THE CITY OF
NORTHFIELD
MINNESOTA

ENGINEERING DIVISION

2026 MILL & OVERLAY AND MILL TOWNS STATE TRAIL IMPROVEMENTS PROJECT

Feasibility Report

This report examines the proposed street improvements including curb and gutter, street and sidewalk construction, trail construction, bikeway construction, and associated boulevard improvements for the proposed mill and overlay project on Maple Street from Meadow View Drive to Jefferson Parkway, Maple Court, Prairie Street from Woodley Street to Jefferson Parkway, Jefferson Parkway from Division Street (TH 246) to Spring Creek Road, and the Mill Towns State Trail from Division Street to Spring Creek Road.

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Certification

I hereby certify that this report was prepared by me or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

By: David E Bennett

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License No. 45867

City of Northfield

Date: 7-25-25

2026 Mill & Overlay and Mill Towns State Trail Improvements Project

Feasibility Report

Introduction

This report examines the proposed street improvements including curb & gutter, street, trail, sidewalk and bikeway construction as well as any associated improvements that may be required in the boulevard for the 2026 Mill & Overlay and Mill Towns State Trail Improvements Project. The scope of work includes the following:

- 2" Mill and Overlay on Jefferson Parkway form Division Street (TH 246) to Spring Creek Road, Prairie Street from Meadow View Drive to Jefferson Parkway, Maple Street from Meadow View Drive to Jefferson Parkway and Maple Court. Bikeway improvements on Prairie Street from Prospect Court to Pleasant View Court. New sidewalk on Prairie Street from Lia Drive to Prairie View Court. Trail repair on the trail south of Prairie View Court. New trail on Jefferson Parkway from Prairie Street to Spring Creek Road and from Division Street to Washington Street. Mill Towns State Trail construction along Jefferson Parkway from Division Street to Prairie Street, then north through Spring Creek Park to Spring Creek Road. Appendix A provides maps of the proposed project area. Appendix B provides a detailed project process. Appendix C contains figures of the proposed intersection improvements. Appendix D contains the arborist report. Appendix E contains the geotechnical report. Appendix F contains feedback received from the public

Background

The City of Northfield has a Capital Improvement Plan (CIP) that has been developed in order to address upcoming maintenance, repair and new construction projects. The adopted 2025 – 2029 CIP includes these areas mentioned above to be completed during the 2026 budget cycle. Additionally, the CIP identifies the estimated costs and funding methods to complete these projects. During the preparation of the approved 2025 – 2029 CIP, these various areas throughout the City of Northfield were identified as areas for needed improvement.

As part of the initial planning for this project, two neighborhood meetings were held on April 16, 2025, and June 11, 2025, to inform the affected property owners adjacent to the project area of the improvements being considered. This meeting also served as an opportunity to gather input from the impacted residents and discuss potential design alternatives for this project. The comments received from the meetings are included in appendix F.

At their June 4, 2024, meeting, the Northfield City Council ordered the preparation of this Feasibility Report via Council Resolution No. 2024-057. This resolution directed the following:

> The proposed improvement be referred to the City Engineer for study and the City Engineer is instructed to report to the Council with all convenient speed advising the Council in a preliminary way as to whether the proposed improvement is necessary, cost-effective, and feasible; whether it should best be made as proposed or in connection with some other improvement; the estimated cost of the improvement as recommended.

Existing Conditions

The existing streets proposed in this project are shown in Appendix A of this report. The project area is located in the southeastern portion of Northfield near Spring Creek Park and just south of Spring Creek Elementary. The area is relatively new residential with areas of pavement distress, and a large number of smaller boulevard trees. Sidewalk is located on both sides of the streets on all but Prairie Street and Maple Court.

A. Streets

The streets within the project area are bituminous surfaced with concrete curb and gutter. Pavement widths vary from 30' – 59' through street segments, all measured from curb face to curb face. As-built information on the streets within the project area indicates that they were originally constructed anywhere from the mid 1980's to the early 2000's. The streets are aged and exhibit wear and distress to different degrees. The pavement is generally in fair to poor condition, and exhibits transverse and longitudinal cracking, alligator cracking, potholes and rutting. Some street segments have settlements, which allow water to pond, infiltrate and weaken the subgrade. This has led to frost heaving, and additional transverse cracking during freeze-thaw cycles.

The City surveyed road distress data such as number and size of cracks and potholes and other statistics that describe the condition of the pavement on every street in the City. This information is used to calculate a Pavement Condition Index (PCI) for each street section. The PCI is a tool for comparing streets when considering where roadway improvements are needed the most. A summary of the PCI rating system is provided below.

Pavement Condition Index (PCI) Rating Summary	
PCI Rating Number	**Pavement Condition**
100-91	Excellent
90-81	Very Good
80-71	Good
70-61	Fair
60-51	Poor
50-41	Very Poor
40-0	Failing

Using PCI data from 2024 project Streets pavement condition is summarized below.

Street Pavement Condition Index		
Segment	**PCI Number**	**Pavement Condition**
Maple Street	70-40	Fair - Failing
Maple Court	60-51	Poor
Prairie Street	70-51	Fair - Poor
Jefferson Parkway	90 - 41	Very good – Very Poor

The existing concrete curb and gutter is in fair condition throughout the project area. Curb settlements have caused areas of poor drainage along the edge of the pavement in various locations. Significant cracking has occurred in sections of the curb.

An Arborist report has been completed for all project areas. This report provides recommendations for removal, protection, and trimming as a part of the proposed construction. Removals will also follow the guidelines of the City's Emerald Ash Borer Management Plan which calls for Ash trees to be removed that are under 13" in diameter, and all trees with fair or worse rating condition. Some trees will need to be removed due to construction.

B. Pedestrian & Bicycle Facilities

The project area has an existing sidewalk on both sides of Jefferson Parkway and Maple Street. Prairie Street has an existing sidewalk on both sides south of Prairie View Court, and on the west side from Jefferson Parkway to Meadow View Drive and Pleasant View Court to Woodley Street. The existing sidewalk is in fair condition with some cracking and heaving in areas. Maple Street has an on-street protected bikeway on the west side of the street that connects to an off-street trail south of Jefferson Parkway that will be constructed in 2025. Prairie Street has an on-street two-way bikeway on the west side from Jefferson Parkway to Lia Drive and from Pleasant View Court to Woodley Street. The Prairie Street bikeway moves to an off-street shared use trail between Lia Drive and Pleasant View Court. Jefferson Parkway has no bicycle facilities east of Division Street. There are two pedestrian trails on the east side of Prairie Street connecting the road to the Mill Towns State Trail. The Trail North of Prairie Circle was constructed in 2023 and is in Excellent condition, the trail south of Prairie View Court is in poor condition with settlements and significant cracking.

C. Storm Water

The condition of the existing storm sewer system was determined from as-built information, storm sewer televising reports, inspections and discussions with City Staff. The current pipe network consists of Reinforced Concrete Pipe (RCP) with sizes ranging from 12" to 54" in diameter. The catch basins in the project area consist of precast concrete and block structures with 2'x3' castings. The structures are in overall fair condition, with 3 structures and 2 flared end sections having significant cracking and are in failing condition. With some maintenance, the storm water system will last the life cycle of the street maintenance being recommended until a full reconstruction is warranted.

Two properties on the project were determined to have inadequate grade to drain storm runoff resulting in poor drainage causing nuisance water conditions.

The city reviewed its surface water management plan which was last updated in 2020 and identified no storm sewer capacity issues within the project area.

D. Sanitary Sewer

Conditions of the sanitary sewer system have been determined from as-built information, sewer televising reports, as well as discussions with the City Staff. The current pipe network consists of Polyvinyl Chloride (PVC), with sizes ranging from 8" to 24" in diameter. From the information that has been gathered, the sewers in the project corridor are determined to be in an overall good condition, and with some maintenance will last the life cycle of street maintenance being recommended until a full reconstruction is warranted.

The sanitary sewer manholes along the project area are primarily pre-cast concrete and are in good condition. Castings throughout the project will be inventoried to ensure castings with open pick-holes are replaced to reduce unwanted inflow of storm water into the sanitary system. In addition, all castings will be reset, and minor grouting or sealing of the structures is warranted in some locations.

E. Watermain

The existing watermain was evaluated within the proposed project area. Conditions of the watermain system have been determined from as-built information, field evaluation, and discussions with the City Staff. The current pipe network consists of Ductile Iron Pipe (DIP) and Cast-Iron Pipe (CIP) with sizes ranging from 6" – 18" and is in good operational condition and has sufficient capacity and redundancy for the service area. There is not a history of watermain breaks in the area and the system will last the life cycle of the street maintenance recommended until a full reconstruction is warranted.

Proposed Improvements

A. Streets

The proposed improvement recommended is a 2 - Inch Mill and Overlay for all streets in the project area. Pavement conditions and existing as-builts show a sufficient existing road base suitable for a mill and overlay rehabilitation of the streets. In addition to the mill and overlay, some isolated areas indicated the need for deeper repairs and potential subgrade corrections may be required where severe distresses are present.

A mill and overlay is considered a maintenance operation that involves the removal of the top layer of pavement and installation of a new wearing surface that prolongs the expected life of the pavement by 15 years. This maintenance ensures continued serviceability to users and keeps the road's entire life cycle cost low.

Additionally, spot concrete cub and gutter will be replaced if it is severely damaged or settled/heaved and not allowing proper drainage.

B. Pedestrian Facilities

All existing sidewalks will be assessed for significant cracking, settling, and heaving that necessitates spot replacement. These spot replacements to the existing concrete sidewalks will be completed in conjunction with the upgrades to each of the existing pedestrian ramps to meet current ADA standards. Pedestrian ramp upgrades involve the removal and replacement of the concrete curb and gutter, ramps and truncated domes, landings, and concrete sidewalk to the proper longitudinal and transverse grades at each crosswalk location. Concrete 'v-curb' may be necessary behind the walk at some locations with difficult grades.

The east side of Prairie Street, from Prairie View Court to Lia Drive will have a new sidewalk installed. This sidewalk is part of the City's walking and biking plan and will connect to a future sidewalk on the east side of Lia Drive. Public feedback on the section showed significant concern about the number of trees that would need to be removed to install this walk. During design, methods to save as many trees as possible will be explored such as meandering the sidewalk and removing street parking to provide more space for the sidewalk.

Prairie Street currently has an on-street bikeway on the west side from Woodley to Sibley Swale Park and from the park to Jefferson Parkway. As part of this project this bikeway from Prospect Court to Pleasant View Court would be protected by adding a raised concrete median where the on-street paint is currently. The City's pedestrian and bike analyzation report shows protecting the bikeway for the full length from Woodley Street to Jefferson Parkway for improving the safety of bikers by separating them from motorists. While staff recommend protecting the entire bikeway there was significant public concern about the median. Due to public feedback the recommendation of this report is to protect only the section from Prospect Court to Pleasant View Court due to the increased likelihood of vehicles entering the bike lane while traversing the hill and corner. Shrinking the length of the median on Prairie Street was presented at neighborhood meeting #2 and was received well with mostly positive comments.

The Mill Towns State Trail is a future state trail that will pass through Northfield, including through this project corridor along the south side of Jefferson Parkway from the east project extents until it reaches Prairie Street where it then crosses Jefferson Parkway and continues along the north side of the road. The trail continues north just west of Michigan Drive where it will meander along the east side of the creek through Spring Creek Park until it reaches Spring Creek Road. The Mill Towns State Trail section adjacent to Spring Creek Road will be constructed as part of the City's 2026 Spring Creek Road Reconstruction project. When complete, the Mill Towns Trail will include approximately 25 miles of trail connecting the cities of Faribault, Dundas, Northfield, Waterford, Randolph, and Cannon Falls.

The 30% preliminary design plans for the state trail identify wayfinding signage and a stormwater basin to be considered for installation. This stormwater basin is discussed in further detail in the storm water section of this report.

Additional new trails will be added separate from the Mill Towns State Trail. This new trail will be on the north side of Jefferson Parkway from Division Street to the trail just east of Washington Street, and from just west of Michigan Drive to Spring Creek Road. This new trail will provide bike facilities for the entire length of Jefferson Parkway, connect to existing trails in the area, and provide for future connections to developments east of Spring Creek Road. In addition to the new

trails the trail just south of Prairie View Court that connects Prairie Street to the Mill Towns State Trail in Spring Creek Park will be rebuilt due to its current poor condition.

Intersection improvements are being considered at ten locations along Jefferson Parkway within the project area. These locations include intersections with Washington Street, Afton Street, the west leg of Bunker Drive, Wilcox Boulevard West, Wilcox Boulevard East, the east leg of Bunker Drive, Maple Street, Prairie Street, a mid-block crossing just west of Michigan Drive, and the intersection of Maple Street and Meadow View Drive. These improvements largely include curb extensions, enhanced pedestrian crossing pavement markings and signage, and pedestrian refuge medians. The intersection improvements included in this project were evaluated by a multimodal design expert to determine if and where enhanced pedestrian crossings may be needed.
Benefits from these improvements will include reduced vehicle speed, shorter pedestrian crossing distances, and an overall increase in safety for multimodal travel along the project corridor. These intersection improvements can be seen on the proposed improvements figures included in Appendix C of this report. During development of the Feasibility Report, Staff considered additional curb cut openings related to bikes accessing the Mill Towns State Trail on the south side of Jefferson Parkway. These additional access points are not being recommended for approval based on public feedback collected at Neighborhood Meeting #2.

Benefits from these improvements will include reduced vehicle speed, shorter pedestrian crossing distances, and an overall increase in safety for multimodal travel along the project corridor. These intersection improvements can be seen on the proposed improvements figures included in Appendix C of this report.

C. Storm Water

City Staff performed video inspection and visual inspection on the entire storm sewer system including the storm piping and storm structures within the project corridor and have determined that it is in satisfactory condition. As such, limited rehabilitation work is needed for the storm sewer system at this time.

Work on the storm sewer as part of this project includes adjusting/replacing the storm sewer castings and covers to provide a smooth/drivable street surface in conjunction with the street resurfacing portion of the project. This work will include the replacement of all concrete adjustment rings for each structure. Minor grouting and concrete patching of the structures may also be completed to prevent infiltration/exfiltration in/out of the storm sewer manholes for a majority of the applicable structures. Structures with significant deterioration will be replaced/reconstructed in lieu of rehabilitation. Properties identified with flooding issues will have additional storm sewer added, sizing and location of these improvements will be determined during design.

The project's stormwater management analysis and design include a volume control requirement, enforced by the City of Northfield and the new municipal separate storm sewer system (MS4) permit, and a rate control requirement enforced by the City of Northfield. The volume control requirement states that the greater of 1-inch of runoff over the new impervious area or 0.5-inches of runoff over the new and reconstructed impervious area for linear projects must be treated. Although this project is almost evenly split between the new impervious from the addition of sidewalk/trail and the reconstructed areas, the required water quality volume is controlled by the

new impervious. Therefore, this project will require a treatment volume of approximately 3,271 cubic feet. The actual treatment volume will be verified during the final design. The rate control requirement states that for the two-year, ten-year, and 100-year NOAA Atlas 14 24-hour rainfall depths with MSE 3 rainfall distribution and the 100-year ten-day snowmelt event with an SCS Spillway One-Day Ten-Day distribution, the proposed post construction runoff rate must not exceed the existing conditions runoff rate at all points leaving the site.

It is proposed to have runoff from the project area treated with a filtration basin located on the downhill side of a section of the proposed Mill Towns State Trail, Segment C. The optimal BMP location will be selected during final design by evaluating existing and proposed site conditions, drainage patterns, and cost effectiveness. We will also assess the project area for locations where additional BMPs could be added to provide a bank of treatment volume for other projects now or in the future.

This treatment option location was initially determined as part of the 30% preliminary Mill Towns State Trail plans. This option would not require property acquisition, since it is located in an outlot owned by the City. Additional investigation will need to be conducted to determine whether an infiltration, or filtration basin would be the best decision.

For this report and the associated cost estimate, it is assumed that the recommended filtration basin will be utilized to satisfy all stormwater management requirements. During final design, the proposed BMP location will be evaluated further relative to available soil borings to verify groundwater levels and determine if infiltration is feasible. If deemed feasible, infiltrometer testing may need to be completed to confirm the actual infiltration rate.

D. Sanitary Sewer

City Staff performed video inspection and visual inspection on the entire sanitary sewer system including the sanitary piping and sanitary sewer manhole structures and has determined that it is in satisfactory condition. As such, limited rehabilitation work is anticipated to be needed for the sanitary sewer system at this time.

Work on the sanitary sewer as a part of this project is proposed to include adjusting the sanitary sewer castings and covers to provide a smooth/drivable street surface in conjunction with the street resurfacing portion of the project. This work will include the replacement of all concrete adjustment rings for each structure. Castings and covers that are damaged or allow for inflow of storm water will be replaced. Minor grouting and concrete patching of the structures may also be completed to seal the structures and prevent infiltration/exfiltration in/out of the sanitary sewer manholes.

E. Watermain

The City of Northfield has reviewed the condition of the existing watermain system located within the boundaries of the project and have determined that it is in satisfactory condition. As such, limited rehabilitation work is needed to the watermain system at this time.

Work on the watermain system as part of this project includes adjusting the water gate valve boxes and covers to provide a smooth/drivable street surface in conjunction with the street resurfacing portion of the project. Some damaged valve box tops may require replacement.

Estimated Costs and Project Funding

The estimated construction costs for the proposed improvements are based on costs from recent street maintenance projects that have been completed in the City of Northfield. These costs can fluctuate significantly; however, at this point in the project, staff feel that all the costs below are properly accounted for in the estimate.

Should the project be authorized it is typical to reduce the contingency as the design is developed, and more certainty is brought to bear on the project scope. The overhead portion of the estimate is used to cover the necessary legal, administrative, engineering, and financing costs for the project.

The funding for the proposed improvements will come from several sources. General Fund monies, bonding, and Enterprise Funds will be used to fund this project.

The cost estimate includes one alternative for protecting the bikeway for the entire length on Prairie Street from Woodley Street to Jefferson Parkway. The base cost includes protecting just the portion from Prospect Court to Pleasant View Drive. The alternate adds approximately $212,000 to the base cost.

Estimated Project Costs

	BASE COSTS W/ PARTIAL PRAIRIE St. MEDIAN	ALTERNATE COSTS W/ FULL PRAIRIE St. MEDIAN
Street	$3,134,713	$3,280,557
Storm Sewer	$337,030	$337,030
Sanitary Sewer	$55,780	$55,780
Watermain	$15,690	$15,690
Construction Subtotal	**$3,543,213**	**$3,689,057**
Construction Contingency (20%)	$708,642	$737,811
Art (1%)	$42,519	$44,269
Total with Art	$4,294,374	$4,471,137
Overhead (20 %)	$858,875	$894,227
Total Project Costs	**$5,153,249**	**$5,365,365**

Estimated Project Funding

	BASE COSTS W/ PARTIAL PRAIRIE St. MEDIAN	ALTERNATE COSTS W/ FULL PRAIRIE St. MEDIAN
Bonding	**$3,834,237**	**$4,046,352**
Franchise Fees	**$774,400**	**$774,400**
Storm Fund	**$449,328**	**$449,328**
Sanitary Fund	**$74,366**	**$74,366**
Water Fund	**$20,918**	**$20,918**
Total Project Costs	**$5,153,279**	**$5,365,365**

Conclusion

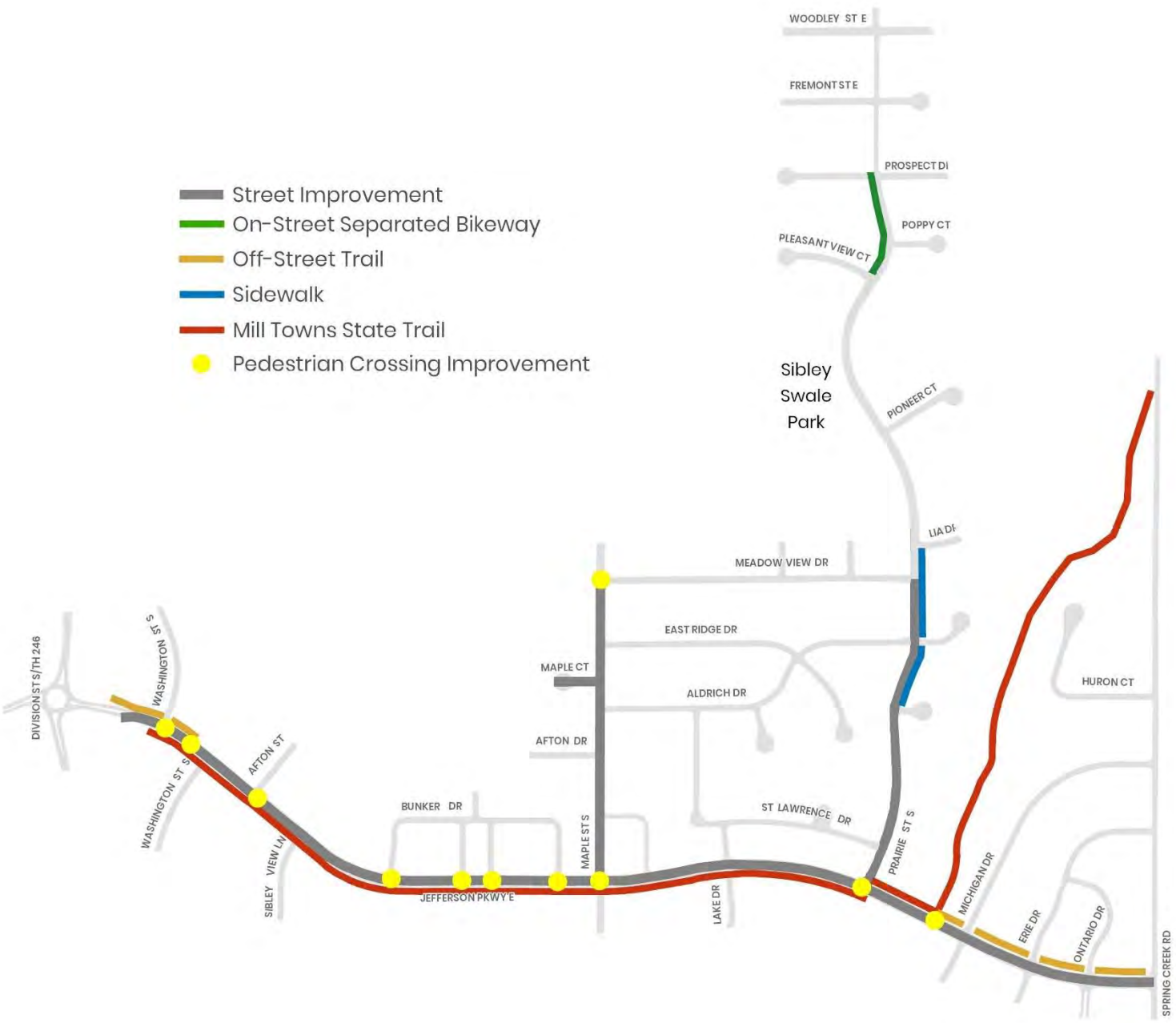
I. Schedule

Appendix B shows the proposed process and schedule for completing this project during the 2026 construction season.

II. Feasibility and Recommendation

From an engineering standpoint this project, as proposed, is feasible, cost effective and necessary. It can best be accomplished by letting competitive bids for the work. Due to the similarity in the scope and nature of the work it is also recommended that the work be completed under one contract in order to have the work done in the most efficient, cost-effective and orderly manner possible.

Appendix A – Location Maps



Appendix B – Project Process

Date[1]	Project Step	Purpose of Step
June 4, 2024	Order preparation of Feasibility Report	Ordering the Feasibility Report will allow Staff to create a Feasibility Report that will allow the Engineer to analyze the potential project, and estimate initial project costs.
July 9, 2024	Approve Professional Services Agreement	Approve Professional Services Agreement for Design and Construction Services
April 16, 2025	Neighborhood Meeting	The intent of this meeting is to inform the neighborhood of the upcoming project and seek input on the improvements, which will be summarized for City Council.
May 20, 2025	Council discussion of Draft Feasibility Report / Intersection Improvements	
June 11, 2025	2nd Neighborhood Meeting	The intent of this meeting is to inform the neighborhood of the upcoming project and seek input on the improvements, which will be summarized for City Council.
August 4, 2025	Accept Feasibility Report and Authorize Preparation of Plans and Specifications	The engineer will present the Feasibility Report, the proposed project, and an initial cost estimate.
November 18, 2025	Publish Street Recon Plan Hearing Ad in Northfield News	A step in the project financing process for bonding
December 2, 2025	Public Hearing – 5-Year Street Reconstruction Plan and adoption of plan	Authorization of bonds requires a public hearing and adoption of a 5-year street reconstruction plan. Plan must be approved by two-thirds of the governing body members present, publish at least 10-day before hearing but no more than 28-days. Once plan and preliminary authorization of bonds is adopted, the public has a 30-day period where a petition signed by at least 5% of the votes cast in the last election can require that the bonding be subject to a referendum. 2/3 of majority of governing body present at the meeting for approval
January 14, 2026	3rd Neighborhood Meeting	The intent of this meeting is to inform the neighborhood of the upcoming project and seek input on the improvements, which will be summarized for City Council.
February 3, 2026	Approve Plans and Order Advertisement for Bids	Final approval of plans for bidding
February 11, 18, 25, 2026	Publish Ad for Bid in Northfield News	A step in the bidding process. The project will also be advertised on the MnDOT e-Advert website.
March 5, 2026	Bid Opening – 2:00 P.M.	Final step in the bidding process. Bids are opened by staff and tabulated. From here staff will make a recommendation to the City Council for award.
March 17, 2026	Accept Bids and Award Contract	This step follows the uniform municipal contracting law, 471.345, the City's purchase policy and allows for the project to move forward with beginning the actual construction process.
May 2026	Property Owner Meetings	Individual meetings with property owners will be scheduled to go over the details of construction and document existing conditions.
May – October, 2026	Construction	The City Engineer recommends to City Council when the final payment should be made to the Contractor. The City Council may accept the work by resolution; however, if the city fails to pay the amount due within 30 days of a monthly estimate, or 90 days after the final estimate, the city must pay interest on the past due amount as prescribed by law.
July 2027	Accept Improvements and Authorize Final Payment	

2026 JEFFERSON PKWY M&O & MTST IMPROVEMENTS
CITY OF NORTHFIELD

FIGURE 1 : JEFFERSON PKWY & WASHINGTON ST PROPOSED IMPROVEMENTS
JULY 2025

BOLTON & MENK

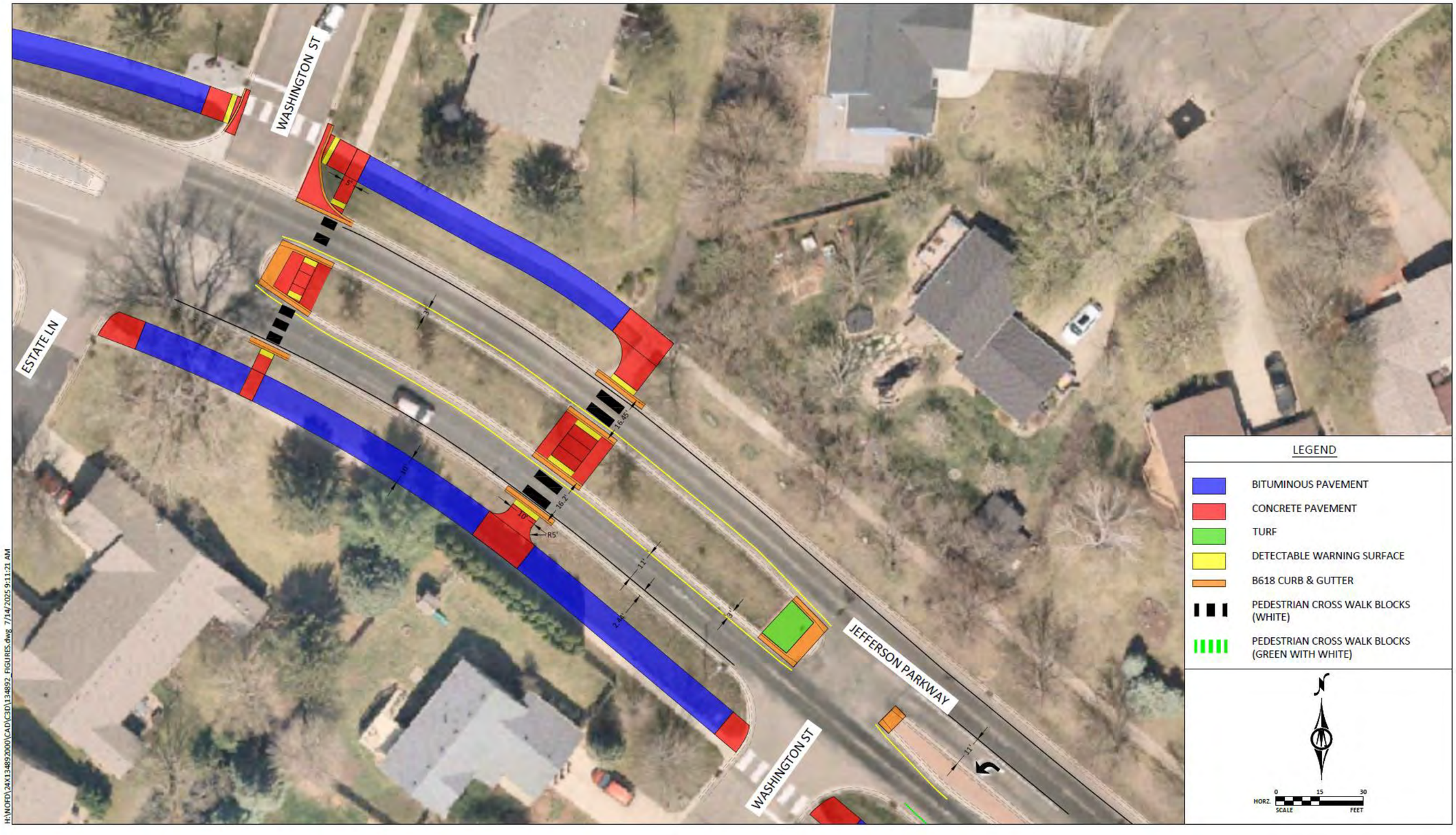


FIGURE 2: JEFFERSON PWKY & AFTON ST PROPOSED IMPROVEMENTS

JULY 2025

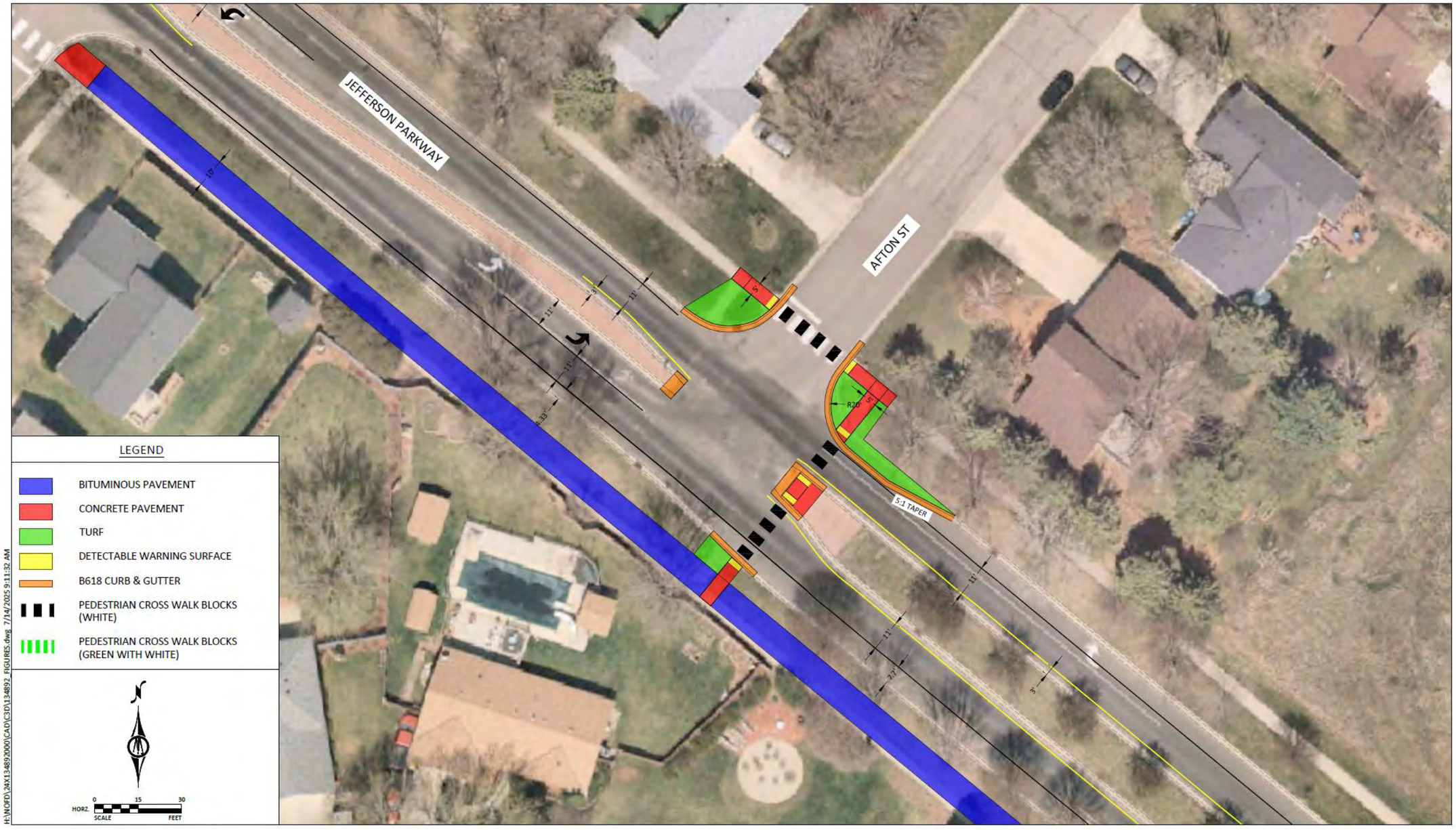


FIGURE 3: JEFFERSON PKWY & BUNKER DR W PROPOSED IMPROVEMENTS

JULY 2025

BOLTON & MENK

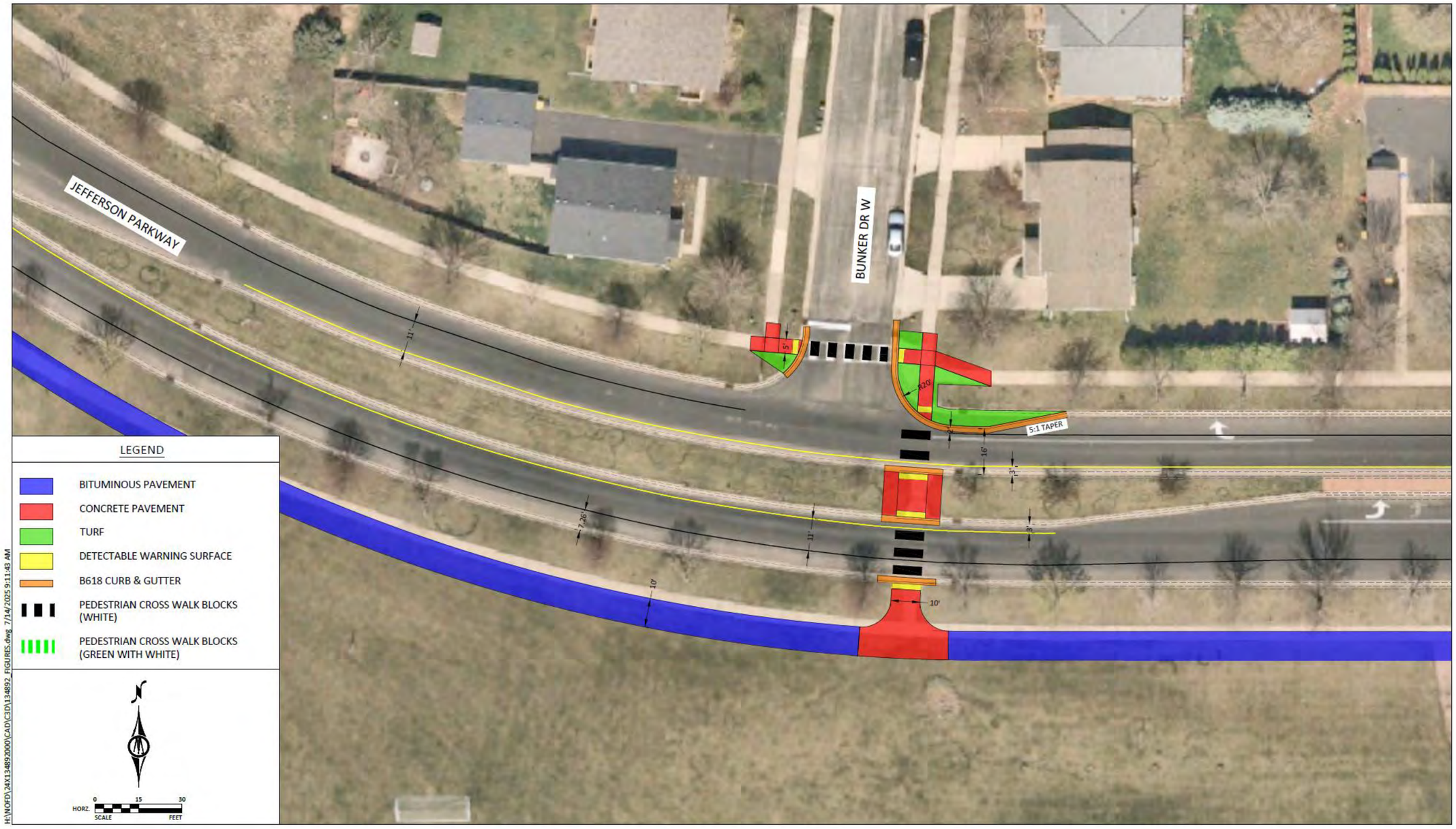


FIGURE 4: JEFFERSON PKWY E & WILCOX BLVD E & W PROPOSED IMPROVEMENTS

JULY 2025

BOLTON & MENK

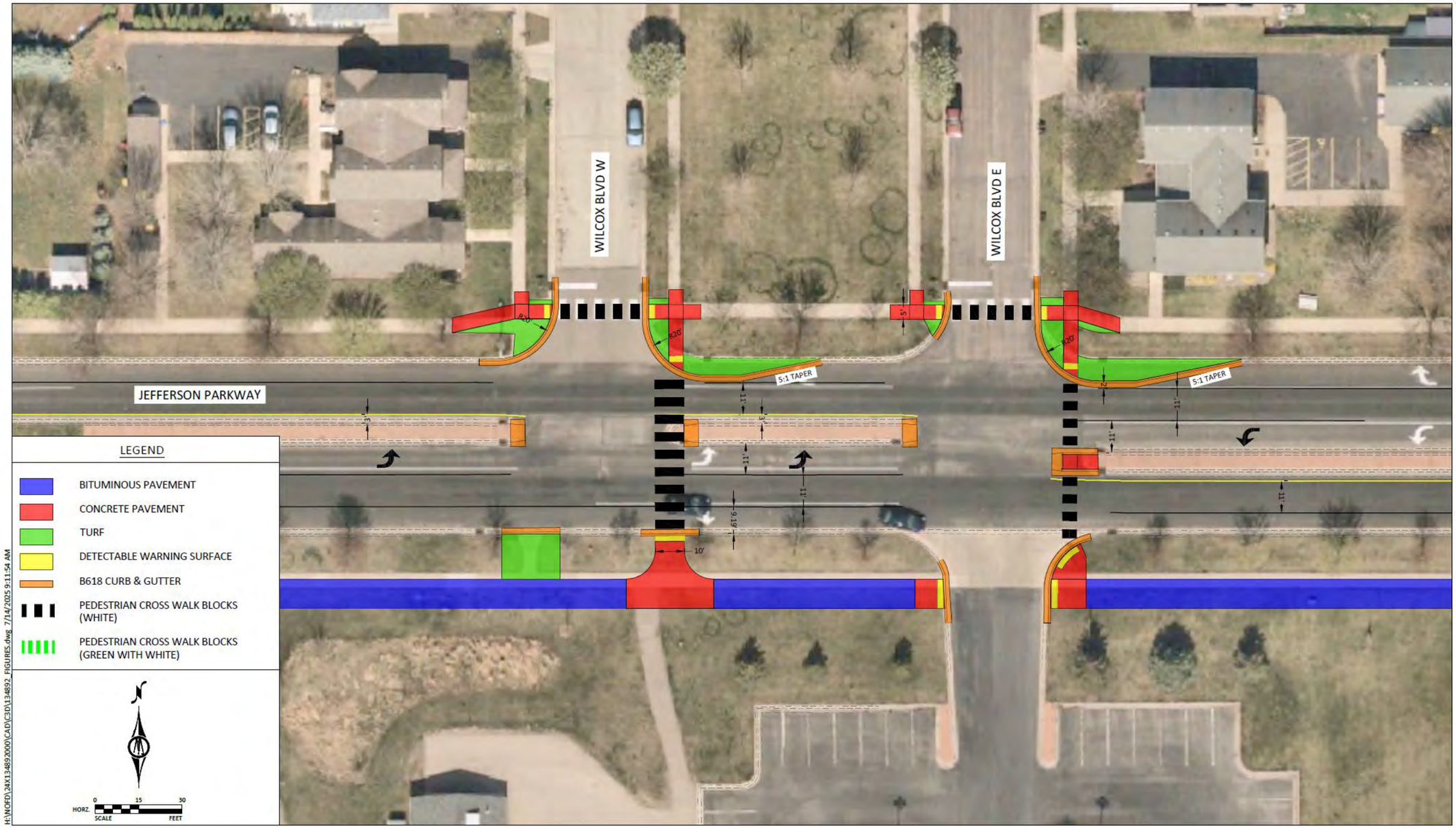


FIGURE 5: JEFFERSON PKWY & BUNKER DR E PROPOSED IMPROVEMENTS

JULY 2025

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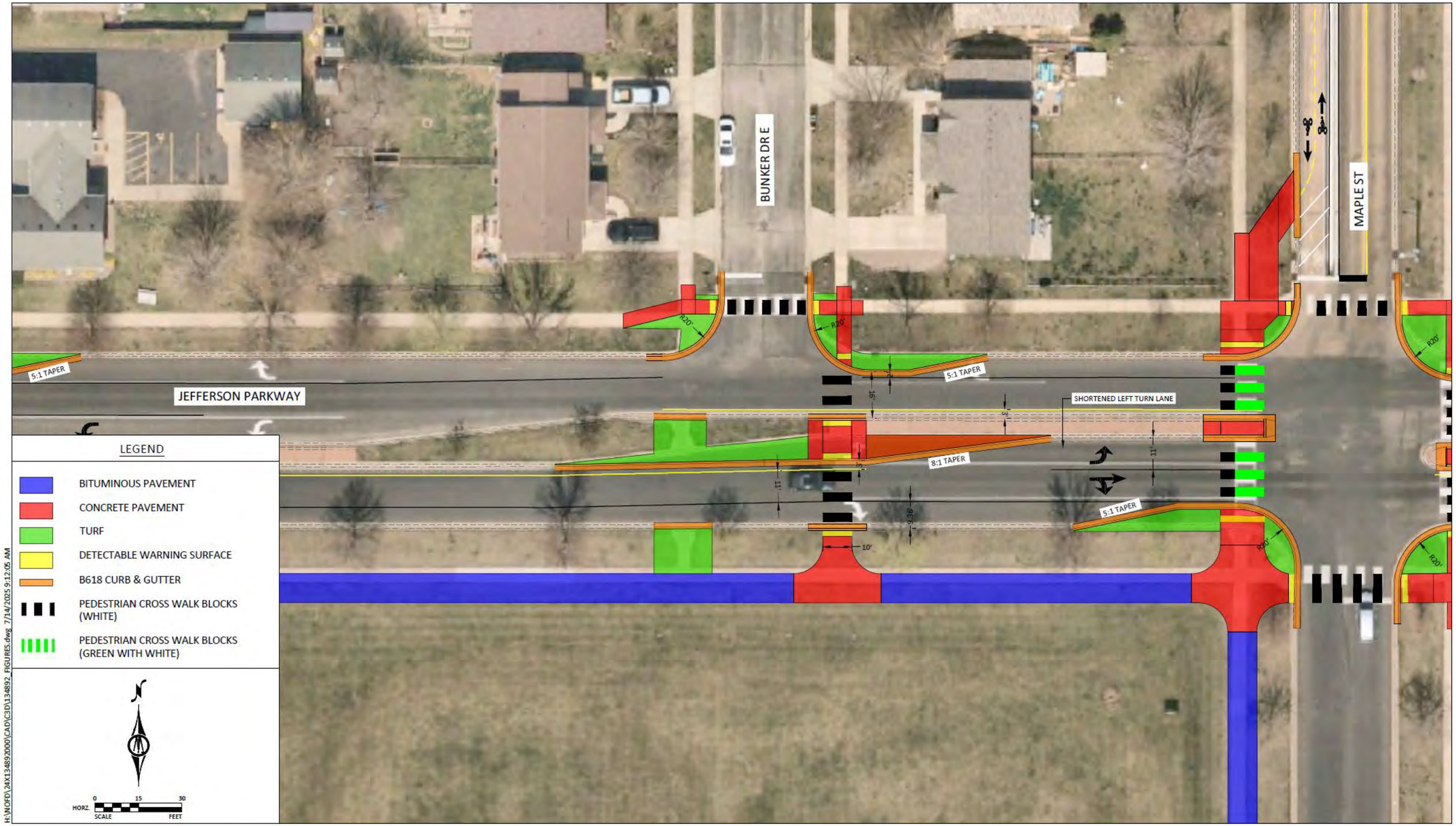

FIGURE 6: JEFFERSON PKWY E & MAPLE ST PROPSED IMPROVEMENTS

JULY 2025

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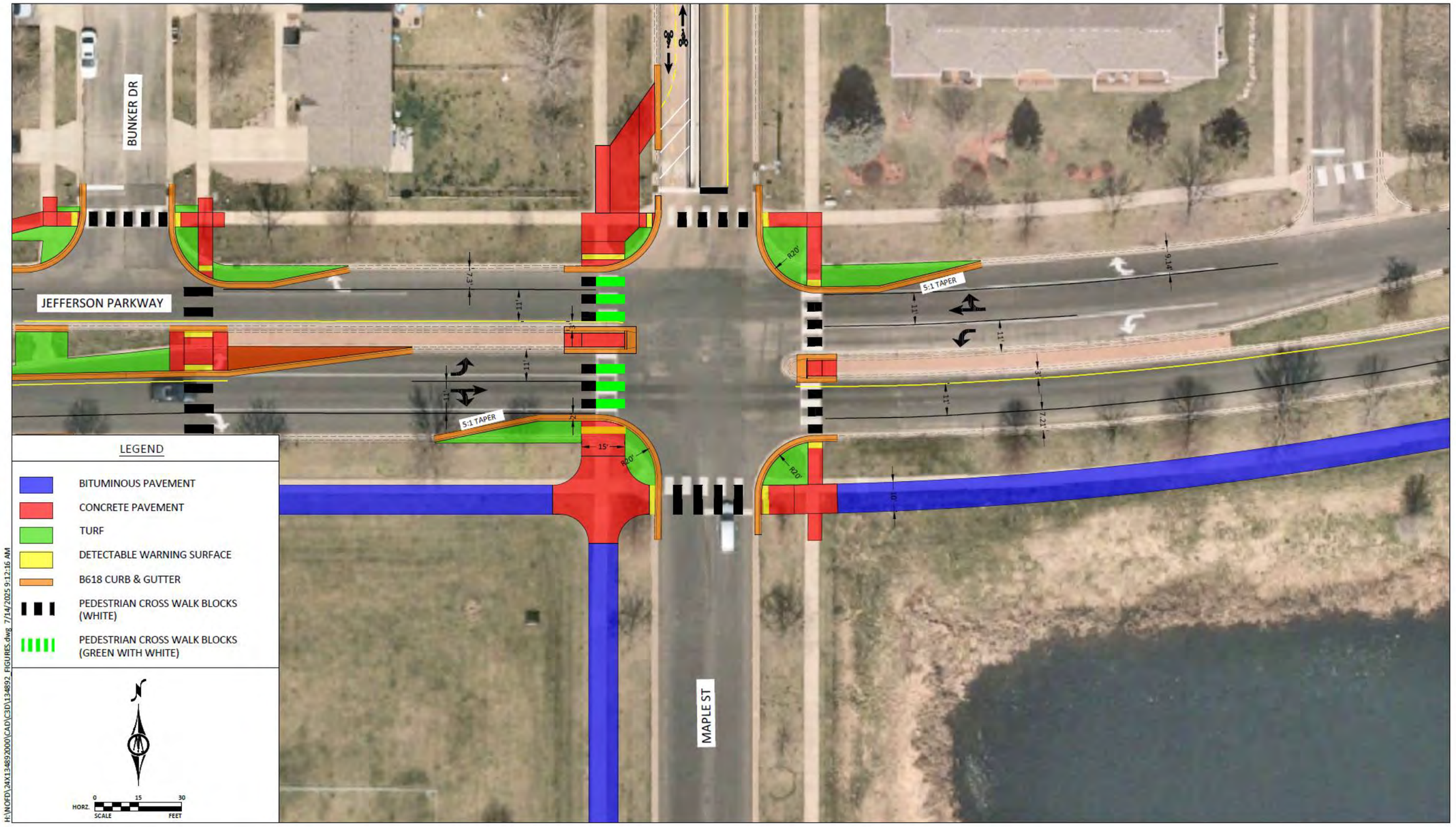

FIGURE 7: MEADOW VIEW DR & MAPLE ST PROPOSED IMPROVEMENTS

JULY 2025

BOLTON & MENK

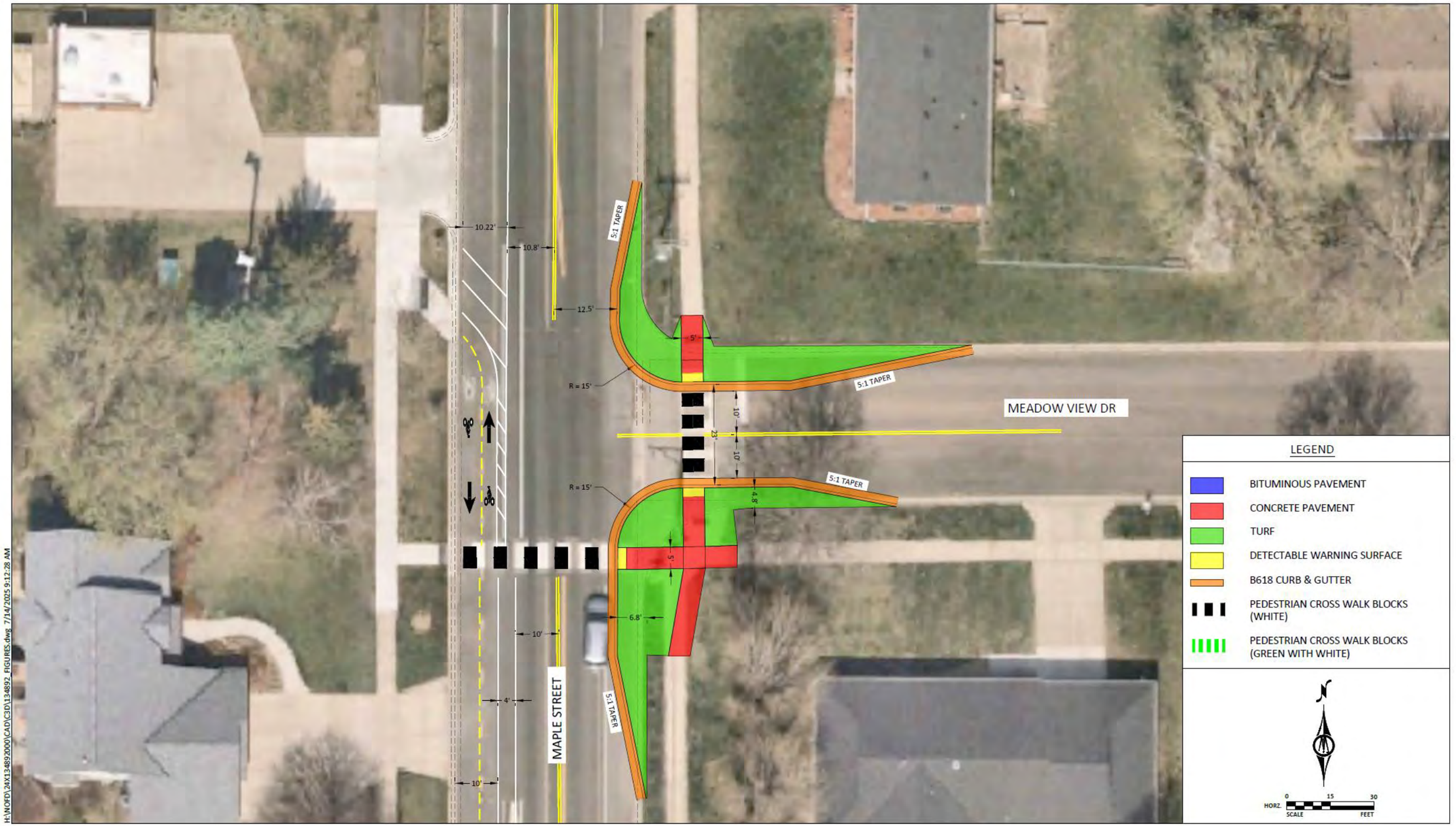

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FIGURE 8: JEFFERSON PKWY E & PRAIRIE ST PROPOSED IMPROVEMENTS

JULY 2025

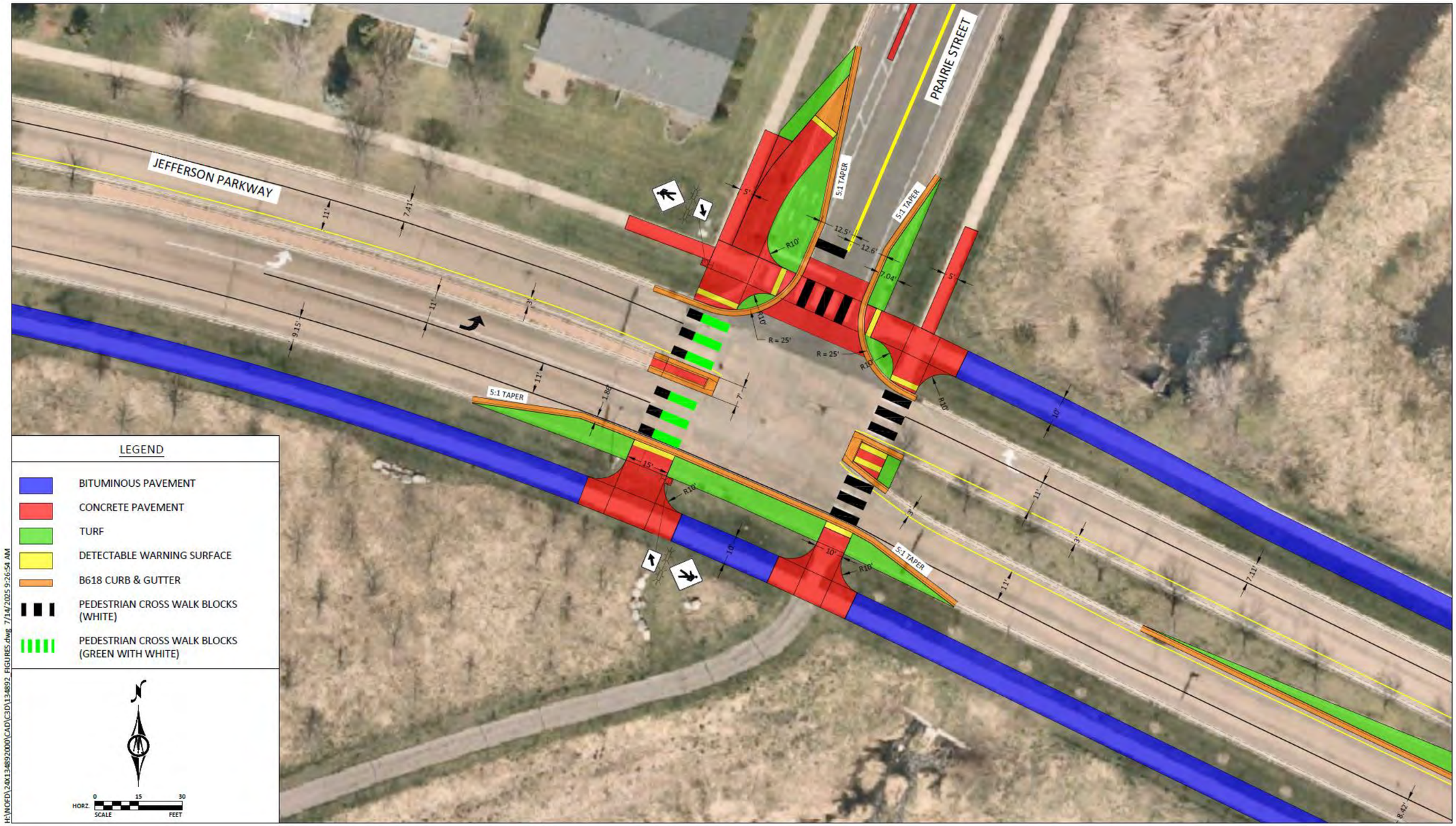
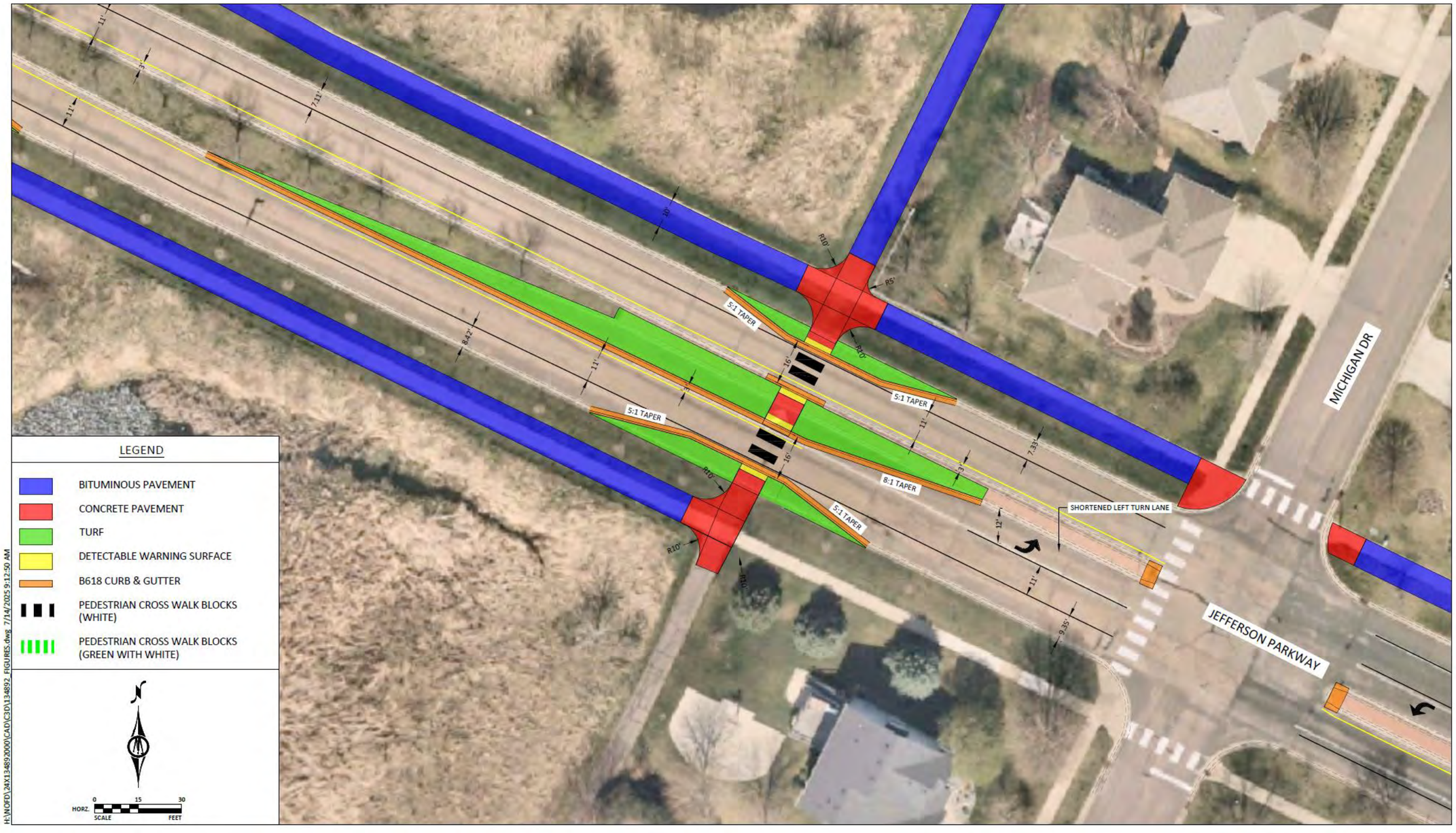


FIGURE 9: JEFFERSON PKWY E & MICHIGAN DR PROPOSED IMPROVEMENTS

JULY 2025



Appendix D – Arborist Report

2026 Jefferson Parkway Mill and Overlay and Mill Towns State Trail Improvements

Introduction

As part of the proposed 2026 Mill and Overlay Project, an inventory and report detailing the species, size, location and condition of trees within the proposed construction envelope. The project area includes a proposed trail connection at the north end of Spring Creek Trail which will extend south along the existing trail to Jefferson Parkway. Also part of the project area are trees within the road right of way on Jefferson Parkway from Spring Creek Road west to Division Street, Maple Street and Prairie Street from Jefferson Parkway north to Meadowview Drive and Maple Court. This report discusses the findings of the tree inventory and makes some general recommendations that may relate to the care and fate of these trees moving forward. Field work associated with the tree inventory was performed in summer and early fall of 2024.

Methods

All data recorded in the field were input into an ESRI shapefile and submitted to Bolton & Menk for inclusion in project plans and for planning information.

Live trees within the Right of Way (ROW) 1 inches in diameter or greater were included in the inventory. Dead trees in the ROW and trail corridor were included.

Tree diameter was measured at 4.5 feet above grade (DBH). Where trees have multiple stems, the diameter recorded is the total diameter of all stems. Location of each tree was determined using sub-meter GNSS equipment and converted into the Rice County Coordinate System. All trees in the inventory were tagged with a unique number for reference.

Condition of each tree was assessed and assigned a number using a scale from 0 – 9. The best quality trees were given the highest number, trees of low quality were given a low number with zero being a dead tree. Trees in good condition are those that appear vigorous and free of significant defects (cavities, decay, large dead or broken branches, cracks, etc.). Trees of low (poor or very poor) quality may have large wounds, significant decay, insect damage or very poor form or a combination of negative factors. Trees in fair condition (rated 4 or 5) may have, for example, an odd form, slight lean, one or two large dead branches, but appear healthy and are expected to survive for many years barring any significant negative impacts in future.

Findings

A total of 554 trees were found and the data associated with those trees are detailed in tabular form. These 554 trees represent 41 different species and range in size from 1 inches DBH to 44.5 inches (a cottonwood on the south side of Jefferson Parkway at the west end of the project). Fifty-four ash trees were found. Four of these are either dead or heavily infested with emerald ash borer (EAB). Six trees, all red maples, show signs of chlorosis. This condition is often caused by high pH soils which are not uncommon along road right of ways.

Many different species make up the 554 trees found: 42 species in total. Most of the trees close to Spring Creek are naturally occurring. On the north end of the proposed trail as it moves away from the creek and closer to Spring Creek Road, many red pine can be found. It is likely that these were planted rather than naturally occurring.

Discussion

The presence of 42 unique species is an indication of a significant amount of tree diversity within the project area. However, many species are not abundant as they are represented by very few trees; in many instances less than five individuals. Twenty-two species each comprise less than one percent of all trees and six species are represented by a single individual. How many of these trees were planted by humans and how many occur naturally may not be relevant but the fact that so many species appear to be thriving (condition greater than average) gives an indication of soils well suited to a variety of trees.

The most common species present is Linden, either the native basswood or non-native ornamental varieties. Other common trees are green ash (52), Arborvitae (49) and red pine (42). Many species are represented by less than five individuals.

Average condition of the 554 trees is 6.4. The most common condition was 7, accounting for over 29 percent. Twenty-five trees are dead. A couple have been dead long enough so that positive species identification isn't possible. These are shown as "Unknown" in the tree list. Factors that prevent a tree from receiving the highest rating (9) include: decay, thin canopy, disease, wounds, decay, etc.

A few of the tree species here are considered by some to be "low quality" or undesirable. These include Siberian elm and boxelder. Siberian elm is a non-native tree that can spread aggressively. Boxelder is a fast-growing, native tree that few people like but has a role as one of the first trees to become established after a disturbance like land clearing or fire. Regardless of the perception of the casual or professional observer, desirability was not a factor in assessing condition.

At the time of this report, 2026 improvements to the proposed project area have not been finalized. This makes projections for the fate of individual trees or groups of trees virtually impossible to predict. Removal of dead trees could occur at any time, preferably before other work commences to ensure the safety of workers and the public.

Recommendations

1. Since soils in this project area appear to be ideal for growing trees, it is important to protect them throughout the construction process by keeping as much of the native soil on site as possible, limiting compaction wherever possible and assuring no change to soil chemistry due to chemical spills or concrete washout. This is particularly true in the area where the trail along the creek will be constructed.

2. Prune saved trees to limit the risk from falling branches once the project is over. Preventive pruning should be considered for saved trees that have branches that conflict with or could be damaged by large and/or equipment like backhoes close to construction.

3. Despite the existing species diversity, there remain many opportunities to increase the number of some of the under-represented species. These include: honeylocust, Kentucky Coffeetree, sugar maple, and some oaks. Trees not now present but should be considered include bitternut hickory and black cherry. Smaller trees for consideration include serviceberry, redbud (non-native), ironwood, musclewood (hornbeam), hawthorn, and witch hazel. These trees should do well along Spring Creek Trail, enhancing the natural environment already present. The area between the trail and the creek provides good sites for river birch, bur oak, bicolor oak and Kentucky coffeetree. These trees can withstand some flooding. Black cherry would make a good choice on the east side of the trail along with some of the smaller trees listed above. Lindens account for over 10% of the existing trees so near-future plantings of these should be limited. Red maple should be avoided in the boulevard along Jefferson Avenue due to high soil pH. However, these trees might thrive along the trail near the creek.

   Trees not mentioned above may also make good selections but should be used judiciously. The use of too many non-native trees could considerably change the rural ambience of this stretch of road.

4. Replacement tree spacing recommendations is difficult at this time since it is not known how many trees might be removed or where new planting spaces may be created by this project. Many communities use a spacing of 30-40 feet between trees on linear projects. This is a good rule of thumb for larger trees like oaks or basswood. Smaller trees could be planted closer together, perhaps as close as 20 feet.

5. Though only a few ash trees show signs of emerald ash borer infestation, it is safe to assume that all ash trees may already be at least lightly infested and all will die eventually. If insecticide injection to save these trees is not an option, the removal of all fifty-four ash trees is recommended. Removal will slow the spread of this insect to other trees in the area.

Prepared by:

Stephen Nicholson CF

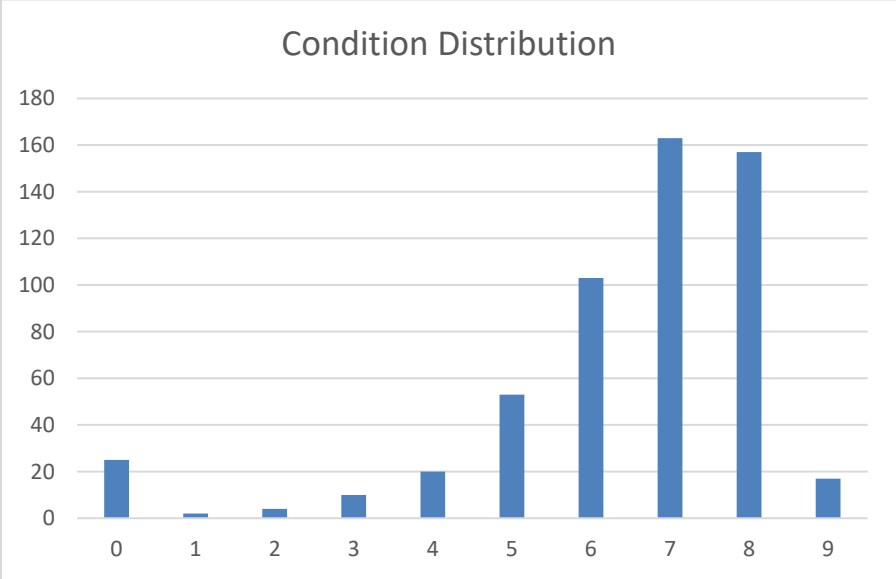
TreeBiz LLC

Species Count

Species		Count	% of Total
Linden		60	10.8
Ash, green		52	9.4
Arborvitae		49	8.8
Pine, red		42	7.6
Boxelder		31	5.6
Maple, Norway		31	5.6
Crabapple		30	5.4
Maple, hybrid		27	4.9
Walnut		26	4.7
Hackberry		25	4.5
Maple, Red		25	4.5
Maple, sugar		17	3.1
Oak, red		16	2.9
Juniper		13	2.3
Cottonwood		10	1.8
Elm, hybrid		10	1.8
Oak, bicolor		10	1.8
Elm, Siberian		8	1.4
Spruce, white		8	1.4
Oak, bur		7	1.3
Hickory, shagbark		5	<1.0
Aspen		4	<1.0
Elm, American		4	<1.0
Maple, silver		4	<1.0
Pine, white		4	<1.0
Apple		3	<1.0
Ginkgo		3	<1.0
Honeylocust		3	<1.0
Coffeetree, Kentucky		3	<1.0
Treelilac		3	<1.0

Maple, amur		3	<1.0
Oak, pin		3	<1.0
Oak, white		3	<1.0
Unknown		2	<1.0
Ash, white		2	<1.0
Catalpa		2	<1.0
Birch, river		1	<1.0
Ironwood		1	<1.0
Poplar, white		1	<1.0
Spruce, blue		1	<1.0
Oak, eastern pin		1	<1.0
Sumac, staghorn		1	<1.0

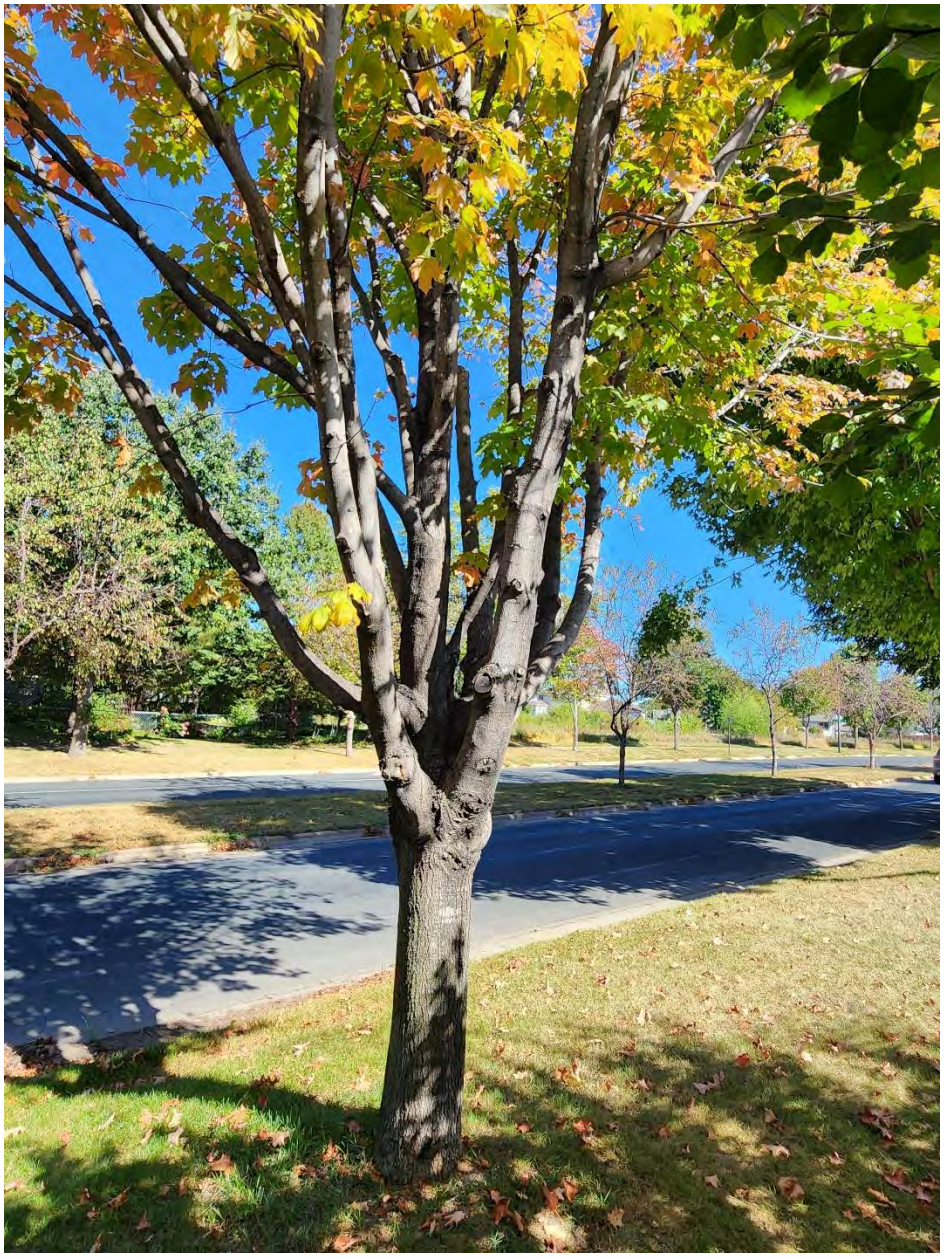
Condition	Count
0	25
1	2
2	4
3	10
4	20
5	53
6	103
7	163
8	157
9	17
Total	**554**



Example of thin canopy – possible apple scab as cause

Example of Sprouts – these interfere with growth of more desirable parts of the plant

Example of poor form – trees should have one main leader in the center



Tree List

(EAB in notes indicates Emerald Ash borer)

Tree #	Species	DBH	Condition	Stems	Notes
68	Pine, red	11.0	4	1	
69	Pine, white	16.5	7	1	
70	Pine, red	9.5	0	1	
71	Pine, red	8.0	0	1	
72	Pine, red	7.0	6	1	
73	Pine, red	12.5	0	1	
74	Hackberry	9.5	7	1	
75	Pine, red	8.5	0	1	
76	Pine, red	6.0	0	1	
77	Juniper	12.0	7	1	
78	Pine, red	6.0	7	1	
79	Pine, red	9.0	7	1	
80	Pine, red	9.0	7	1	
81	Boxelder	9.0	7	1	
82	Pine, white	12.0	8	1	
83	Pine, red	13.0	0	1	
84	Walnut	10.0	8	1	
85	Hackberry	12.0	8	1	
86	Walnut	13.0	8	1	
87	Elm, American	7.5	7	1	
88	Walnut	9.0	8	1	
89	Walnut	8.0	8	1	
90	Juniper	8.0	6	1	
91	Juniper	6.0	5	1	
92	Walnut	8.5	8	1	
93	Pine, red	13.5	7	1	
94	Juniper	9.0	8	1	
95	Pine, red	12.5	8	1	
96	Pine, red	12.5	0	1	

97	Pine, red	9.0	0	1	
98	Pine, red	12.0	6	1	
99	Walnut	10.0	8	1	
100	Pine, red	8.0	0	1	
101	Boxelder	8.5	0	1	
102	Pine, red	9.0	0	1	
103	Pine, white	16.0	8	1	
104	Pine, red	10.5	6	1	
105	Poplar, white	6.5	4	1	
106	Pine, red	12.5	7	1	
107	Pine, red	9.5	7	1	
108	Pine, red	14.0	7	1	
109	Boxelder	7.0	6	1	
110	Aspen	6.0	9	1	
111	Pine, red	9.5	8	1	
112	Pine, red	8.5	6	1	
113	Juniper	18.0	7	2	
114	Pine, red	12.0	0	1	
115	Pine, red	9.0	4	1	
116	Pine, white	13.5	0	1	
117	Pine, red	7.5	0	1	
118	Walnut	7.0	0	1	
119	Pine, red	7.5	0	1	
120	Walnut	10.5	7	1	
121	Walnut	12.5	8	1	
122	Pine, red	9.5	7	1	
123	Pine, red	10.5	6	1	
124	Hackberry	6.0	7	1	
125	Elm, American	6.0	0	1	
126	Unknown	6.5	0	1	
127	Pine, red	9.5	7	1	
128	Pine, red	13.5	7	1	
129	Pine, red	12.5	7	1	

130	Pine, red	11.0	0	1	
131	Boxelder	6.0	7	1	
132	Pine, red	12.0	6	1	
133	Pine, red	12.0	7	1	
134	Pine, red	12.0	6	1	
135	Pine, red	8.0	6	1	
136	Pine, red	10.0	7	1	
137	Unknown	9.0	0	1	
138	Pine, red	11.5	6	1	
139	Apple	8.5	5	1	
140	Elm, Siberian	11.0	7	1	
141	Boxelder	6.5	0	1	
142	Pine, red	6.0	8	1	
143	Elm, American	9.5	4	1	
144	Elm, Siberian	11.0	0	1	
145	Walnut	6.0	4	1	
146	Juniper	12.5	7	1	
147	Elm, American	11.5	1	1	almost dead
148	Boxelder	8.0	7	1	
149	Boxelder	12.0	7	2	
150	Boxelder	11.0	5	2	
151	Boxelder	16.5	5	2	
152	Boxelder	12.5	6	2	
153	Boxelder	9.0	6	1	
154	Walnut	14.0	7	1	
155	Pine, red	10.0	7	1	
156	Walnut	10.0	7	1	
157	Boxelder	6.5	6	1	
158	Boxelder	6.5	8	1	
159	Boxelder	11.0	5	1	
160	Boxelder	6.5	7	1	
161	Boxelder	7.0	7	1	
162	Boxelder	7.0	6	1	

163	Boxelder	7.0	6	1	
164	Boxelder	8.0	5	1	
165	Juniper	11.0	7	1	
166	Ash, green	7.0	6	1	
167	Ash, green	6.5	7	1	
168	Juniper	15.0	6	1	
169	Juniper	16.0	7	1	
170	Juniper	11.5	7	1	
171	Apple	13.0	5	1	
172	Walnut	6.0	8	1	
173	Maple, amur	18.0	7	8	
174	Oak, bur	7.0	8	1	
175	Walnut	6.0	8	1	
176	Elm, Siberian	10.5	7	1	
177	Ash, green	6.0	8	1	
178	Elm, Siberian	20.0	6	2	
179	Juniper	8.0	7	1	
180	Elm, Siberian	16.0	7	1	
181	Elm, Siberian	6.0	6	1	
182	Ash, green	26.5	6	5	
183	Walnut	6.5	8	1	
184	Ash, green	6.0	7	1	
185	Ash, green	7.0	7	1	
186	Ash, green	8.0	7	1	
187	Ash, green	7.0	7	1	
188	Ash, green	7.5	7	1	
189	Elm, Siberian	19.5	4	1	
190	Walnut	9.5	8	1	
191	Boxelder	10.0	6	1	
192	Boxelder	6.0	7	1	
193	Boxelder	8.5	7	1	
194	Juniper	7.5	8	1	
195	Ash, green	9.0	6	1	

196	Ash, green	6.0	7	1	
197	Walnut	14.0	9	1	
198	Walnut	15.0	7	1	
199	Walnut	14.0	7	1	
200	Walnut	11.0	8	1	
201	Walnut	6.5	9	1	
202	Walnut	6.5	8	1	
203	Boxelder	7.5	7	1	
204	Ash, green	11.0	7	2	
205	Cottonwood	22.0	9	1	
206	Walnut	15.5	8	1	
207	Walnut	23.0	8	1	
208	Boxelder	12.0	4	2	
209	Boxelder	40.0	5	4	
210	Boxelder	11.0	5	2	
211	Boxelder	6.5	7	1	
212	Boxelder	7.0	5	1	
213	Boxelder	12.0	7	1	
214	Cottonwood	16.5	9	1	
215	Cottonwood	26.0	6	1	
216	Boxelder	8.0	7	1	
217	Cottonwood	14.5	8	1	
218	Cottonwood	26.0	6	1	
219	Cottonwood	36.0	6	1	
220	Ash, green	7.0	7	1	
221	Cottonwood	22.5	9	1	
222	Cottonwood	29.5	5	3	
223	Juniper	6.0	9	1	
224	Ash, green	6.0	7	1	
225	Ash, green	8.5	6	1	
226	Elm, Siberian	13.0	7	1	
227	Oak, red	9.5	9	1	
228	Maple, silver	10.0	6	1	

229	Oak, white	6.5	9	1	
230	Oak, white	6.0	9	1	
231	Maple, silver	13.0	5	1	sprouts
232	Oak, pin	10.0	9	1	
233	Ash, green	8.0	8	1	
234	Maple, silver	11.0	5	1	sprouts
235	Sumac, staghorn	5.0	8	1	
236	Maple, amur	18.0	6	3	
237	Maple, amur	13.0	6	1	
238	Spruce, blue	19.0	7	1	
239	Walnut	9.5	7	1	
240	Hackberry	16.0	8	1	
241	Apple	10.0	7	1	
242	Boxelder	16.0	6	2	
243	Oak, red	13.0	9	1	
244	Maple, sugar	4.0	5	1	trunk wounds
245	Ash, green	12.0	7	1	
246	Linden	9.0	8	1	
247	Ash, green	7.5	7	1	
248	Linden	12.5	8	1	
249	Maple, sugar	7.5	8	1	
250	Ash, green	9.5	6	1	
251	Aspen	21.5	6	3	
252	Ash, green	9.5	5	1	sprouts
253	Maple, sugar	9.5	7	1	
254	Ash, green	9.5	7	1	
255	Linden	9.0	8	1	
256	Maple, hybrid	6.0	7	1	
257	Elm, hybrid	10.0	6	1	
258	Maple, hybrid	11.0	7	1	
259	Maple, hybrid	10.5	7	1	
260	Maple, hybrid	5.5	8	1	
261	Elm, hybrid	6.5	8	1	

262	Maple, hybrid	5.5	8	1	
263	Elm, hybrid	6.5	7	1	
264	Maple, hybrid	5.0	8	1	
265	Elm, hybrid	5.5	7	1	
266	Maple, hybrid	4.0	9	1	
267	Elm, hybrid	6.5	8	1	
268	Linden	13.5	7	1	
269	Ash, green	12.5	8	1	
270	Maple, sugar	8.0	8	1	
271	Linden	14.0	8	1	
272	Ash, green	12.0	5	1	thin canopy
273	Maple, sugar	9.0	8	1	
274	Linden	10.5	8	1	
275	Ash, green	8.0	7	1	
276	Maple, sugar	7.5	7	1	
277	Ash, green	7.5	0	1	EAB
278	Maple, Norway	6.0	2	1	trunk wounds
279	Hackberry	6.0	7	1	
280	Ginkgo	6.0	7	1	
281	Ash, green	8.5	2	1	EAB
282	Maple, hybrid	8.0	2	1	almost dead
283	Ginkgo	6.0	6	1	trunk wound
284	Ash, green	7.5	1	1	EAB
285	Ash, green	7.5	4	1	trunk wound
286	Hackberry	1.5	8	1	
287	Oak, bicolor	1.0	8	1	
288	Oak, white	1.5	8	1	
289	Oak, pin	1.5	8	1	
290	Linden	1.5	8	1	
291	Hickory, shagbark	1.5	6	1	
292	Hickory, shagbark	1.5	8	1	
293	Hickory, shagbark	1.5	8	1	
294	Hickory, shagbark	1.5	6	1	

295	Hickory, shagbark	1.5	6	1	
296	Oak, pin	1.5	7	1	
297	Linden	1.5	8	1	
298	Linden	1.5	8	1	
299	Linden	1.5	8	1	
300	Linden	6.5	3	1	trunk damage, borers
301	Maple, Norway	7.0	7	1	
302	Maple, Norway	9.5	7	1	
303	Linden	7.0	6	1	
304	Oak, bicolor	14.0	8	1	
305	Ash, green	11.0	5	1	
306	Maple, Norway	9.0	6	1	
307	Maple, Norway	10.5	7	1	
308	Ash, green	11.0	5	1	
309	Maple, Norway	9.0	7	1	
310	Linden	10.5	8	1	
311	Maple, red	8.0	6	1	
312	Linden	13.0	7	1	
313	Ash, green	14.0	5	1	
314	Maple, red	8.5	7	1	
315	Maple, Norway	12.0	5	1	stem girdling root
316	Maple, sugar	9.5	6	1	
317	Maple, Norway	10.5	6	1	
318	Linden	11.5	7	1	
319	Oak, bicolor	12.5	8	1	
320	Elm, hybrid	9.5	8	1	
321	Oak, bicolor	9.0	9	1	
322	Ash, green	11.5	6	1	
323	Linden	9.5	7	1	stem girdling root
324	Maple, Norway	7.0	7	1	
325	Maple, hybrid	13.0	5	1	trunk wound
326	Linden	10.0	8	1	
327	Maple, hybrid	12.5	8	1	

328	Linden	10.5	6	1	stem girdling root
329	Oak, red	6.0	8	1	
330	Oak, red	6.5	8	1	
331	Oak, red	6.5	8	1	
332	Oak, red	5.5	8	1	
333	Oak, red	5.5	8	1	
334	Oak, red	5.5	8	1	
335	Oak, red	6.0	8	1	
336	Ash, green	9.5	5	1	thin canopy
337	Maple, Norway	9.0	8	1	
338	Hackberry	8.0	8	1	
339	Ash, green	9.5	2	1	EAB
340	Catalpa	8.0	8	1	
341	Maple, hybrid	4.5	9	1	
342	Birch, river	10.0	8	1	
343	Maple, hybrid	11.0	8	1	
344	Oak, red	12.0	9	1	
345	Oak, bicolor	7.5	7	1	
346	Ginkgo	5.0	8	1	
347	Ash, white	15.5	7	1	
348	Linden	11.5	7	1	
349	Ash, green	12.0	7	1	
350	Oak, bur	11.0	9	1	
351	Ash, green	10.0	6	1	
352	Maple, sugar	7.0	7	1	
353	Linden	8.0	7	1	suckers
354	Linden	9.0	7	1	suckers
355	Maple, Norway	7.0	6	1	
356	Hackberry	10.5	8	1	
357	Maple, hybrid	14.5	7	1	
358	Maple, Norway	12.0	7	1	
359	Crabapple	3.5	5	1	thin canopy
360	Crabapple	6.0	5	1	thin canopy, sprouts

361	Crabapple	8.0	5	1	thin canopy, sprouts
362	Crabapple	7.0	5	1	thin canopy, sprouts
363	Crabapple	6.5	4	1	trunk wound, thin canopy
364	Maple, hybrid	13.5	7	1	
365	Maple, Norway	10.9	7	1	excessive lean
366	Linden	7.0	7	1	
367	Maple, Norway	13.0	4	1	trunk wound
368	Linden	7.0	6	1	thin canopy, sprouts
369	Linden	11.5	6	1	sprouts
370	Ash, green	11.0	5	1	thin canopy
371	Crabapple	5.0	3	1	trunk wound
372	Crabapple	3.5	3	1	mower damage
373	Ash, green	15.5	4	1	dieback, sprouts
374	Maple, Norway	10.5	7	1	
375	Linden	12.5	8	1	
376	Ash, green	11.5	5	1	sprouts
377	Linden	12.5	7	1	
378	Maple, Norway	6.0	7	1	
379	Ash, green	10.5	6	1	
380	Maple, Norway	7.5	8	1	
381	Linden	8.0	8	1	
382	Maple, Norway	9.0	6	1	stem girdling root
383	Linden	11.0	7	1	
384	Ash, green	14.5	6	1	
385	Oak, bicolor	10.5	6	1	
386	Hackberry	12.0	6	1	
387	Oak, bicolor	13.0	7	1	
388	Crabapple	4.5	5	1	thin canopy
389	Crabapple	4.5	5	1	thin canopy
390	Crabapple	4.0	5	1	suckers, thin canopy
391	Crabapple	3.5	4	1	trunk wound
392	Maple, Norway	11.5	7	1	
393	Linden	10.0	7	1	

394	Maple, sugar	6.5	7	1	
395	Ash, green	12.5	6	1	sprouts
396	Maple, Norway	10.0	6	1	old wound
397	Linden	11.5	7	1	
398	Maple, red	9.0	7	1	
399	Oak, bur	12.0	7	1	sprouts
400	Linden	15.5	7	1	
401	Maple, sugar	8.0	0	1	dead
402	Maple, Norway	9.5	8	1	
403	Maple, sugar	9.5	8	1	
404	Maple, red	7.0	6	1	mower damage
405	Linden	12.5	6	1	
406	Maple, red	7.5	4	1	trunk wounds
407	Ash, green	12.5	5	1	
408	Ironwood	8.0	6	1	
409	Oak, bur	16.0	8	1	
410	Linden	27.0	5	2	
411	Oak, red	17.5	8	1	
412	Crabapple	8.5	6	1	
413	Ash, green	36.0	5	6	poor form
414	Oak, Eastern pin	16.0	8	1	
415	Linden	17.5	8	1	
416	Crabapple	7.5	5	1	thin canopy
417	Crabapple	6.5	5	1	thin canopy
418	Crabapple	7.0	5	1	thin canopy, sprouts
419	Crabapple	6.5	5	1	thin canopy, sprouts
420	Crabapple	6.5	5	1	thin canopy, sprouts
421	Maple, sugar	12.0	5	1	poor form
422	Maple, sugar	13.5	7	1	
423	Aspen	14.5	7	1	
424	Linden	18.0	7	1	
425	Linden	13.5	7	1	
426	Maple, Norway	12.0	8	1	

427	Linden	13.0	7	1	
428	Maple, red	8.0	7	1	
429	Ash, green	17.5	6	1	
430	Maple, sugar	9.0	5	1	trunk wounds
431	Linden	11.5	8	1	
432	Maple, Norway	11.0	8	1	
433	Maple, sugar	8.5	3	1	borers
434	Linden	11.0	7	1	
435	Hackberry	10.0	8	1	
436	Linden	8.5	7	1	
437	Hackberry	8.5	8	1	
438	Linden	11.5	7	1	stem girdling root
439	Hackberry	10.0	8	1	
440	Maple, Norway	11.5	8	1	
441	Maple, sugar	7.5	8	1	
442	Oak, bicolor	14.5	7	1	
443	Ash, green	14.5	6	1	
444	Oak, bur	10.5	7	1	
445	Hackberry	9.5	8	1	
446	Aspen	10.0	8	1	
447	Oak, bicolor	8.5	8	1	
448	Maple, red	4.0	4	1	trunk wounds
449	Hackberry	6.0	7	1	
450	Linden	6.0	6	1	
451	Maple, Norway	7.0	7	1	
452	Linden	6.5	8	1	
453	Arborvitae	16.0	7	12	
454	Arborvitae	7.0	6	3	
455	Arborvitae	15.0	7	4	
456	Arborvitae	17.0	7	10	
457	Arborvitae	14.0	7	6	
458	Arborvitae	20.0	6	5	
459	Arborvitae	15.0	7	4	

460	Arborvitae	20.0	6	8	
461	Arborvitae	11.0	6	5	
462	Arborvitae	15.0	6	4	
463	Arborvitae	10.0	6	7	
464	Arborvitae	10.0	6	5	
465	Arborvitae	13.0	6	4	
466	Arborvitae	15.0	5	4	
467	Walnut	14.0	4	7	
468	Arborvitae	10.0	5	3	
469	Arborvitae	12.0	4	8	
470	Arborvitae	14.0	6	4	
471	Arborvitae	13.0	5	6	
472	Arborvitae	10.0	6	3	
473	Arborvitae	12.0	7	3	
474	Arborvitae	8.0	7	4	
475	Arborvitae	10.0	7	6	
476	Arborvitae	9.0	7	3	
477	Arborvitae	13.0	7	4	
478	Arborvitae	12.0	7	5	
479	Arborvitae	14.0	7	1	
480	Arborvitae	8.0	7	3	
481	Arborvitae	13.0	7	5	
482	Arborvitae	11.0	7	3	
483	Arborvitae	7.5	7	3	
484	Arborvitae	9.0	7	4	
485	Arborvitae	9.0	7	3	
486	Arborvitae	6.5	7	2	
487	Arborvitae	13.0	7	7	
488	Spruce, white	14.0	6	1	
489	Spruce, white	15.5	6	1	
490	Spruce, white	14.0	6	1	
491	Spruce, white	12.5	6	1	
492	Spruce, white	14.5	5	1	

493	Spruce, white	11.0	3	1	diseased
494	Spruce, white	11.5	3	1	diseased
495	Spruce, white	12.0	3	1	diseased
496	Ash, green	18.5	7	1	
497	Oak, red	13.5	8	1	
498	Ash, green	14.5	7	1	
499	Oak, red	17.5	7	1	stem girdling root
500	Linden	23.0	7	1	suckers
501	Oak, red	13.0	7	1	
502	Linden	18.5	7	1	
503	Oak, red	15.0	7	1	
504	Crabapple	4.5	5	1	thin canopy
505	Crabapple	5.0	6	1	suckers
506	Crabapple	4.0	5	1	thin canopy
507	Crabapple	4.0	5	1	thin canopy
508	Cottonwood	44.5	8	1	
509	Arborvitae	21.0	8	6	
510	Arborvitae	12.0	8	6	
511	Arborvitae	18.0	8	4	
512	Arborvitae	18.0	8	4	
513	Arborvitae	17.0	8	6	
514	Arborvitae	18.0	8	5	
515	Arborvitae	17.0	8	6	
516	Arborvitae	17.0	8	6	
517	Arborvitae	2.0	8	7	
518	Arborvitae	19.0	8	4	
519	Arborvitae	18.0	8	5	
520	Arborvitae	27.0	8	7	
521	Arborvitae	17.0	8	1	
522	Arborvitae	19.0	8	4	
523	Arborvitae	25.0	8	1	
524	Hackberry	22.5	5	1	large wound
525	Hackberry	7.0	6	1	

526	Maple, silver	22.0	5	1	poor form
527	Linden	11.5	8	1	
528	Linden	10.5	8	1	
529	Linden	9.0	8	1	
530	Linden	7.0	8	1	
531	Maple, red	8.5	5	1	chlorotic
532	Maple, red	8.0	6	1	chlorotic
533	Maple, red	8.5	6	1	chlorotic
534	Maple, red	7.0	6	1	chlorotic
535	Maple, red	11.5	6	1	chlorotic
536	Maple, red	4.0	6	1	chlorotic
537	Maple, red	7.0	4	1	trunk wound
538	Maple, red	7.5	8	1	
539	Maple, red	9.5	8	1	
540	Maple, red	9.5	8	1	
541	Ash, green	9.5	6	1	
542	Elm, hybrid	17.5	7	1	
543	Ash, green	12.0	6	1	
544	Linden	17.5	8	1	
545	Maple, hybrid	24.0	6	1	poor form
546	Linden	16.0	8	1	
547	Maple, red	9.0	7	1	
548	Maple, red	9.0	4	1	
549	Maple, hybrid	16.0	6	1	poor form
550	Maple, hybrid	15.0	6	1	poor form
551	Maple, hybrid	17.5	6	1	poor form
552	Maple, hybrid	17.5	6	1	poor form
553	Maple, hybrid	19.5	6	1	poor form
554	Treelilac	6.0	8	1	
555	Treelilac	3.5	8	1	
556	Treelilac	5.5	8	1	
557	Oak, red	8.5	8	1	
558	Ash, white	15.5	8	1	

559	Linden	8.0	8	1	
560	Maple, Norway	8.5	7	1	
561	Maple, red	5.0	4	1	trunk wounds
562	Linden	20.0	5	3	
563	Maple, hybrid	2.5	7	1	
564	Hackberry	9.5	8	1	
565	Oak, bur	8.5	8	1	
566	Oak, bicolor	2.0	3	1	dead top
567	Maple, Norway	10.5	7	1	
568	Honeylocust	2.0	8	1	
569	Maple, red	9.5	7	1	
570	Linden	13.0	8	1	
571	Linden	12.0	6	1	suckers & sprouts
572	Hackberry	10.5	6	1	
573	Hackberry	2.0	6	1	
574	Maple, Norway	11.5	3	1	trunk wound and decay
575	Hackberry	10.0	8	1	
576	Maple, hybrid	5.0	8	1	
577	Maple, hybrid	6.0	8	1	
578	Ash, green	26.5	6	3	
579	Linden	15.5	6	1	
580	Catalpa	12.5	8	1	
581	Ash, green	16.0	6	1	
582	Hackberry	10.0	8	1	
583	Maple, red	10.0	8	1	
584	Hackberry	7.0	7	1	
585	Hackberry	9.5	8	1	
586	Elm, hybrid	3.0	0	1	
587	Maple, hybrid	10.0	8	1	
588	Maple, red	8.0	8	1	
589	Maple, hybrid	10.5	7	1	
590	Maple, hybrid	8.0	3	1	trunk wound
591	Maple, Norway	12.0	6	1	

592	Maple, Norway	11.0	8	1	
593	Linden	10.5	6	1	sprouts
594	Crabapple	8.0	7	1	sprouts
595	Crabapple	10.5	7	1	
596	Maple, red	7.5	8	1	
597	Crabapple	12.5	7	1	
598	Cottonwood	7.5	6	1	sprouts
599	Crabapple	11.0	7	1	sprouts
600	Crabapple	4.5	4	1	poor form
601	Maple, red	3.0	8	1	
602	Crabapple	1.0	8	1	
603	Crabapple	1.0	8	1	
604	Crabapple	1.0	8	1	
605	Crabapple	1.0	6	1	suckers
606	Honeylocust	2.5	8	1	
607	Elm, hybrid	14.5	8	1	
608	Linden	9.5	8	1	
609	Hackberry	9.0	8	1	
610	Maple, Norway	10.5	8	1	
611	Elm, hybrid	2.5	8	1	
612	Hackberry	7.0	8	1	
613	Linden	2.0	7	1	
614	Oak, bur	9.0	6	1	
615	Honeylocust	2.0	8	1	
616	Linden	18.5	7	1	
617	Maple, sugar	7.5	5	1	trunk wounds
618	Maple, hybrid	9.0	7	1	
619	Coffeetree, Kentucky	8.5	8	1	
620	Coffeetree, Kentucky	8.5	8	1	
621	Coffeetree, Kentucky	2.0	8	1	
554	**Total # of Trees**	**Average**	**6.34**		

REPORT OF GEOTECHNICAL EXPLORATION

2026 Mill and Overlay and Mill Towns Trail Project
Northfield, Minnesota

AET Project No. P-0034268

Date:
March 12, 2025

Prepared for:
Bolton & Menk, Inc.
12224 Nicollet Ave
Burnsville, MN 55337

Geotechnical • Materials
Forensic • Environmental
Building Technology
Petrography/Chemistry

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March 12, 2025

Bolton & Menk, Inc.
12224 Nicollet Ave
Burnsville, MN 55337

Attn: Jason Malecha, PE

RE: Report of Geotechnical Exploration
2026 Mill and Overlay and Mill Towns Trail Project
Northfield, Minnesota
AET Project No. P-0034268

Dear Mr. Malecha:

American Engineering Testing, Inc. (AET) is pleased to present the results of our subsurface exploration program and geotechnical engineering review for the 2026 Mill and Overlay and Mill Towns Trail Improvement Project in Northfield, Minnesota. These services were performed according to our proposal to you dated May 31, 2024.

We are submitting an electronic copy (PDF) of the report to you. Please contact me if you have any questions about the report. I can also be contacted to arrange construction observation and testing services.

Sincerely,
American Engineering Testing, Inc.

Neil G. Lund, PE (MN)
Principal Engineer
nlund@teamAET.com
612-369-3163

SIGNATURE PAGE

Prepared for:

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46212
STATE OF MINNESOTA

Reviewed by:

Thomas Evans, PE (MN)
Senior Engineer

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under Minnesota Statute Section 326.02 to 326.15

Name: Neil G. Lund, PE

Date: March 12, 2025 License #: 46212

TABLE OF CONTENTS

1.0 INTRODUCTION

The City of Northfield (City) 2026 Mill and Overlay and Mill Towns Trail Improvement Project will include upgrades to several City street segments and various bikeway, trail and sidewalk areas. To assist with planning and design, Bolton & Menk, Inc. (BMI) authorized American Engineering Testing, Inc. (AET) to conduct a subsurface exploration program at the site, conduct soil laboratory testing, and perform a geotechnical engineering review for the project. This report presents the results of the above services and provides our engineering recommendations based on this data.

2.0 SCOPE OF SERVICES

AET's services were performed according to our revised proposal to BMI dated May 31, 2024. The authorized scope included the following:

- GPS staking and arranging to clear the exploration locations of underground utilities.
- Nine pavement cores with shallow hand auger borings on street segments were mill and overlay was proposed.
- Traffic control necessary to complete the above work.
- Eight hand auger borings to an estimated depth of 3 feet along proposed Mill Towns Trail segments.
- Soil laboratory testing.
- Geotechnical engineering review based on the data collected and preparation of this report.

Due to changes in the project scope, we added a 10th core on an existing segment of trail. We also added two hand auger borings to collect additional data along the new segment and a new connection near Hall Ave.

These services were intended for geotechnical purposes only. The scope was not intended to explore for the presence or extent of environmental contamination in the soil or groundwater.

3.0 PROJECT INFORMATION

The City is proposing pavement improvements or new trails along several street segments as part of the 2026 project. The proposed street improvements include mill and overlay and spot repair of curb and gutter; trail or sidewalk improvements are also proposed along with several intersection improvements as summarized below:

Mill and Overlay (8,560 ft)

- Jefferson Pkwy, TH 246 Roundabout to Spring Creek Rd (5,480 ft)
- Maple St, Jefferson Pkwy to Meadow View Dr (1,400 ft)
- Maple Ct, Maple St to Cul-de-sac (180 ft)
- Prairie St, Jefferson Pkwy to Meadow View Dr (1,500 ft)

Off-Road Trails

- Mill Towns Trail, TH 246 to Spring Creek Rd (new construction, 5,480 ft)
- Jefferson Pkwy Trail, Mill Towns Trail to Spring Creek Rd on the north side (new construction, 430 ft)

The above stated information represents our understanding of the proposed construction. This information is an integral part of our engineering review. It is important that you contact us if there are changes from that described so that we can evaluate whether modifications to our recommendations are appropriate.

4.0 SUBSURFACE EXPLORATION AND TESTING

4.1 Field Exploration Program

The amended subsurface exploration program conducted for the project consisted of 10 pavement cores and 10 hand auger borings performed in September 2024. We estimated the number of cores and borings based on an approximate 1,000-foot spacing along the project lengths for mill and overlay and 500-foot spacing for the new trail alignments. AET chose the boring and core locations and hand auger boring depths.

The boring and core locations are shown on the Boring Location Map in Appendix A. The locations were collected by AET personnel using GPS equipment with sub-meter accuracy. Please note that the elevations provide relative consistency for presenting geotechnical data and they do not represent the precision of a licensed land surveyor.

Pavement core photographs are provided in Appendix A.

The logs of the borings and details of the methods used appear in Appendix A. The logs contain information concerning soil layering, soil classification, geologic origins, and moisture condition. The coordinates and elevations are provided on the boring logs in the appendix.

4.2 Laboratory Testing

The soils were visually-manually classified by the Unified Soil Classification System (USCS) and the American Association of State Highway and Transportation Officials (AASHTO) system. Water content test results appear on the individual boring logs in Appendix A, adjacent to the samples upon which they were performed.

5.0 SITE CONDITIONS

5.1 Pavement Summary

At the core locations, we observed a pavement section consisting of bituminous pavement over mixed, mostly granular fill that was likely a possible aggregate base. Table 5.1 presents the thickness of the bituminous layer with comments on material condition.

Table 5.1 – Bituminous Thickness and Condition Summary

Location	Core	Recovered Core Thickness (in)	Downhole Core Thickness (in)[A]	Material Condition
Jefferson Pkwy	C-01	4.6	4.75	Good condition
	C-02	3.6	3.75	Good condition
	C-03	4.4	4.5	Debonding at 1 ½ inches; stripping near debonded interface
	C-04	4.1	4	Good condition
	C-05	5.2	5	Good condition
Maple Ct	C-06	3.0	4	Low-severity stripping present
Maple St	C-07	4.2	4	Low-severity stripping present
Prairie St	C-08	4.6	4.75	Good condition
	C-09	3.7	3.75	Good condition
Multiuse Trail	C-10	2.5	2.75	Good condition

A. Measured to the nearest ¼”

We visually evaluated the condition of the bituminous pavements based on the pavement cores obtained at the site and our observations of the pavement surface during our field exploration. Photographs of the pavement cores are provided on the pavement core logs in Appendix A.

The core condition varied, but they were generally good or only included low severity stripping. Core C-03 was debonded near the surface, with some stripping present at the former bond.

Stripping occurs when water or water vapor gets between the asphalt film and the aggregates, thereby breaking the adhesive bond between the aggregate and asphalt binder. This will “strip”

the asphalt from the aggregate, eventually leading to pavement failure. When stripping within the pavement becomes excessive, severe deformation and fatigue cracking will occur, with traffic loadings will result in local failures such as alligator cracking, potholes, and rutting in the wheel paths.

The pavement surface distress on much of Jefferson Pkwy included mostly transverse cracks, with some longitudinal/block cracking and edge distress. A chip seal, mostly in fair condition, may have been obscuring other distresses. Conditions were poorer at the west end of the project, with areas of possible alligator cracking and greater surface weathering; the east end included a different chip seal application, greater edge distress, and more crack seal.

Maple St and Maple Ct were in similar condition to Jefferson Pkwy, though a chip seal in good condition on Maple Ct was also likely obscuring surface distress.

Prairie Street appeared to be in the poorest condition overall, with transverse cracking, frequent alligator cracking and possible rutting.

5.2 Subsurface Soils/Geology

The site geology below the pavement and topsoil layers consisted of fill soils.

In paved areas, the underlying materials consisted of mostly gravelly silty sand with occasional inclusions of recycled bituminous (A-1-b). A small amount of this material was recovered mixed with clayey soils or trace roots (A-6, A-7-6).

Along proposed trail alignments, the topsoil varied in depth from about 2 to 6 inches thick and averaged about 4 inches. The underlying soils included mixed fill that was mostly silty sand with gravel (A-1-b), sometimes mixed with clayey sand or sandy lean clay (A-6, A-7-6).

5.3 Groundwater

We observed the hand auger boreholes for the presence of groundwater after the boring termination depth was reached. Groundwater was not observed at the time of our exploration.

Longer-term monitoring of water levels using temporary piezometers will provide more accurate water level measurement; however, this was not part of our scope of services. Groundwater levels fluctuate due to varying seasonal and annual rainfall and snow melt amounts, as well as other factors. A discussion of the water level measurement methods is presented in Appendix A.

5.4 Subgrade Soil Properties

The soils encountered within the critical subgrade zone, which includes the top 3 feet of subgrade, were variable but consisted mostly of A-1-b sands (silty sand and sand with silt with variable amounts of gravel), with occasional silty or clayey layers or inclusions. We judge the A-1-b silty sands to have low to moderate frost susceptibility, moderately fast drainage characteristics, and moderately high strength and stability characteristics regarding pavement support.

6.0 RECOMMENDATIONS

6.1 Specifications

This report references the 2020 MnDOT Standard Specifications for Construction (MnDOT Spec.). The ensuing sections refer to the following words, which are defined below:

Grading grade is the bottom of the aggregate base layer.

Granular or Select Granular Material should meet the requirements of MnDOT Specification 3149, including Table 3149.2-1, which requires 0% to 20% (Granular) or 0% to 12% (Select Granular) for the ratio of the percent passing the No. 200 sieve/1-inch sieve.

Select Grading Material is mineral soil, excluding organic soils (>5% organic material by weight), silt (soil containing 80 percent or more silt-sized particles), and marl (soil consisting of clay and lime or unconsolidated sedimentary rock).

Top of Subgrade is the surface of material immediately beneath a granular material layer meeting MnDOT Spec. 3149, which is usually placed as a sand subbase layer. If there is no granular material layer, then the top of subgrade is the grading grade.

Uniform soils have the same USCS soil class, and they have similar color, moisture content, and performance characteristics.

Road Core is the area below the grading grade extending down and out from the grading grade point of intersection (PI) to the bottom of the excavation at a 1V:1H slope for embankments less than or equal to 30 feet high or at a 1V:1.5H slope for embankments greater than 30 feet high.

6.2 Discussion

We understand the City is proposing mill and overlay for the 2026 project. Mill and overlay consists of removing a portion of the in-place bituminous pavement, usually at least 1½ inches,

and replacing it with new bituminous pavement layers. This approach is typically used with pavements in fair or better condition to renew the surface, improve structure and ride, and extend the overall pavement service life.

When selecting a pavement to rehabilitate by mill and overlay, the following should be considered:

- Pavement surface condition – the amount of surface distress will have a proportional effect on mill and overlay service life. Cracks and other damage in the pavement below the milling will inevitably reflect to the new surface, which will require maintenance to limit water intrusion and excessive crack propagation.
- Material condition – it is typically undesirable to leave highly stripped bituminous pavements as support for the new overlay. Stripped pavements will bond poorly to the overlay materials, reducing the effective pavement structure. Additionally, they can complicate construction and will result in an inconsistent finished product.
- Pavement thickness – about 1 ½ inches of intact bituminous pavement should be left in place to support construction equipment and provide adequate structure for new pavements.

Overall, the pavements we evaluated have variable surface condition, with portions of some segments such as Prairie St in poor condition. However, the material condition was generally good, with adequate thickness of bituminous pavement, making mill and overlay a viable option.

We expect mill and overlay, if completed properly, will generally have a service life of 10 to 15 years. This service life will be greater on roads with better surface condition and may be less where conditions are relatively poor, such as on Prairie St. Distresses will quickly reappear through new surfaces, and supplemental patching and repair work will improve the service life of new overlays.

6.3 Mill and Overlay Recommendations

We recommend the following construction sequence for mill and overlay segments. Mill and overlay should be performed in general accordance with MnDOT Specifications 2232 (Mill Pavement Surface) and 2360 (Plant Mixed Asphalt Pavement):

1. Mill the pavement with appropriate self-propelled cold milling equipment to a depth of 1 1/2 inches. The mill depth may need to be adjusted or extended to remove damaged pavements.
    a. A greater mill and overlay depth will provide some additional service life

2. Sweep or clean the surfaces until they are free of loose materials.
3. Review the surfaces of the bituminous pavements, for areas of distress that may benefit from additional milling, removals, or patching.
4. Distribute a uniform tack coat on the clean surfaces and protect it from dirt and debris.
5. Place and compact the required thickness of bituminous pavement. We recommend a minimum of 1 1/2 inches of SPWEA340B.

One method to improve service life of a mill and overlay is by using an “underseal” (also called a “Texas underseal”). The process includes placing a chip seal on the existing or milled surface prior to the pavement overlay. Because the chip seal provides stress relief and impedes water intrusion, the underseal retards or delays reflective cracking. The underseal should be designed as a typical chip seal, usually with a greater rate of emulsion application for the rougher milled surface. The underseal will also work as the tack layer between the in-place pavement and new overlay.

6.4 Trail Construction

6.4.1 Removals and Excavation

We recommend removing the existing topsoil materials. Excavations should continue to allow for placement of the recommended trail pavement section.

6.4.2 Subgrade Preparation

The soils exposed following the excavation recommended in Section 7.2.1 should be prepared per MnDOT Spec. 2112, Subgrade Preparation. This includes scarification, mixing, moisture conditioning, and compaction of the upper 6 inches of the subgrade.

If unstable soils or soils which do not meet the requirements for Select Grading Material are encountered during subgrade preparation, we recommend removing these unsuitable materials and replacing them with Select Grading Material. Unstable soils typically have a water content exceeding the standard optimum water content as defined in ASTM D698 (Standard Proctor test). We caution that instability of soils beneath those being reworked and compacted may limit the ability to compact the upper soils; therefore, greater depths of subcutting and stability improvement may be needed.

6.4.3 Fill and Compaction

Fill soils used to re-attain pavement subgrade may consist of on-site, non-organic, debris-free soils, and they should be moisture conditioned for compaction. Imported fill soils should consist

of Select Grading Material and should generally match the adjacent soils when placed within 3 feet of grading grade.

All new fill and reworked soils for pavement support should be placed and compacted per MnDOT Spec. 2106, including the moisture content and compaction requirements shown in MnDOT Tables 2106.3-1 and 2106.3-4, respectively. In ASTM terms, this specification requires soils placed within 3 feet of grading grade within the road core be compacted to a minimum of 100% of the standard maximum dry unit weight defined in ASTM D 698 (Standard Proctor test). A reduced minimum compaction level of 95% of the standard maximum dry unit weight can be used below the critical subgrade zone for non-granular materials (those which do not meet MnDOT Spec 3149.2B).

6.4.4 Subgrade Stability

The final subgrade should have proper stability within the critical subgrade zone. Where clayey soils are exposed, stability should be evaluated using the test roll procedure. Where unstable soils are found using the test roll process, these soils should be improved by means of scarification, drying, and recompaction; or by subcutting and replacement. If highly variable conditions are present (either stability-wise or soil type), a compaction subcut should be performed to provide a more consistent subgrade condition. We recommend the final soils remaining in place be capable of passing a test roll prior to placing the aggregate base.

Where granular soils are exposed (i.e., sands to silty sands), we recommend applying surface compaction. This compaction should take place with a self-propelled vibratory roller compactor having a drum diameter of at least 3 feet. Overall stability should be evaluated during the compaction process (judged by an AET geotechnical/pavement engineer or their representative). Instability will likely be a result of wetter clayey/silty soils beneath the exposed sandy soils. The unstable soils should be improved by means of scarification, drying, and recompaction; or by subcutting and replacement.

6.4.5 Aggregate Base

Aggregate base placed for pavement support should meet the gradation and quality requirements for Class 5 per MnDOT Spec. 3138, modified as required by the City. Any millings or reclaimed material placed as aggregate base should meet the gradation requirements of MnDOT Table 3138.2-6. Aggregate base placement and compaction should be performed according to MnDOT Spec. 2211. All aggregate base material (including existing, imported, or reclaimed) should be tested for compaction using the Penetration Index Method per the requirements of MnDOT Table 2211.3-3.

After the aggregate base has been placed, compacted, and tested, it is the contractor's responsibility to maintain the base in a suitable condition for paving. If the subgrade or aggregate base materials become saturated or contaminated by clayey or silty soils after testing, it may be rendered unsuitable for paving due to softness and pumping. This action would require remedial action before pavement can be placed.

6.4.6 Trail Pavement Design

Table 6.4.6 below shows the pavement sections for various project trails including Mill Towns Trail based on the City standards.

Table 6.4.6 – Bituminous Pavement Thickness Design STR-9 (Mill Towns Trail)

Pavement Course	MnDOT Material Type (Spec.)	Thickness
Bituminous Wear	SPWEB230B (PG 58S-28)	3"
Aggregate Base	Class 5 or 6 (3138)	8"

Please note that the pavement thickness design recommended above is for minimum thicknesses, not average thicknesses. This should be noted as such on the project plans and specifications.

7.0 CONSTRUCTION CONSIDERATIONS

7.1 Potential Difficulties

7.1.1 Runoff Water in Excavation

Water can be expected to collect in the excavation bottom during times of inclement weather or snow melt. To allow observation of the excavation bottom, to reduce the potential for soil disturbance, and to facilitate filling operations, we recommend water be removed from within the excavation during construction. Based on the soils encountered, we anticipate the groundwater can be handled with conventional sump pumping.

7.1.2 Disturbance of Soils

The on-site soils can be disturbed under construction traffic, especially if the soils are wet. If soils become disturbed, they should be subcut to the underlying undisturbed soils. The subcut soils can then be dried and recompacted back into place, or they should be removed and replaced with drier imported fill.

7.1.3 Cobbles and Boulders

The soils at this site can include cobbles and boulders. This may make excavating procedures somewhat more difficult than normal if they are encountered.

7.2 Excavation Backsloping

If excavation faces are not retained, the excavations should maintain maximum allowable slopes in accordance with *OSHA Regulations (Standards 29 CFR), Part 1926, Subpart P, "Excavations"* (can be found on www.osha.gov). Even with the required OSHA sloping, water seepage or surface runoff can potentially induce sideslope erosion or sloughing which could require slope maintenance.

7.3 Observation and Testing

The recommendations in this report are based on the subsurface conditions found at our test boring locations. Since the soil conditions can be expected to vary away from the soil boring locations, we recommend on-site observation by a geotechnical engineer/technician during construction to evaluate these potential changes. Soil density testing should also be performed on new fill placed to document that project specifications for compaction have been satisfied.

8.0 TEST STANDARDS

When we refer to an ASTM Standard in this report, we mean that our services were performed in general accordance with that standard. Compliance with any other standards referenced within the specified standard is neither inferred nor implied.

9.0 LIMITATIONS

Within the limitations of scope, budget, and schedule, we have endeavored to provide our services according to generally accepted geotechnical engineering practices at this time and location. Other than this, no warranty, express or implied, is intended.

Important information regarding risk management and proper use of this report is given in Appendix B entitled "Geotechnical Report Limitations and Guidelines for Use."

Appendix A

Geotechnical Field Exploration and Testing
Boring Log Notes
Unified Soil Classification System
AASHTO Soil Classification System
Boring Location Maps
Pavement Core Logs
Subsurface Boring Logs

Appendix A
Geotechnical Field Exploration and Testing
Report No. P-0034268

A.1 FIELD EXPLORATION

The subsurface conditions at the site were explored by performing 10 pavement cores with hand auger borings, plus 10 supplemental hand auger borings. The locations of the borings and cores appear on the Boring Location Maps, preceding the Pavement Core Logs and Subsurface Boring Logs in this appendix.

A.2 SAMPLING METHODS

A.2.1 Hand Auger Sampling (HA)

Sample types described as "HA" on the boring logs are continuous core samples collected by the hand auger method. The method consists of a 3.25 inch OD hand auger tool that is manually twisted continuously into the ground to the desired depth or refusal.

A.2.2 Sampling Limitations

Unless observed in a sample, contacts between soil layers are estimated based on the spacing of samples and the action of drilling tools. Cobbles, boulders, and other large objects generally cannot be recovered from test borings, and they may be present in the ground even if they are not noted on the boring logs.

Determining the thickness of "topsoil" layers is usually limited, due to variations in topsoil definition, sample recovery, and other factors. Visual-manual description often relies on color for determination, and transitioning changes can account for significant variation in thickness judgment. Accordingly, the topsoil thickness presented on the logs should not be the sole basis for calculating topsoil stripping depths and volumes. If more accurate information is needed relating to thickness and topsoil quality definition, alternate methods of sample retrieval and testing should be employed.

A.3 CLASSIFICATION METHODS

Soil descriptions shown on the boring logs are based on the Unified Soil Classification System (USCS). The USCS is described in ASTM: D2487 and D2488. Where laboratory classification tests (sieve analysis or Atterberg Limits) have been performed, accurate classifications per ASTM: D2487 are possible. Otherwise, soil descriptions shown on the boring logs are visual-manual judgments. Charts are attached which provide information on the USCS, the descriptive terminology, and the symbols used on the boring logs.

Visual-manual judgment of the AASHTO Soil Group is also noted as a part of the soil description. A chart presenting details of the AASHTO Soil Classification System is also attached.

The boring logs include descriptions of apparent geology. The geologic depositional origin of each soil layer is interpreted primarily by observation of the soil samples, which can be limited. Observations of the surrounding topography, vegetation, and development can sometimes aid this judgment.

A.4 WATER LEVEL MEASUREMENTS

The groundwater level measurements are shown at the bottom of the boring logs. The following information appears under "Water Level Measurements" on the logs:

- Date and Time of measurement
- Sampled Depth: lowest depth of soil sampling at the time of measurement
- Casing Depth: depth to bottom of casing or hollow-stem auger at time of measurement
- Cave-in Depth: depth at which measuring tape stops in the borehole
- Water Level: depth in the borehole where free water is encountered
- Drilling Fluid Level: same as Water Level, except that the liquid in the borehole is drilling fluid

The true location of the water table at the boring locations may be different than the water levels measured in the boreholes. This is possible because there are several factors that can affect the water level measurements in the borehole. Some of these factors include: permeability of each soil layer in profile, presence of perched water, amount of time between water level readings, presence of drilling fluid, weather conditions, and use of borehole casing.

A.5 LABORATORY TEST METHODS

A.5.1 Water Content Tests

Conducted per AET Procedure 01-LAB-010, which is performed in general accordance with ASTM: D2216 and AASHTO: T265.

A.6 TEST STANDARD LIMITATIONS

Field and laboratory testing is done in general conformance with the described procedures. Compliance with any other standards referenced within the specified standard is neither inferred nor implied.

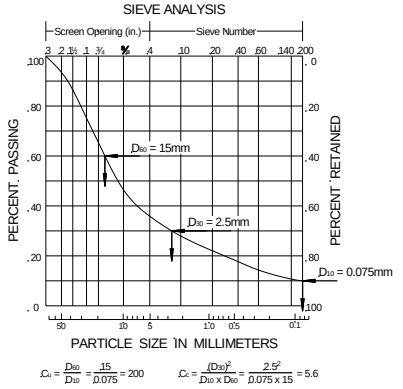
A.7 SAMPLE STORAGE

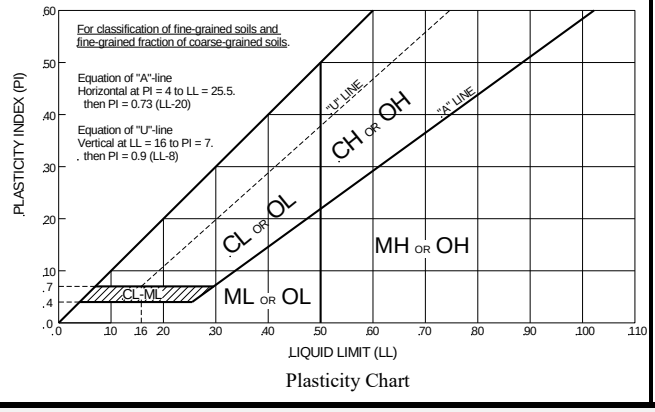
Unless notified to do otherwise, we routinely retain representative samples of the soils and pavement cores recovered from the borings for a period of 30 days.

UNIFIED SOIL CLASSIFICATION SYSTEM
ASTM Designations: D 2487, D2488

AMERICAN ENGINEERING TESTING, INC.

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests[A]				Soil Classification: Group Symbol	Soil Classification: Group Name[B]
Coarse-Grained Soils More than 50% retained on No. 200 sieve	Gravels More than 50% coarse fraction retained on No. 4 sieve	Clean Gravels Less than 5% fines[C]	Cu≥4 and 1≤Cc≤3[E]	GW	Well graded gravel[F]
			Cu<4 and/or 1>Cc>3[E]	GP	Poorly graded gravel[F]
		Gravels with Fines more than 12% fines[C]	Fines classify as ML or MH	GM	Silty gravel[F,G,H]
			Fines classify as CL or CH	GC	Clayey gravel[F,G,H]
	Sands 50% or more of coarse fraction passes No. 4 sieve	Clean Sands Less than 5% fines[D]	Cu≥6 and 1≤Cc≤3[E]	SW	Well-graded sand[I]
			Cu<6 and/or 1>Cc>3[E]	SP	Poorly-graded sand[I]
		Sands with Fines more than 12% fines[D]	Fines classify as ML or MH	SM	Silty sand[G,H,I]
			Fines classify as CL or CH	SC	Clayey sand[G,H,I]
Fine-Grained Soils 50% or more passes the No. 200 sieve (see Plasticity Chart below)	Silts and Clays Liquid limit less than 50	inorganic	PI>7 and plots on or above "A" line[J]	CL	Lean clay[K,L,M]
			PI<4 or plots below "A" line[J]	ML	Silt[K,L,M]
		organic	Liquid limit–oven dried / Liquid limit – not dried <0.75	OL	Organic clay[K,L,M,N] / Organic silt[K,L,M,O]
	Silts and Clays Liquid limit 50 or more	inorganic	PI plots on or above "A" line	CH	Fat clay[K,L,M]
			PI plots below "A" line	MH	Elastic silt[K,L,M]
		organic	Liquid limit–oven dried / Liquid limit – not dried <0.75	OH	Organic clay[K,L,M,P] / Organic silt[K,L,M,Q]
Highly organic soil			Primarily organic matter, dark in color, and organic in odor	PT	Peat[R]





Plasticity Chart

Notes

[A]Based on the material passing the 3-in (75-mm) sieve.
[B]If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.
[C]Gravels with 5 to 12% fines require dual symbols:
GW-GM well-graded gravel with silt
GW-GC well-graded gravel with clay
GP-GM poorly graded gravel with silt
GP-GC poorly graded gravel with clay
[D]Sands with 5 to 12% fines require dual symbols:
SW-SM well-graded sand with silt
SW-SC well-graded sand with clay
SP-SM poorly graded sand with silt
SP-SC poorly graded sand with clay

[E]$Cu = D_{60} / D_{10}$, $Cc = \frac{(D_{30})^2}{D_{10} \times D_{60}}$

[F]If soil contains ≥15% sand, add "with sand" to group name.
[G]If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.
[H]If fines are organic, add "with organic fines" to group name.
[I]If soil contains ≥15% gravel, add "with gravel" to group name.
[J]If Atterberg limits plot is hatched area, soil is a CL-ML silty clay.
[K]If soil contains 15 to 29% plus No. 200 add "with sand" or "with gravel", whichever is predominant.
[L]If soil contains ≥30% plus No. 200, predominantly sand, add "sandy" to group name.
[M]If soil contains ≥30% plus No. 200, predominantly gravel, add "gravelly" to group name.
[N]PI≥4 and plots on or above "A" line.
[O]PI<4 or plots below "A" line.
[P]PI plots on or above "A" line.
[Q]PI plots below "A" line.
[R]Fiber Content description shown below.

ADDITIONAL TERMINOLOGY NOTES USED BY AET FOR SOIL IDENTIFICATION AND DESCRIPTION

Grain Size

Term	Particle Size
Boulders	Over 12"
Cobbles	3" to 12"
Gravel	#4 sieve to 3"
Sand	#200 to #4 sieve
Fines (silt & clay)	Pass #200 sieve

Gravel Percentages

Term	Percent
A Little Gravel	3% - 14%
With Gravel	15% - 29%
Gravelly	30% - 50%

Consistency of Plastic Soils

Term	N-Value, BPF
Very Soft	less than 2
Soft	2 - 4
Firm	5 - 8
Stiff	9 - 15
Very Stiff	16 - 30
Hard	Greater than 30

Relative Density of Non-Plastic Soils

Term	N-Value, BPF
Very Loose	0 - 4
Loose	5 - 10
Medium Dense	11 - 30
Dense	31 - 50
Very Dense	Greater than 50

Moisture/Frost Condition

(MC Column)

D (Dry): Absence of moisture, dusty, dry to touch.
M (Moist): Damp, although free water not visible. Soil may still have a high water content (over "optimum").
W (Wet/ Waterbearing): Free water visible, intended to describe non-plastic soils. Waterbearing usually relates to sands and sand with silt.
F (Frozen): Soil frozen

Layering Notes

Laminations: Layers less than ½" thick of differing material or color.
Lenses: Pockets or layers greater than ½" thick of differing material or color.

Peat Description

Term	Fiber Content (Visual Estimate)
Fibric Peat:	Greater than 67%
Hemic Peat:	33 – 67%
Sapric Peat:	Less than 33%

Organic Description (if no lab tests)

Soils are described as *organic*, if soil is not peat and is judged to have sufficient organic fines content to influence the Liquid Limit properties. *Slightly organic* used for borderline cases.

Root Inclusions

With roots: Judged to have sufficient quantity of roots to influence the soil properties.
Trace roots: Small roots present, but not judged to be in sufficient quantity to significantly affect soil properties.

BORING LOG NOTES

DRILLING AND SAMPLING SYMBOLS

Symbol	Definition
AR:	Sample of material obtained from cuttings blown out the top of the borehole during air rotary procedure.
B, H, N:	Size of flush-joint casing
CAS:	Pipe casing, number indicates nominal diameter in inches
COT:	Clean-out tube
DC:	Drive casing; number indicates diameter in inches
DM:	Drilling mud or bentonite slurry
DR:	Driller (initials)
DS:	Disturbed sample from auger flights
DP:	Direct push drilling; a 2.125 inch OD outer casing with an inner 1½ inch ID plastic tube is driven continuously into the ground.
FA:	Flight auger; number indicates outside diameter in inches
HA:	Hand auger; number indicates outside diameter
HSA:	Hollow stem auger; number indicates inside diameter in inches
LG:	Field logger (initials)
MC:	Column used to describe moisture condition of samples and for the ground water level symbols
N (BPF):	Standard penetration resistance (N-value) in blows per foot (see notes)
NQ:	NQ wireline core barrel
PQ:	PQ wireline core barrel
RDA:	Rotary drilling with compressed air and roller or drag bit.
RDF:	Rotary drilling with drilling fluid and roller or drag bit
REC:	In split-spoon (see notes), direct push and thin-walled tube sampling, the recovered length (in inches) of sample. In rock coring, the length of core recovered (expressed as percent of the total core run). Zero indicates no sample recovered.
SS:	Standard split-spoon sampler (steel; 1.5" is inside diameter; 2" outside diameter); unless indicated otherwise
SU	Spin-up sample from hollow stem auger
TW:	Thin-walled tube; number indicates inside diameter in inches
WASH:	Sample of material obtained by screening returning rotary drilling fluid or by which has collected inside the borehole after "falling" through drilling fluid
WH:	Sampler advanced by static weight of drill rod and hammer
WR:	Sampler advanced by static weight of drill rod
94mm:	94 millimeter wireline core barrel
▼:	Water level directly measured in boring
▽:	Estimated water level based solely on sample appearance

TEST SYMBOLS

Symbol	Definition
CONS:	One-dimensional consolidation test
DEN:	Dry density, pcf
DST:	Direct shear test
E:	Pressuremeter Modulus, tsf
HYD:	Hydrometer analysis
LL:	Liquid Limit, %
LP:	Pressuremeter Limit Pressure, tsf
OC:	Organic Content, %
PERM:	Coefficient of permeability (K) test; F - Field; L - Laboratory
PL:	Plastic Limit, %
q_p:	Pocket Penetrometer strength, tsf (approximate)
q_c:	Static cone bearing pressure, tsf
q_u:	Unconfined compressive strength, psf
R:	Electrical Resistivity, ohm-cms
RQD:	Rock Quality Designation of Rock Core, in percent (aggregate length of core pieces 4" or more in length as a percent of total core run)
SA:	Sieve analysis
TRX:	Triaxial compression test
VSR:	Vane shear strength, remolded (field), psf
VSU:	Vane shear strength, undisturbed (field), psf
WC:	Water content, as percent of dry weight
%-200:	Percent of material finer than #200 sieve

STANDARD PENETRATION TEST NOTES

The standard penetration test consists of driving a split-spoon sampler with a drop hammer counting the number of blows applied in each of three 6" increments of penetration. If the sampler is driven less than 18" (usually in highly resistant material), permitted in ASTM: D1586, the blows for each complete 6" increment and for each partial increment is on the boring log. For partial increments, the number of blows is shown to the nearest 0.1' below the slash.

The length of sample recovered, as shown on the "REC" column, may be greater than the distance indicated in the N column. The disparity is because the N-value is recorded below the initial 6" set (unless partial penetration defined in ASTM: D1586 is encountered) whereas the length of sample recovered is for the entire sampler drive (which may even extend more than 18").

AASHTO SOIL CLASSIFICATION SYSTEM

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS

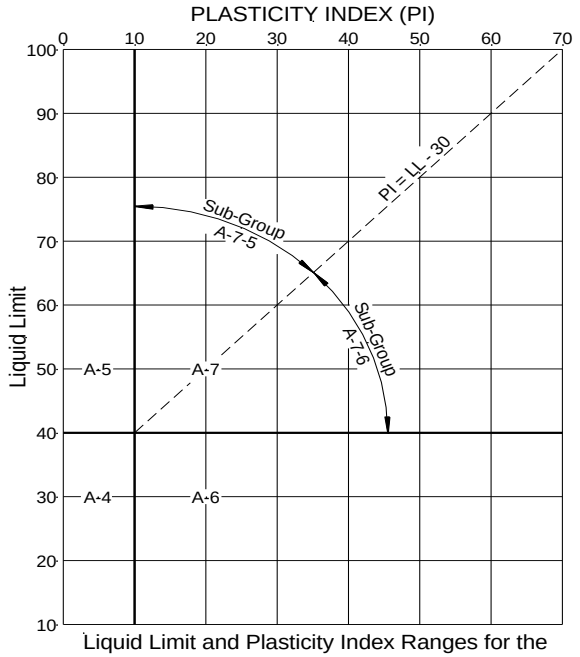
Classification of Soils and Soil-Aggregate Mixtures

General Classification	Granular Materials (35% or less passing No. 200 sieve)							Silt-Clay Materials (More than 35% passing No. 200 sieve)			
Group Classification	A-1		A-3	A-2				A-4	A-5	A-6	A-7
	A-1-a	A-1-b		A-2-4	A-2-5	A-2-6	A-2-7				A-7-5 A-7-6
Sieve Analysis, Percent passing:											
No. 10 (2.00 mm)	50 max.	....	....	....	....	....	....	....	....	....	....
No. 40 (0.425 mm)	30 max.	50 max.	51 min.	....	....	....	....	....	....	....	....
No. 200 (0.075 mm)	15 max.	25 max.	10 max.	35 max.	35 max.	35 max.	35 max.	36 min.	36 min.	36 min.	36 min.
Characteristics of Fraction Passing No. 40 (0.425 mm)											
Liquid limit	....		....	40 max.	41 min.	40 max.	41 min.	40 max.	41 min.	40 max.	41 min.
Plasticity index	6 max.		N.P.	10 max.	10 max.	11 min.	11 min.	10 max.	10 max.	11 min.	11 min.
Usual Types of Significant Constituent Materials	Stone Fragments, Gravel and Sand		Fine Sand	Silty or Clayey Gravel and Sand				Silty Soils		Clayey Soils	
General Ratings as Subgrade	Excellent to Good							Fair to Poor			

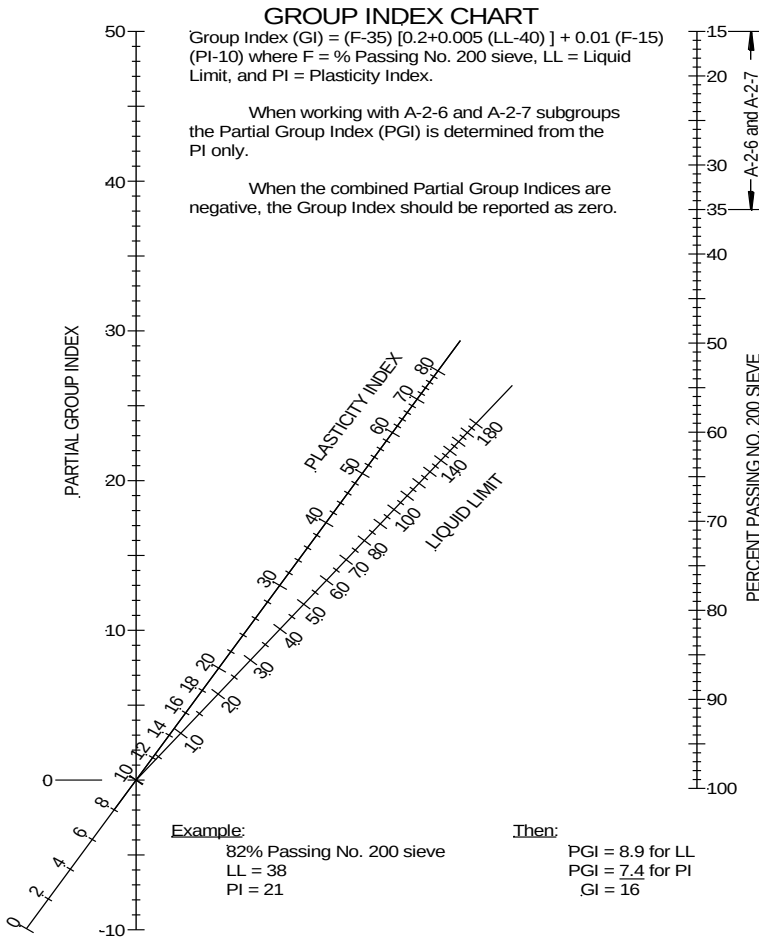
The placing of A-3 before A-2 is necessary in the "left to right elimination process" and does not indicate superiority of A-3 over A-2.

Plasticity index of A-7-5 subgroup is equal to or less than LL minus 30. Plasticity index of A-7-6 subgroup is greater than LL minus 30.

Group A-8 soils are organic clays or peat with organic content >5%.



Liquid Limit and Plasticity Index Ranges for the A-4, A-5, A-6 and A-7 Subgroups



Definitions of Gravel, Sand and Silt-Clay

The terms "gravel", "coarse sand", "fine sand" and "silt-clay", as determinable from the minimum test data required in this classification arrangement and as used in subsequent word descriptions are defined as follows:

GRAVEL - Material passing sieve with 3-in. square openings and retained on the No. 10 sieve.

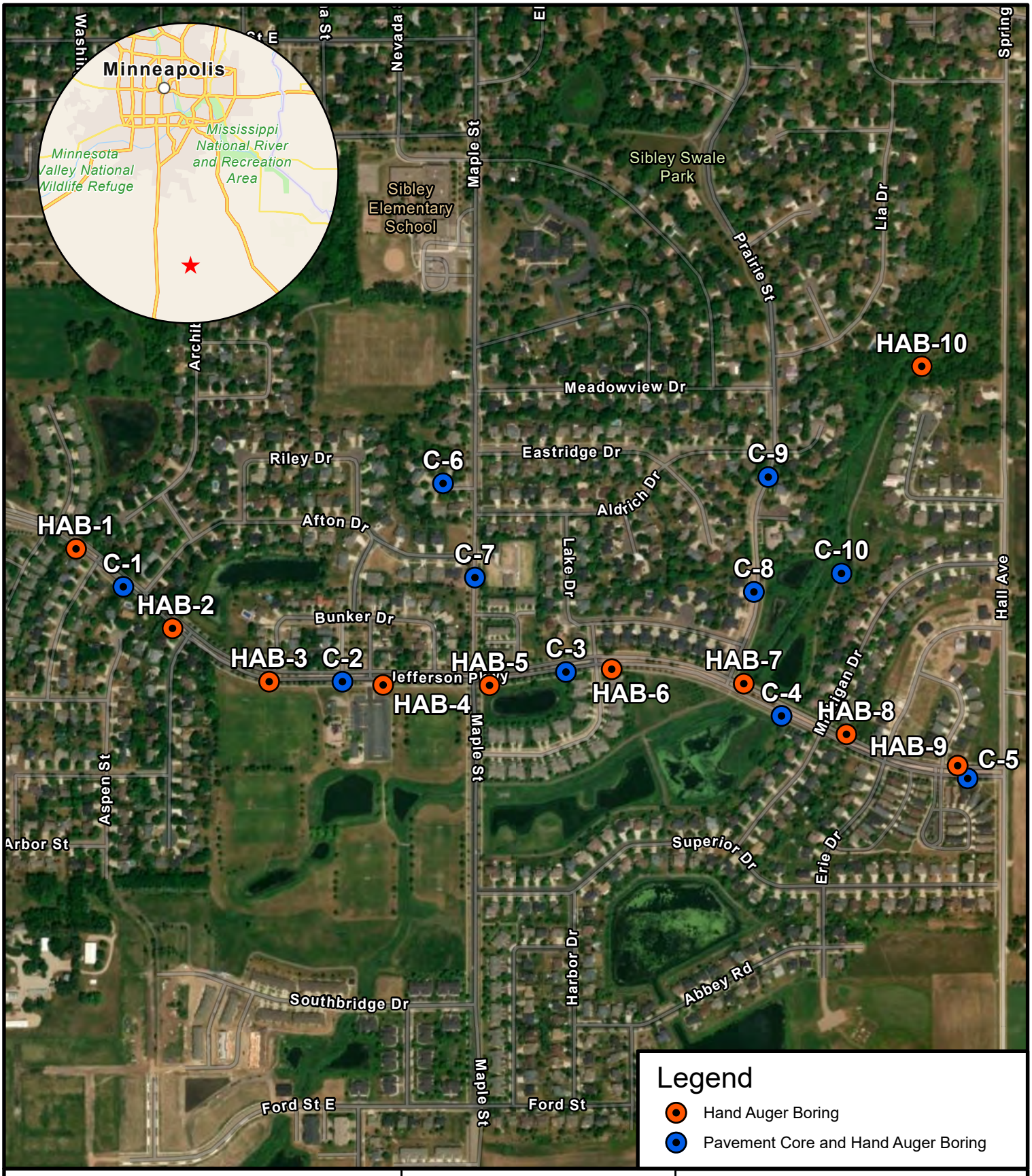
COARSE SAND - Material passing the No. 10 sieve and retained on the No. 40 sieve.

FINE SAND - Material passing the No. 40 sieve and retained on the No. 200 sieve.

COMBINED SILT AND CLAY - Material passing the No. 200 sieve

BOULDERS (retained on 3-in. sieve) should be excluded from the portion of the sample to which the classificaiton is applied, but the percentage of such material, if any, in the sample should be recorded.

The term "silty" is applied to fine material having plasticity index of 10 or less and the term "clayey" is applied to fine material having plasticity index of 11 or greater.



AMERICAN ENGINEERING TESTING

Map Reference: MnGeo 2023

N

0 540 1080

Feet

Figure 1

Boring Location Map

2026 Mill and Overlay and Mill Towns Trail Project
Northfield, MN

Date: 2/27/2025 AET Project No. P-0034268

C-01

Coring performed September 2024

AMERICAN
ENGINEERING TESTING

Pavement Core Photographs	
Core C-01	
2026 Mill and Overlay and Mill Towns Trail Improvements Northfield, Minnesota	
Date: 9/2024	AET Project P-0034268

C-02

Coring performed September 2024

AMERICAN
ENGINEERING TESTING

Pavement Core Photographs
Core C-02
2026 Mill and Overlay and Mill Towns Trail Improvements Northfield, Minnesota
Date: 9/2024 AET Project P-0034268

C-03

Coring performed September 2024

AMERICAN
ENGINEERING TESTING

Pavement Core Photographs
Core C-03
2026 Mill and Overlay and Mill Towns Trail Improvements Northfield, Minnesota
Date: 9/2024 AET Project P-0034268

C-04

Coring performed September 2024

AMERICAN ENGINEERING TESTING

Pavement Core Photographs
Core C-04
2026 Mill and Overlay and Mill Towns Trail Improvements Northfield, Minnesota
Date: 9/2024 AET Project P-0034268

C-05

Coring performed September 2024

AMERICAN ENGINEERING TESTING

Pavement Core Photographs
Core C-05
2026 Mill and Overlay and Mill Towns Trail Improvements Northfield, Minnesota
Date: 9/2024 AET Project P-0034268

C-06

Coring performed September 2024

AMERICAN ENGINEERING TESTING

Pavement Core Photographs
Core C-06
2026 Mill and Overlay and Mill Towns Trail Improvements Northfield, Minnesota
Date: 9/2024 AET Project P-0034268

C-07

Coring performed September 2024

AMERICAN
ENGINEERING TESTING

Pavement Core Photographs
Core C-07
2026 Mill and Overlay and Mill Towns Trail Improvements Northfield, Minnesota
Date: 9/2024 AET Project P-0034268

C-08

Coring performed September 2024

AMERICAN
ENGINEERING TESTING

Pavement Core Photographs

Core C-08

2026 Mill and Overlay and Mill Towns Trail Improvements

Northfield, Minnesota

Date: 9/2024 AET Project P-0034268

C-09

Coring performed September 2024

AMERICAN ENGINEERING TESTING

Pavement Core Photographs
Core C-09
2026 Mill and Overlay and Mill Towns Trail Improvements Northfield, Minnesota
Date: 9/2024 AET Project P-0034268

C-10

Coring performed September 2024

AMERICAN
ENGINEERING TESTING

Pavement Core Photographs
Core C-10
2026 Mill and Overlay and Mill Towns Trail Improvements Northfield, Minnesota
Date: 9/2024 AET Project P-0034268

SUBSURFACE BORING LOG

AET JOB NO: **P-0034268** LOG OF BORING NO. **C-01 (p. 1 of 1)**

PROJECT: **Northfield 2026 Mill & Overlay and Mill Towns Trail Project; Northfield, Minnesota**

SURFACE ELEVATION: _____ LATITUDE: **44.43977033** LONGITUDE: **-93.1577011**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
	4.75" Bituminous pavement	FILL			CORE						
	19.25" FILL, mostly gravelly silty sand, bituminous present, brown (A-1-b)										
1					HA						
2	**END OF BORING**										

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-2'	**Core/HA**	**9/3/24**		**2.0**	**0.0**	**2.0**		**None**	
BORING COMPLETED:	**9/3/24**								
DR: **RS**	LG:	Rig: **HA**							

AET_CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25

SUBSURFACE BORING LOG

AET JOB NO: **P-0034268** LOG OF BORING NO. **C-02 (p. 1 of 1)**

PROJECT: **Northfield 2026 Mill & Overlay and Mill Towns Trail Project; Northfield, Minnesota**

SURFACE ELEVATION: _____ LATITUDE: **44.4384767** LONGITUDE: **-93.15351615**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
	4" Bituminous pavement	FILL			CORE						
	20" FILL, mostly gravelly silty sand, a little clayey sand, brown (A-1-b)										
1					HA						
2	**END OF BORING**										

DEPTH:	DRILLING METHOD
0-2'	**Core/HA**

WATER LEVEL MEASUREMENTS						
DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
9/3/24		**2.0**	**0.0**	**2.0**		**None**

BORING COMPLETED: **9/3/24**

DR: **RS** LG: Rig: **HA**

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25

SUBSURFACE BORING LOG

AET JOB NO: **P-0034268** LOG OF BORING NO. **C-03 (p. 1 of 1)**

PROJECT: **Northfield 2026 Mill & Overlay and Mill Towns Trail Project; Northfield, Minnesota**

SURFACE ELEVATION: _____ LATITUDE: **44.43860822** LONGITUDE: **-93.14924909**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
	4.5' Bituminous pavement	FILL			CORE						
	19.5' FILL, mostly gravelly sand with silt, brown (A-1-b)										
1					HA						
2	**END OF BORING**										

DEPTH:	DRILLING METHOD
0-2'	**Core/HA**
BORING COMPLETED:	**9/3/24**
DR: **RS** LG:	Rig: **HA**

WATER LEVEL MEASUREMENTS

DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
9/3/24		**2.0**	**0.0**	**2.0**		**None**

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25

SUBSURFACE BORING LOG

AET JOB NO: **P-0034268** LOG OF BORING NO. **C-04 (p. 1 of 1)**

PROJECT: **Northfield 2026 Mill & Overlay and Mill Towns Trail Project; Northfield, Minnesota**

SURFACE ELEVATION: _____ LATITUDE: **44.43800959** LONGITUDE: **-93.1451334**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
	4" Bituminous pavement	FILL			CORE						
	20" FILL, mostly gravelly silty sand, brown (A-1-b)										
1					HA						
2	**END OF BORING**										

DEPTH:	DRILLING METHOD
0-2'	**Core/HA**

WATER LEVEL MEASUREMENTS

DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
9/3/24		**2.0**	**0.0**	**2.0**		**None**

BORING COMPLETED: **9/3/24**

DR: **RS** LG: Rig: **HA**

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25

SUBSURFACE BORING LOG

AET JOB NO: **P-0034268** LOG OF BORING NO. **C-05 (p. 1 of 1)**

PROJECT: **Northfield 2026 Mill & Overlay and Mill Towns Trail Project; Northfield, Minnesota**

SURFACE ELEVATION: _____ LATITUDE: **44.4371574** LONGITUDE: **-93.14157868**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
	5" Bituminous pavement	FILL			CORE						
	19" FILL, mostly gravelly silty sand, bituminous present, brown (A-1-b)										
1					HA						
2	**END OF BORING**										

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-2'	**Core/HA**	**9/3/24**		**2.0**	**0.0**	**2.0**		**None**	
BORING COMPLETED:	**9/3/24**								
DR: **RS**	LG:	Rig: **HA**							

AET_CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25

SUBSURFACE BORING LOG

AET JOB NO: **P-0034268** LOG OF BORING NO. **C-06 (p. 1 of 1)**

PROJECT: **Northfield 2026 Mill & Overlay and Mill Towns Trail Project; Northfield, Minnesota**

SURFACE ELEVATION: _____ LATITUDE: **44.44118029** LONGITUDE: **-93.15159543**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
	4" Bituminous pavement	FILL			CORE						
	24" FILL, mixture of gravelly sand with silt and clayey sand,t race roots, brown and brown and black and dark brown (A-1-b) (A-6)										
1					HA						
2	**END OF BORING**										

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-2'	**Core/HA**	**9/3/24**		**2.0**	**0.0**	**2.0**		**None**	
BORING COMPLETED: **9/3/24**									
DR: **RS** LG:	Rig: **HA**								

AET_CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25

SUBSURFACE BORING LOG

AET JOB NO: **P-0034268** LOG OF BORING NO. **C-07 (p. 1 of 1)**

PROJECT: **Northfield 2026 Mill & Overlay and Mill Towns Trail Project; Northfield, Minnesota**

SURFACE ELEVATION: _____ LATITUDE: **44.43989605** LONGITUDE: **-93.15098674**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
	4" Bituminous pavement	FILL			CORE						
	20" FILL, mostly gravelly silty sand, brown (A-1-b)										
1					HA						
2	**END OF BORING**										

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-2'	**Core/HA**	**9/3/24**		**2.0**	**0.0**	**2.0**		**None**	
BORING COMPLETED:	**9/3/24**								
DR: **RS**	LG:	Rig: **HA**							

AET_CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25

SUBSURFACE BORING LOG

AET JOB NO: **P-0034268** LOG OF BORING NO. **C-08 (p. 1 of 1)**

PROJECT: **Northfield 2026 Mill & Overlay and Mill Towns Trail Project; Northfield, Minnesota**

SURFACE ELEVATION: _____ LATITUDE: **44.4397008** LONGITUDE: **-93.14566035**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
	4.75" Bituminous pavement	FILL			CORE						
	19.25" FILL, mostly gravelly silty sand, brown (A-1-b)										
1					HA						
2	**END OF BORING**										

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-2'	**Core/HA**	**9/3/24**		**2.0**	**0.0**	**2.0**		**None**	
BORING COMPLETED:	**9/3/24**								
DR: **RS**	LG:	Rig: **HA**							

AET_CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25

SUBSURFACE BORING LOG

AET JOB NO: **P-0034268** LOG OF BORING NO. **C-09 (p. 1 of 1)**

PROJECT: **Northfield 2026 Mill & Overlay and Mill Towns Trail Project; Northfield, Minnesota**

SURFACE ELEVATION: _____ LATITUDE: **44.44126644** LONGITUDE: **-93.14538693**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
	3.75" Bituminous pavement	FILL			CORE						
	16.25" FILL, mostly gravelly silty sand, brown (A-1-b)										
1					HA						
	END OF BORING										

DEPTH:	DRILLING METHOD
0-1.67'	**Core/HA**

WATER LEVEL MEASUREMENTS

DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
9/3/24		**1.7**	**0.0**	**1.7**		**None**

BORING COMPLETED: **9/3/24**

DR: **RS** LG: Rig: **HA**

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25

SUBSURFACE BORING LOG

AET JOB NO: **P-0034268** LOG OF BORING NO. **C-10 (p. 1 of 1)**

PROJECT: **Northfield 2026 Mill & Overlay and Mill Towns Trail Project; Northfield, Minnesota**

SURFACE ELEVATION: _____ LATITUDE: **44.43995238** LONGITUDE: **-93.14398788**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
	2.75" Bituminous pavement	FILL			CORE						
	21.25" FILL, mixture of gravelly silty sand and sandy lean clay, slightly organic, trace roots, brown and dark brown (A-1-b) (A-7-6)										
1					HA						
2	**END OF BORING**										

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-2'	**Core/HA**	**9/3/24**		**2.0**	**0.0**	**2.0**		**None**	
BORING COMPLETED: **9/3/24**									
DR: **RS** LG:	Rig: **HA**								

AET_CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25

SUBSURFACE BORING LOG

AET JOB NO: **P-0034268** LOG OF BORING NO. **HAB-01 (p. 1 of 1)**

PROJECT: **Northfield 2026 Mill & Overlay and Mill Towns Trail Project; Northfield, Minnesota**

SURFACE ELEVATION: _____ LATITUDE: **44.44026939** LONGITUDE: **-93.15861051**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
1	36" FILL, mostly gravelly sand with silt, a little clayey sand, trace roots at surface, brown (A-1-b)	FILL			HA						
2											
3	**END OF BORING**										

DEPTH:	DRILLING METHOD
0-3'	**Hand Auger**

WATER LEVEL MEASUREMENTS

DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
9/3/24		**3.0**	**0.0**	**3.0**		**None**

BORING COMPLETED: **9/3/24**

DR: **RS** LG: Rig: **HA**

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25

SUBSURFACE BORING LOG

AET JOB NO: **P-0034268** LOG OF BORING NO. **HAB-02 (p. 1 of 1)**

PROJECT: **Northfield 2026 Mill & Overlay and Mill Towns Trail Project; Northfield, Minnesota**

SURFACE ELEVATION: _____ LATITUDE: **44.43920889** LONGITUDE: **-93.15683451**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
	2" Topsoil	FILL									
	34" FILL, mostly sand with silt and gravel and clayey sand, brown (A-1-b) (A-6)										
1					HA						
2											
3	**END OF BORING**										

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-3'	**Hand Auger**	**9/3/24**		**3.0**	**0.0**	**3.0**		**None**	
BORING COMPLETED:	**9/3/24**								
DR: **RS**	LG:	Rig: **HA**							

AET_CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25

SUBSURFACE BORING LOG

AET JOB NO: **P-0034268** LOG OF BORING NO. **HAB-03 (p. 1 of 1)**

PROJECT: **Northfield 2026 Mill & Overlay and Mill Towns Trail Project; Northfield, Minnesota**

SURFACE ELEVATION: _____ LATITUDE: **44.43844648** LONGITUDE: **-93.15493571**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
	4" Topsoil	FILL									
	32" FILL, mixture of silty sand and sandy lean clay, a little gravel, dark brown (A-1-b) (A-7-6)										
1					HA						
2											
3	**END OF BORING**										

DEPTH: DRILLING METHOD

0-3' Hand Auger

BORING COMPLETED: **9/3/24**

DR: **RS** LG: Rig: **HA**

WATER LEVEL MEASUREMENTS

DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
9/3/24		**3.0**	**0.0**	**3.0**		**None**

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25

SUBSURFACE BORING LOG

AET JOB NO: **P-0034268** LOG OF BORING NO. **HAB-04 (p. 1 of 1)**

PROJECT: **Northfield 2026 Mill & Overlay and Mill Towns Trail Project; Northfield, Minnesota**

SURFACE ELEVATION: _____ LATITUDE: **44.438432** LONGITUDE: **-93.15273954**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
	6" Topsoil	FILL									
	30" FILL, mixture of sand and sandy lean clay, a little gravel, dark brown (A-1-b) (A-7-6)				HA						
1											
2											
3	**END OF BORING**										

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-3'	**Hand Auger**	**9/3/24**		**3.0**	**0.0**	**3.0**		**None**	
BORING COMPLETED:	**9/3/24**								
DR: **RS**	LG:	Rig: **HA**							

AET_CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25

SUBSURFACE BORING LOG

AET JOB NO: **P-0034268** LOG OF BORING NO. **HAB-05 (p. 1 of 1)**

PROJECT: **Northfield 2026 Mill & Overlay and Mill Towns Trail Project; Northfield, Minnesota**

SURFACE ELEVATION: _____ LATITUDE: **44.4384268** LONGITUDE: **-93.15070844**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
	4" Topsoil	FILL									
	32" FILL, mixture of silty sand and clayey sand,a little gravel, dark brown (A-1-b) (A-7-6)										
1					HA						
2											
3	**END OF BORING**										

DEPTH: DRILLING METHOD

0-3' Hand Auger

BORING COMPLETED: **9/3/24**

DR: **RS** LG: Rig: **HA**

WATER LEVEL MEASUREMENTS

DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
9/3/24		**3.0**	**0.0**	**3.0**		**None**

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25

SUBSURFACE BORING LOG

AET JOB NO: **P-0034268** LOG OF BORING NO. **HAB-06 (p. 1 of 1)**

PROJECT: **Northfield 2026 Mill & Overlay and Mill Towns Trail Project; Northfield, Minnesota**

SURFACE ELEVATION: _____ LATITUDE: **44.43864688** LONGITUDE: **-93.14837551**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
	4" Topsoil	FILL									
	32" FILL, mostly sand with silt, light brown and brown (A-1-b)				HA						
1											
2											
3	**END OF BORING**										

DEPTH: DRILLING METHOD	WATER LEVEL MEASUREMENTS						
	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
0-3' Hand Auger	**9/3/24**		**3.0**	**0.0**	**3.0**		**None**
BORING COMPLETED: **9/3/24**							
DR: **RS** LG: Rig: **HA**							

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25

SUBSURFACE BORING LOG

AET JOB NO: **P-0034268** LOG OF BORING NO. **HAB-07 (p. 1 of 1)**

PROJECT: **Northfield 2026 Mill & Overlay and Mill Towns Trail Project; Northfield, Minnesota**

SURFACE ELEVATION: _____ LATITUDE: **44.43844988** LONGITUDE: **-93.14585328**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
	6" Topsoil	FILL									
	30" FILL, mostly silty sand with gravel, dark brown (A-1-b)				HA						
1											
2											
3	**END OF BORING**										

DEPTH:	DRILLING METHOD
0-3'	**Hand Auger**

WATER LEVEL MEASUREMENTS

DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
9/3/24		**3.0**	**0.0**	**3.0**		**None**

BORING COMPLETED: **9/3/24**

DR: **RS** LG: Rig: **HA**

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25

SUBSURFACE BORING LOG

AET JOB NO: **P-0034268** LOG OF BORING NO. **HAB-08 (p. 1 of 1)**

PROJECT: **Northfield 2026 Mill & Overlay and Mill Towns Trail Project; Northfield, Minnesota**

SURFACE ELEVATION: _____ LATITUDE: **44.43775939** LONGITUDE: **-93.14389346**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
	2" Topsoil	FILL									
	25" FILL, mostly silty sand with gravel, brown (A-1-b)										
1					HA						
2											
	END OF BORING										

DEPTH: DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-2.3' Hand Auger	**9/3/24**		**2.3**	**0.0**	**2.3**		**None**	
BORING COMPLETED: **9/3/24**								
DR: **RS** LG: Rig: **HA**								

AET_CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25

SUBSURFACE BORING LOG

AET JOB NO: **P-0034268** LOG OF BORING NO. **HAB-09 (p. 1 of 1)**

PROJECT: **Northfield 2026 Mill & Overlay and Mill Towns Trail Project; Northfield, Minnesota**

SURFACE ELEVATION: _____ LATITUDE: **44.43733192** LONGITUDE: **-93.14176997**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
	2" Topsoil	FILL									
	34" FILL, mixture of silty sand and clayey sand, a little gravel, dark brown (A-1-b)										
1					HA						
2											
3	**END OF BORING**										

DEPTH: DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-3' Hand Auger	**9/3/24**		**3.0**	**0.0**	**3.0**		**None**	
BORING COMPLETED: **9/3/24**								
DR: **RS** LG: Rig: **HA**								

AET_CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25

SUBSURFACE BORING LOG

AET JOB NO: **P-0034268** LOG OF BORING NO. **HAB-10 (p. 1 of 1)**

PROJECT: **Northfield 2026 Mill & Overlay and Mill Towns Trail Project; Northfield, Minnesota**

SURFACE ELEVATION: _____ LATITUDE: **44.44277637** LONGITUDE: **-93.14245579**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
1	26" FILL, mixture of gravelly sand with silt and sandy lean clay, trace roots at surface, dark brown (A-1-b)	FILL			HA						
2	**END OF BORING**										

DEPTH: DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-2.2' Hand Auger	**9/3/24**		**2.2**	**0.0**	**2.2**		**None**	
BORING COMPLETED: **9/3/24**								
DR: **RS** LG: Rig: **HA**								

AET_CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25

Appendix B

Geotechnical Report Limitations and Guidelines for Use

Appendix B
Geotechnical Report Limitations and Guidelines for Use
Report No. P-0034268

B.1 REFERENCE

This appendix provides information to help you manage your risks relating to subsurface problems which are caused by construction delays, cost overruns, claims, and disputes. This information was developed and provided by GBA[1], of which we are a member firm.

B.2 RISK MANAGEMENT INFORMATION

B.2.1 Understand the Geotechnical Engineering Services Provided for this Report

Geotechnical engineering services typically include the planning, collection, interpretation, and analysis of exploratory data from widely spaced borings and/or test pits. Field data are combined with results from laboratory tests of soil and rock samples obtained from field exploration (if applicable), observations made during site reconnaissance, and historical information to form one or more models of the expected subsurface conditions beneath the site. Local geology and alterations of the site surface and subsurface by previous and proposed construction are also important considerations. Geotechnical engineers apply their engineering training, experience, and judgment to adapt the requirements of the prospective project to the subsurface model(s). Estimates are made of the subsurface conditions that will likely be exposed during construction as well as the expected performance of foundations and other structures being planned and/or affected by construction activities.

The culmination of these geotechnical engineering services is typically a geotechnical engineering report providing the data obtained, a discussion of the subsurface model(s), the engineering and geologic engineering assessments and analyses made, and the recommendations developed to satisfy the given requirements of the project. These reports may be titled investigations, explorations, studies, assessments, or evaluations. Regardless of the title used, the geotechnical engineering report is an engineering interpretation of the subsurface conditions within the context of the project and does not represent a close examination, systematic inquiry, or thorough investigation of all site and subsurface conditions.

B.2.2 Geotechnical Engineering Services are Performed for Specific Purposes, Persons, and Projects, and At Specific Times

Geotechnical engineers structure their services to meet the specific needs, goals, and risk management preferences of their clients. A geotechnical engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared solely for the client.

Likewise, geotechnical engineering services are performed for a specific project and purpose. For example, it is unlikely that a geotechnical engineering study for a refrigerated warehouse will be the same as one prepared for a parking garage; and a few borings drilled during a preliminary study to evaluate site feasibility will not be adequate to develop geotechnical design recommendations for the project.

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project or purpose;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, the reliability of a geotechnical-engineering report can be affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. If you are the least bit uncertain about the continued reliability of this report, contact your geotechnical engineer before applying the recommendations in it. A minor amount of additional testing or analysis after the passage of time – if any is required at all – could prevent major problems.

1 Geoprofessional Business Association, 15800 Crabbs Branch Way Suite 300, Rockville, MD 20850 Telephone: 301/565-2733: www.geoprofessional.org, 2019

B.2.3 Read the Full Report

Costly problems have occurred because those relying on a geotechnical-engineering report did not read the report in its entirety. Do not rely on an executive summary. Do not read selective elements only. Read and refer to the report in full.

B.2.4 You Need to Inform Your Geotechnical Engineer About Change

Your geotechnical engineer considered unique, project-specific factors when developing the scope of study behind this report and developing the confirmation-dependent recommendations the report conveys. Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the elevation, configuration, location, orientation, function or weight of the proposed structure and the desired performance criteria;
- the composition of the design team; or
- project ownership.

As a general rule, always inform your geotechnical engineer of project or site changes – even minor ones – and request an assessment of their impact. The geotechnical engineer who prepared this report cannot accept responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.

B.2.5 Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface using various sampling and testing procedures. Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing is performed. The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgement to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team through project completion to obtain informed guidance quickly, whenever needed.

B.2.6 This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, they are not final, because the geotechnical engineer who developed them relied heavily on judgement and opinion to do so. Your geotechnical engineer can finalize the recommendations only after observing actual subsurface conditions exposed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.

B.2.7 This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a continuing member of the design team, to:

- confer with other design-team members;
- help develop specifications;
- review pertinent elements of other design professionals' plans and specifications; and
- be available whenever geotechnical engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction-phase observations.

B.2.8 Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical engineering report, along with any attachments or appendices, with your contract documents, but be certain to note conspicuously that you've included the material for information purposes only. To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the

report. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, only from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and be sure to allow enough time to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

B.2.9 Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. This happens in part because soil and rock on project sites are typically heterogeneous and not manufactured materials with well-defined engineering properties like steel and concrete. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. Read these provisions closely. Ask questions. Your geotechnical engineer should respond fully and frankly.

B.2.10 Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical engineering study. For that reason, a geotechnical engineering report does not usually provide environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. Unanticipated subsurface environmental problems have led to project failures. If you have not obtained your own environmental information about the project site, ask your geotechnical consultant for a recommendation on how to find environmental risk-management guidance.

B.2.11 Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, the engineer's services were not designed, conducted, or intended to prevent migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration. Confront the risk of moisture infiltration by including building-envelope or mold specialists on the design team. Geotechnical engineers are not building-envelope or mold specialists.

PROJECT QUESTIONNAIRE

2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

The City values input from residents who live along the project corridor as you have first-hand knowledge of how the streets and utilities function. Your comments / concerns will assist us during the preliminary design and layout of the project. We encourage you to take a few minutes to fill out the following questionnaire. Completed questionnaires can be collected at the Neighborhood Meeting, emailed to Jacob.Ives@northfieldmn.gov or dropped off at the Engineering Office located at Northfield City Hall, 801 Washington Street.

1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes _____ or No X

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

_____ I have observed street ponding after a significant rain located at: NO!

_____ (address)

_____ I have observed areas of erosion along the boulevard at: NO!

_____ (address)

Does your home or business have a sump pump?

_____ (address)

X Yes or No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

____Yes or X No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

_____ (address)

4. **WATERMAIN**

X We have not experienced any problems with our water service.

____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

____Yes or X No

If Yes, please provide location:

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

PLEASE STOP spending tax dollar money on EVERY WANT AND only on NEEDS! Your doing your BEST to tax me out of my Home AT THIS RATE. Northfield HAS to BE THE Highest TAXED City IN THE STATE!

So please STOP!!!

NORTHFIELD MINNESOTA

PROJECT QUESTIONNAIRE

2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes _____ or No X

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

No I have observed street ponding after a significant rain located at:

_____ (address)

No I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

_____ (address)

X Yes or ___ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

___ Yes or X No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

X We have not experienced any problems with our water service.

____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

____Yes or X No

If Yes, please provide location:

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

Please consider the property tax impact this will have. Our taxes increased over $700 for 2025, + there are more increases in the offing. Please consider this.

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes ✓ or No _____

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

_____ I have observed street ponding after a significant rain located at:

_____ (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

_____ (address)

✓ Yes or ____ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

✓ Yes or ____ No

3. SANITARY SEWER

✓ We have <u>not</u> experienced any problems with our sanitary sewer service.

_____ We <u>have</u> experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

✓ We have not experienced any problems with our water service.

____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

✓ Yes or ____ No

If Yes, please provide location:

Walking/biking paths between Michigan & Prairie, going South, turning left towards Prairie (crossing bridge)

Walking/biking paths south of Jefferson Pkwy and Prairie going toward Superior, Maple, ~~Bob Cratchit~~ circling back around (circling) towards Jefferson Parkway

Walkers/biking Path South of Superior Circling around largest Pond (Abbey Rd area) pavement around these areas are buckling & crumbling cause safety for walking biking issues

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

The City values input from residents who live along the project corridor as you have first-hand knowledge of how the streets and utilities function. Your comments / concerns will assist us during the preliminary design and layout of the project. We encourage you to take a few minutes to fill out the following questionnaire. Completed questionnaires can be collected at the Neighborhood Meeting, emailed to Jacob.Ives@northfieldmn.gov or dropped off at the Engineering Office located at Northfield City Hall, 801 Washington Street.

1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes _____ or No ✓

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

_____ I have observed street ponding after a significant rain located at:

_____ (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

_____ (address)

____Yes or ____ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

____Yes or ____ No

3. SANITARY SEWER

✓ We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. WATERMAIN

✓ We have not experienced any problems with our water service.

_____ We have experienced problems with our water service.

_____ (address)

5. SIDEWALKS AND TRAILS (WALKING AND BIKING)

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or ✓ No

If Yes, please provide location:

6. GENERAL COMMENTS / QUESTIONS

Please offer any additional information you would like to be considered as a part of these improvements:

The new bike lanes on Prairie St. are perfectly adequate for the minimal bike traffic. A separated bikeway is NOT necessary, and is a waste of money.

Thoughts on Installation of Concrete Barriers on Prairie Street Bike Lanes

A number of us in the Prairie Street area have met to discuss City Council's proposal to install concrete barriers on the existing bike lanes on Prairie Street. We have spoken with a large number of adult bikers, parents of child bikers, residents on Prairie Street and its cul-de-sacs, auto and service/delivery truck drivers, residents who have already had barriers installed, and those with whom we interact in our social venues.

We support safe biking for all ages and abilities. However, we believe the current painted bike lanes you have designed are working well and that installing permanent barriers would cause unnecessary problems including:

***Reduced Safety for Young and Inexperienced Riders:** Concrete barriers present rigid obstacles that can cause crashes and injuries, especially among children.

***Increased Difficulty for Drivers:** In driving down streets with cement barriers we've noted tire marks on the side of the barriers, indicating that cars are hitting them. We've heard concerns that drivers, especially inexperienced ones, who hit the barriers might then oversteer and connect with oncoming traffic. Some have noted damage to cars, as well as concern that these hits can cause off balance wheels which could get the driver in trouble in future driving.

***Negative Impact on Neighborhood Aesthetics:** Bright poles, concrete structures and street bulges would drastically alter the visual character of our residential street.

***Lack of Justification:** Prairie Street has low bicycle traffic volumes and no direct access to an elementary school or sports fields. There is no demonstrated need for additional bike infrastructure.

***Allocation of City Resources:** If possible, funds might be better reallocated to repairing potholes, maintaining existing streets or addressing greater safety concerns.

In talking with various Northfielders we concluded that the large majority feel that the current painted bike lanes balance safety and the neighborhood's quality of life. In short, they are doing the job! We urge the City Council to preserve the current street design and prioritize smart, resident-supported improvements for our community.

We realize that your job is a difficult one, and we thank you for your consideration!

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

The City values input from residents who live along the project corridor as you have first-hand knowledge of how the streets and utilities function. Your comments / concerns will assist us during the preliminary design and layout of the project. We encourage you to take a few minutes to fill out the following questionnaire. Completed questionnaires can be collected at the Neighborhood Meeting, emailed to Jacob.Ives@northfieldmn.gov or dropped off at the Engineering Office located at Northfield City Hall, 801 Washington Street.

1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes X or No _____

↓ on Division Street!.

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

_____ I have observed street ponding after a significant rain located at:

_____ (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

_____ [redacted] _____ (address)

X Yes or ____ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

____ Yes or X No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

_____ [redacted] _____ (address)

→

4. **WATERMAIN**

X We have not experienced any problems with our water service.

____ We have experienced problems with our water service.

[redacted] (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

X Yes or ____ No

If Yes, please provide location:

On Jefferson Pkwy my children ride bike to feel safe on the sidewalks when the street narrows + there is no bike path - Every time they ride bike on the sidewalk in these places along Jefferson Pkwy, they get flicked off, cursed at, honked at + heckled by pedestrians screaming at them to get off the sidewalk with their bikes

They no longer ride bike in town

In the reverse, I have walked on the new bike lanes on Maple Street + have been screamed at + told to get out Because it is only for bikes So I no longer walk in my neighborhood -

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

The Jefferson Pkwy crossings are bad + the congestion is bad + it is very dangerous for pedestrians + bikers - both physically + emotionally dangerous

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes X or No ____ Maple Street and Maple Court Fix the recessed manhole covers!

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

X I have observed street ponding after a significant rain located at:

Corner of Maple St and Afton Dr (address)
Corner of Maple St and East Ridge Dr.

____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

_____ (address)

____Yes or X No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

____Yes or ____ No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

__X__ We have not experienced any problems with our water service.

_____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or __X__ No

If Yes, please provide location:

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

See attached sheets.

General Comments to 2026 Mill and Overlay & Mill Towns State Trail Improvement Project

[redacted]

1. We both have concerns about the Mill Towns State Trail proposed improvement project. Could the trail along Jefferson Parkway be extended all the way to Spring Creek Road rather extending the pedestrian path behind existing homes and disturbing the area around the ponds and stream? It appears that you have already proposed an off-street trail to do that. Why do you need both? By not having the Mill Street State Trail as proposed, the walking path could remain as is and a larger bike path wouldn't be needed. Will the Mill Towns State Trail be built further down on Spring Creek Road past the entrance indicated on the map? Who is paying for this? Will this be an increase to our already overtaxed property taxes and City taxes? We are opposed if it is an increase to our city taxes.
2. We are totally against the proposed On-Street Separated Bikeway for Prairie Street. Tom Gill Construction Inc developed much of Maple Street. We live on Maple Court and cannot believe what the on-street separated bikeway has done to our neighborhood and neighbors. We frequently walk these streets. There are very few bike riders using the bikeway on Maple Street and Prairie Street. When we have seen a bike rider, many times they aren't even using the dedicated curbed bikeway. They are riding on the right side of the street on which we were taught to ride....with the flow of traffic. Even with the dedicated on-street separated bikeway, riding on the right side is riding against the traffic. It just doesn't feel right and can be dangerous even with the curbed bikeway. Since our Northfield streets are all different on which side of the road bike riders are to ride, adding expense to redo Prairie Street that already has bike markings and signage doesn't make sense!

   Another reason we are against on-street separated bikeways is the poor snow removal we have seen these past two winters. After a heavy snow, the bikeway usually gets plowed several times during the day because the plows on the actual driving lanes throw snow onto the bikeway, thus additional plowing is necessary. Then, the special sweeper plow that is used to clean the bikeway throws its huge amount of snow onto the neighbor's driveways. The neighbors need additional plowing and removal because of this. The build up of snow that our neighbors have endured at the end of their driveway is ridiculous, just because of the on-street separated bikeway. Our experience living on Maple Court is that the on-street bikeway gets precedence over plowing our court. That doesn't make sense.

   When out of town visitors come to our house, most are shocked by the raised curb, narrow roadway and curved street that Maple Street has become. The lines on the street, if visible, and the raised curb, can't be seen after a heavy snowfall. Many of our

visitors have turned onto the bikeway and damaged their car because of it. One of our neighbors had an additional cement pad poured as she couldn't back out of her driveway safely without being concerned that she would hit the raised bikeway curb or have an accident with oncoming traffic.

Another occurrence we have experienced these past few years with the on-street separated bikeway on Maple Street is that there is hardly room for two cars to pass one another due to the narrow street. If there is a car parked on the designated parking side, we have to come close to or cross the center median line to get past it. There are many vehicles that don't fit onto the designated parking side.

The biggest reason that an on-street separated bikeway curbed lane isn't needed is that there are hardly any bike riders that use it. Has there ever been a study to see how many bike riders actually use these bike lanes? The exuberant cost and chaos of these on-street separated bikeway lanes cannot be justified for the few that use it!

Why is an on-street separated bikeway even being proposed for Prairie Street? Bike riders can use Maple Street if they want to get to Woodley Street. Or, they can use the Mill Towns State Trail once completed to get there.

We are vehemently against our on-street separated bikeway on Maple Street and would like to have it removed. We can't believe that there is another on-street separated bikeway proposed for Prairie Street. Please do not consider installing it there too!

From: [redacted]
To:
Subject: 2026 Mill and Overlay & Mill Town trail - Jefferson Parkway Signage
Date: Tuesday, April 15, 2025 9:58:55 AM

[redacted]

You don't usually receive emails from this address.
Make sure you trust this sender before taking any actions.

Jacob,

With this proposed project, please review the street name signage for Jefferson Parkway from the roundabout going east. The signage all states “Jefferson Parkway” with no east designation. Highway 246 (Division street) is the dividing line for east and west street designations in the city of Northfield. Jefferson Parkway going to the east of Highway 246 has never been labeled as “Jefferson Parkway East”.

The map that came with the mailing about this project is the first I have ever seen Jefferson Parkway labeled “Jefferson Parkway East”. I think it’s time to get the street name correct and inline with all the other streets in town. Would you agree?

Please let me know your conclusion.

Thanks,

[redacted]

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE
2026 Mill and Overlay & Mill Towns State Trail Improvements Project
Northfield, Minnesota

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes _____ or No _____

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

Yes I have observed street ponding after a significant rain located at:

Corner of East Ridge + Maple (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

Yes [redacted] (address)

X Yes or ___ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

___ Yes or X No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

X We have not experienced any problems with our water service.

____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

____Yes or ____ No

If Yes, please provide location:

Please do not build any more bike paths with concrete dividers.

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

It's very dangerous to enter the bike path on Maple St. & Aldrich Dr. The concrete needs to be removed at that intersection. Riding a bike up the hill on the bike path & trying to turn right onto Aldrich Dr. one has to look behind and also hope that a speeding car doesn't come over the hill as you turn. The concrete opening at Aldrich Dr should be as wide as they are on all of the other streets that intersect the Maple St. bike path.

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes _____ or No X

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

_____ I have observed street ponding after a significant rain located at:

_____ (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

[redacted] (address)

X Yes or _____ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

_____ Yes or _____ No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

X We have not experienced any problems with our water service.

_____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or X No !! bo

If Yes, please provide location:

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

Please discontinue adding the concrete barriers between streets and bike paths!

the bike paths all vary & it is very confusing to drivers. paths on left, paths on right, switching sides, concrete barries, no barriers with painted lines. Stop spending money on walking + bike paths!

NORTHFIELD MINNESOTA

PROJECT QUESTIONNAIRE

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes _____ or No ✓

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

X I have observed street ponding after a significant rain located at:

[redacted] (address) (IN FRONT OF MY HOUSE EVERY TIME WE HAVE A HEAVY RAINFALL)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

_____

____Yes or ✓ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

____Yes or ____ No

3. SANITARY SEWER

✓ We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

✓ We have not experienced any problems with our water service.

____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

✓ Yes or ____ No

If Yes, please provide location:

SIBLEY DRIVE COULD USE A SIDEWALK

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional inform[illegible]ments:

PLEASE do not add more pavement without addressing the woefully inadequate & outdated drainage system. I have had to replace carpet in my lower level 3 times in 15 years due to water coming into our lower level after backing up onto our front lawn. The storm drain is not adequate. Do not add more pavement w/o fixing the current drainage problems. I'm excited to have the bike trail added, but am tired of replacing carpet every few years.

NORTHFIELD
MINNESOTA

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1. ROADWAY PAVEMENT CONDITION

   Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

   Yes X or No _____

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

   X I have observed street ponding after a significant rain located at:

   intersection of Maple + East Ridge (address)

   _____ I have observed areas of erosion along the boulevard at:

   _____ (address)

   Does your home or business have a sump pump?

   _____ (address)

   X Yes or ___ No

   If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

   ___ Yes or X No

3. SANITARY SEWER

   X We have not experienced any problems with our sanitary sewer service.

   _____ We have experienced problems with our sanitary sewer service.

   _____ (address)

→

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

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Northfield, Minnesota

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1. ROADWAY PAVEMENT CONDITION

   Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

   Yes X or No _____

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

   X I have observed street ponding after a significant rain located at:

   intersection of Maple + East Ridge (address)

   _____ I have observed areas of erosion along the boulevard at:

   _____ (address)

   Does your home or business have a sump pump?

   _____ (address)

   X Yes or ___ No

   If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

   ___ Yes or X No

3. SANITARY SEWER

   X We have not experienced any problems with our sanitary sewer service.

   _____ We have experienced problems with our sanitary sewer service.

   _____ (address)

→

4. WATERMAIN

X We have not experienced any problems with our water service.

_____ We have experienced problems with our water service.

_____ (address)

5. SIDEWALKS AND TRAILS (WALKING AND BIKING)

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or X No

If Yes, please provide location:

6. GENERAL COMMENTS / QUESTIONS

Please offer any additional information you would like to be considered as a part of these improvements:

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

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Northfield, Minnesota

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes _____ or No X

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

_____ I have observed street ponding after a significant rain located at:

_____ (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

[redacted] _____ (address)

____Yes or X No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

____Yes or ____ No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

[redacted] _____ (address)

→

4. **WATERMAIN**

_X_ We have not experienced any problems with our water service.

____ We have experienced problems with our water service.

[redacted] (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

____Yes or _X_ No

If Yes, please provide location:

It looks on the diagram that a sidewalk is contemplated on the east side of Prairie St. from Prairie View Ct. to Lia Drive. We do not believe such a sidewalk is needed — are strongly opposed to it. There is a sidewalk on the west side of Prairie St and there is a walking lane on the east side of Prairie St. Also, there is buried internet cable on the east side of Prairie St. between Prairie View Ct. and Prairie Circle.

The macadam surface on Mill Town State Trail does need attention

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

Who could be asked to pay for a sidewalk on the east side of Prairie St?

[redacted]

NORTHFIELD
MINNESOTA

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes X or No _____

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

X I have observed street ponding after a significant rain located at:

[redacted] (address)

X I have observed areas of erosion along the boulevard at:

[redacted] (address)

Does your home or business have a sump pump?

_____ (address)

___Yes or X No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

___Yes or X No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. WATERMAIN

X We have not experienced any problems with our water service.

_____ We have experienced problems with our water service.

_____ (address)

5. SIDEWALKS AND TRAILS (WALKING AND BIKING)

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or X No

If Yes, please provide location:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

6. GENERAL COMMENTS / QUESTIONS

Please offer any additional information you would like to be considered as a part of these improvements:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes X or No _____ [redacted]

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

X I have observed street ponding after a significant rain located at:

[redacted] _____ (address)

X I have observed areas of erosion along the boulevard at:

[redacted] _____ (address)

The lowest part of the street is in front of my house.

Does your home or business have a sump pump?

_____ (address)

___Yes or X No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

___Yes or ___ No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

X We have not experienced any problems with our water service.

_____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or X No

If Yes, please provide location:

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

The bike lanes are fine — there is no need for concrete barriers.

NORTHFIELD
MINNESOTA

Project questionnaire – PRAIRIE ST. (N. OF JEFFERSON; S. OF WOODLEY)

2026 Mill and Overlay & Mill Towns State Trail Improvements Project

The City values input from all residents, especially those who live along the project corridor as you have first-hand knowledge of how the streets and utilities function. Your comments and concerns will assist us during the preliminary design and layout of the project. We encourage you to take a few minutes to fill out the following questionnaire.

Completed questionnaires can be hand-delivered at the Neighborhood Meeting, dropped off at the Engineering Office located at Northfield City Hall, 801 Washington Street or emailed to Jacob.Ives@northfieldmn.gov.

Roadway pavement condition – PRAIRIE ST.

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

__X__ Yes or _____ No

Storm sewer, storm water drainage and surface erosion

_____ I/We have observed street ponding after a significant rain

Located at: _____

_____ I/We have observed areas of erosion along the boulevard

Located at: _____

Does your home or business have a sump pump?

_____ Yes or _____ No

Address _____

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

_____ Yes or __X__ No

Sanitary sewer

X I/We have not experienced any problems with our sanitary sewer service

 I/We have experienced problems with our sanitary sewer service

Address _____

Watermain

X I/We have not experienced any problems with our water service

_____ I/We have experienced problems with our water service

Address _____

Sidewalk and trails (walking and biking)

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or X No

If yes, please provide location:

_____

_____

_____

_____

_____

_____

_____

General comments and questions

Give any additional information you would like us to consider as a part of these improvements:

REVERT TO THE PREVIOUS LANES, & REMOVE BIKE TRAILS TO IMPROVE SAFETY. BIKE TRAFFIC IS MINIMAL SINCE NO SCHOOL. BIKERS GOING NORTH FROM JEFFERSON TO WOODLEY, ALMOST ALL USE THE EAST PARKING LANE, WHICH IS SELDOM USED FOR PARKING.

PERHAPS CONVERT TO 25 MPH ZONE, DUE TO HILL/CURVE @ POPPY ST. & THEN SIBLEY SWALE PARK.

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes _____ or No _____

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

✓ I have observed street ponding after a significant rain located at:

Lia Drive & Lindberg Ct. (address) Intersection

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

[redacted] (address)

___Yes or X No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

___Yes or ___ No

3. SANITARY SEWER

✗ We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. WATERMAIN

_____ We have not experienced any problems with our water service.

✓ We have experienced problems with our water service.

[redacted] Tree Roots Backup (address)

5. SIDEWALKS AND TRAILS (WALKING AND BIKING)

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or ____ No

If Yes, please provide location:

6. GENERAL COMMENTS / QUESTIONS

Please offer any additional information you would like to be considered as a part of these improvem

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

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Northfield, Minnesota

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes _____ or No _____ Please pave Hall Ave/Spring Creek Rd between Huron Ct and Woodley. It is always really rough.

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

_____ I have observed street ponding after a significant rain located at:

_____ (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

_____ (address)

___Yes or ___No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

___Yes or ___No

3. SANITARY SEWER

__X__ We have <u>not</u> experienced any problems with our sanitary sewer service.

_____ We <u>have</u> experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

_____ We have not experienced any problems with our water service.

__X__ We have experienced problems with our water service. – we were told that our water pressure is very low. Not really a problem?

[redacted] (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

____Yes or ____ No

If Yes, please provide location:

The new path that connects Huron Ct with Prairie street is great! But when you come out off the path onto Prairie St you are dumped onto the street and it is un-marked. This intersection / trail crossing needs better marking / signage. Thanks!

The project map does not show the Mill Towns State Trail going all the way to Woodley. I assume that is an error on the map or it will be completed in 2025?

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

Great to see these improvements! Looking forward to it.

Please pave Spring Creek Rd / Hall Ave north of Huron Ct. The gravel is always in really rough shape because there is so much traffic on that road.

NORTHFIELD
MINNESOTA

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes X or No _____

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

X I have observed street ponding after a significant rain located at:

Corner of Lia Dr + Lindberg Ct (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

_____ (address)

____Yes or X No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

____Yes or ____ No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

X We have not experienced any problems with our water service.

_____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or X No

If Yes, please provide location:

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes _____ or No X

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

_____ I have observed street ponding after a significant rain located at:

_____ (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

_____ (address)

X Yes or ____ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

____Yes or ____ No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

X We have not experienced any problems with our water service.

___ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

___Yes or X No

If Yes, please provide location:

Already improving with Mill Town Trail.
I would suggest finally getting Gravel
Road portion on Hall Ave Paved this
year. There was a roll over last
year its very unsafe

6. **GENERAL COMMENTS / QUESTIONS** [redacted]

Please offer any additional information you would like to be considered as a part of these improvements:

[redacted] Huron Ct.

City Resurfaced with Tar & Covered with
Ground Shale. Almost three years Still
Sweeping Culdesac gallons. Can You please
Run Street Sweeper entire Culdesac &
Street Coming down?

NORTHFIELD
MINNESOTA

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1. **ROADWAY PAVEMENT CONDITION**

   Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

   Yes _____ or No X

2. **STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION**

   X I have observed street ponding after a significant rain located at:

   Jefferson Parkway between Maple & Afton (address)

   _____ I have observed areas of erosion along the boulevard at:

   _____ (address)

   Does your home or business have a sump pump?

   [redacted] (address)

   X Yes or ___ No

   If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

   ___ Yes or X No

3. **SANITARY SEWER**

   X We have not experienced any problems with our sanitary sewer service.

   _____ We have experienced problems with our sanitary sewer service.

   _____ (address)

→

4. **WATERMAIN**

X We have not experienced any problems with our water service.

____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

X Yes or ~~X~~ No

If Yes, please provide location: Mill Town Trail

It appears that the official crossing ~~is~~ on Jefferson will be at Prairie St.

Will there also be new curb cuts and a crossing just to the east where the MTT goes north on the east side of Spring Creek? That spot is now a muddy, unofficial crossing used by walkers crossing south across Jefferson to the trail along the ponds between Jefferson and Maple. Concrete and curb cuts would be useful there, despite the official pedestrian crossing nearby at Jefferson and Michigan.

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

NORTHFIELD MINNESOTA

PROJECT QUESTIONNAIRE

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes X or No _____

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

X I have observed street ponding after a significant rain located at:

Corner of Lia Dr & Lindberg Ct (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

_____ (address)

___Yes or X No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

___Yes or ___ No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. WATERMAIN

_X_ We have not experienced any problems with our water service.

_____ We have experienced problems with our water service.

_____ (address)

5. SIDEWALKS AND TRAILS (WALKING AND BIKING)

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or ____ No

If Yes, please provide location:

_____

_____

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6. GENERAL COMMENTS / QUESTIONS

Please offer any additional information you would like to be considered as a part of these improvements:

_____

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_____

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

The City values input from residents who live along the project corridor as you have first-hand knowledge of how the streets and utilities function. Your comments / concerns will assist us during the preliminary design and layout of the project. We encourage you to take a few minutes to fill out the following questionnaire. Completed questionnaires can be collected at the Neighborhood Meeting, emailed to Jacob.Ives@northfieldmn.gov or dropped off at the Engineering Office located at Northfield City Hall, 801 Washington Street.

1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes _____ or No ✓

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

_____ I have observed street ponding after a significant rain located at:

_____ (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump? no

[redacted] (address)

___Yes or ✓ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

___Yes or ✓ No

3. SANITARY SEWER

✓ We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

[redacted] (address)

→

4. **WATERMAIN**

_✓_ We have not experienced any problems with our water service.

_____ We have experienced problems with our water service.

[redacted] (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or _✓_ No

If Yes, please provide location:

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

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Northfield, Minnesota

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1. **ROADWAY PAVEMENT CONDITION**

   Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

   Yes X or No _____

2. **STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION**

   X I have observed street ponding after a significant rain located at: For 20 years!

   Intersection of Maple St. & Eastridge Dr (address)

   X I have observed areas of erosion along the boulevard at:

   Intersection of Aldrich & Eastridge Drive (address)

   [redacted]

   Does your home or business have a sump pump?

   [redacted] (address)

   X Yes or ____ No

   If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

   ____ Yes or X No

3. **SANITARY SEWER**

   X We have not experienced any problems with our sanitary sewer service.

   _____ We have experienced problems with our sanitary sewer service.

   _____ (address)

→

4. **WATERMAIN**

_X_ We have not experienced any problems with our water service.

_____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or ____ No

If Yes, please provide location:

Meadowview Drive: 2-3-4 spots where the sidewalk is raised. Do homeowners fix sidewalk or the city?

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

Thank you for asking these questions. Best questionnaire ever!

From: Sean Simonson
To: David Bennett; Jacob Ives
Subject: FW: Online Form Submittal: Email Sean Simonson
Date: Monday, April 14, 2025 1:10:48 PM

FYI

From: noreply@notifyme.NorthfieldMN.gov <noreply@notifyme.NorthfieldMN.gov>
Sent: Monday, April 14, 2025 1:08 PM
To: Sean Simonson <Sean.Simonson@northfieldmn.gov>
Subject: Online Form Submittal: Email Sean Simonson

External sender <noreply@notifyme.northfieldmn.gov>
Make sure you trust this sender before taking any actions.

Email Sean Simonson

First Name	[redacted]
Last Name	[redacted]
Reply Email	[redacted]
Subject	Road Improvements
Attachment(s)	*Field not completed.*
Comments	Sean, I have covid so am unable to attend the meeting on road improvements. I would like to say that I DO NOT support bike paths on Prarie Street. I also DO NOT support more bump outs. In my opinion these "improvements" are costly and unwanted. If you disagree, look to Northfield Happenings on Facebook to see all of the angry responses. These are very difficult times for many people and working on WANTS rather than needs is NOT spending our tax dollars wisely. Also, there are many other streets that need mill and overlay. Have you driven down Washington? It is a veritable maze to try and make it through without hitting potholes. PLEASE keep the spending to things that need repair instead of implementing money sucking wants. Another option is to increase police traffic stops to get drivers to slow down. The added bonus is that there is revenue generated! A win, win in my opinion. Thank you for your time, [redacted]

NORTHFIELD MINNESOTA

PROJECT QUESTIONNAIRE

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Northfield, Minnesota

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes _____ or No ✓

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

_____ I have observed street ponding after a significant rain located at:

_____ (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

[redacted] _____ (address)

✓ Yes or ___ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

✓ Yes or ___ No – DEPENDS ON COST

3. SANITARY SEWER

✓ We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

✓ We have not experienced any problems with our water service.

_____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or ____ No

If Yes, please provide location:

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

THERE ARE SECTIONS OF THE SIDEWALK ALONG PRAIRIE THAT HAVE LIFTED AND/OR SETTLED CREATING TRIPPING POINTS THAT STOP ME WHEN BLOWING OR SHOVELING SNOW. IT WOULD BE HELPFUL IF THE SIDEWALK WAS MORE SMOOTH.

BACK YARD OF [redacted] - APPROX 125-150' LONG.

[redacted]

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes _____ or No ✓ (just a few areas are in need)

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

✓ I have observed street ponding after a significant rain located at:

just before Washington St. (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

[redacted] (address)

✓ Yes or ___ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

✓ Yes or ___ No

3. SANITARY SEWER

✓ We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

✓ We have not experienced any problems with our water service.

_____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or ✓ No

If Yes, please provide location:

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

Overall, seeking the least amount of changes. Taxes in this town are so high that another assessment or increase to my property taxes will be tough to accept. I'm not in support of a trail, (off street or state hwy) or a bikeway.

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes _____ or No X

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

X I have observed street ponding after a significant rain located at:

DRAIN WEST OF SIBLEY VIEW LANE (address)
SOUTH SIDE OF STREET

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

_____ (address)

X Yes or ___ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

___ Yes or X No Curb deteriation, fungus from consistent water and standing water, from current sump pump discharge at end of our driveway from neighbors discharge.

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

X We have not experienced any problems with our water service.

____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

____Yes or X No

If Yes, please provide location:

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

DON'T ADD SIDE WALK CROSSING EXTENSIONS TO CURBS THAT RESTRICT AUTOMOBILES SIDE LANES AS WERE DONE @ SENIOR CENTER.

Crosswalk added to Jefferson Parkway and Sibley View Lane - Before casualties occur please.

[redacted]

NORTHFIELD
MINNESOTA

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes X or No _____ Division Street

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

_____ I have observed street ponding after a significant rain located at:

_____ (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

[redacted] _____ (address)

X Yes or ___ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

___ Yes or X No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

X We have not experienced any problems with our water service.

___ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

X Yes or ___ No

If Yes, please provide location:

(1) ALONG JEFFERSON PARKWAY - WHICH I UNDERSTAND THE 2026 MILL AND OVERLAY PROJECT WILL ADDRESS.

(2) DIVISION STREET AS ONE APPROACHES DOWNTOWN FROM ALL DIRECTIONS.

(3) THE NORTH SIDE OF JEFFERSON PARKWAY ON THE APPROACH TO THE DIVISION STREET ROUNDABOUT FROM THE EAST

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

THE BIKE TRAILS IN THIS TOWN ARE A MESS. TOO MANY TYPES OF TRAILS. - - - IT IS VERY INCONSISTENT AND CONFUSING.

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes _____ or No X

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

_____ I have observed street ponding after a significant rain located at:

_____ (address)

X I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump? Yes

[redacted] _____ (address)

X Yes or ___ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

___ Yes or X No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

X We have not experienced any problems with our water service.

_____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or X No

If Yes, please provide location:

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

My wife and I bike daily in Northfield, when the weather permits. We feel that the current bike trails on Prarie Street are very safe and offer easy navigation for bikes, pedestrians, and motor vehicles. We strongly discourage the construction of more concrete barrier trails on residential streets in Northfield.

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE
2026 Mill and Overlay & Mill Towns State Trail Improvements Project
Northfield, Minnesota

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes ✓ or No _____

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

_____ I have observed street ponding after a significant rain located at:

_____ (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

[redacted] _____ (address)

✓ Yes or ____ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

✓ Yes or ____ No

3. SANITARY SEWER

✓ We have <u>not</u> experienced any problems with our sanitary sewer service.

_____ We <u>have</u> experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

___✓___ We have not experienced any problems with our water service.

_____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or ____ No

If Yes, please provide location:

Not missing but surface improvement for Section of The State Trail from Jefferson north to Spring (Hall)

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes _____ or No X

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

No I have observed street ponding after a significant rain located at:

Ontario Lane (address)

No I have observed areas of erosion along the boulevard at:

Lots of weeds along boulevard/pavement (address)

Does your home or business have a sump pump?

[redacted] (address)

X Yes or ___ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

X Yes or ___ No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

___ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. WATERMAIN

X We have not experienced any problems with our water service.

_____ We have experienced problems with our water service.

_____ (address)

5. SIDEWALKS AND TRAILS (WALKING AND BIKING)

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or X No

If Yes, please provide location:

6. GENERAL COMMENTS / QUESTIONS

Please offer any additional information you would like to be considered as a part of these improvements:

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes _____ or No X

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

_____ I have observed street ponding after a significant rain located at:

_____ (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

[redacted] _____ (address)

X Yes or ___ No Never comes on

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

___ Yes or X No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

X We have not experienced any problems with our water service.

____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

____Yes or X No

If Yes, please provide location:

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

Please NO More bike PATHS on Our STreetS

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes X or No _____

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

no I have observed street ponding after a significant rain located at:

_____ (address)

no I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

[redacted] _____ (address)

X Yes or ___ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

X Yes or ___ No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

Same. _____ (address)

→

4. **WATERMAIN**

X We have not experienced any problems with our water service.

____ We have experienced problems with our water service.

same (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

____Yes or X No!

If Yes, please provide location:

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

We are against creating the cement curb barriers along Prairie Street if that is part of the plan.

Further, we are against any of these "improvements" if it adds to the already burdensome tax level we are currently experiencing.

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes _X_ or No _____

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

_____ I have observed street ponding after a significant rain located at:

_____ (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

__[redacted]_____ (address)

_X_ Yes or ___ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

___ Yes or _X_ No

3. SANITARY SEWER

_X_ We have <u>not</u> experienced any problems with our sanitary sewer service.

_____ We <u>have</u> experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

X We have not experienced any problems with our water service.

_____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or X No

If Yes, please provide location:

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

Fix potholes in streets - more important than trails -

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

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Northfield, Minnesota

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes _____ or No _____

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

_____ I have observed street ponding after a significant rain located at:

_____ (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

_____ (address)

____Yes or ____ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

____Yes or ____ No

3. SANITARY SEWER

_____ We have <u>not</u> experienced any problems with our sanitary sewer service.

_____ We <u>have</u> experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

_____ We have not experienced any problems with our water service.

_____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

X Yes or ___ No

If Yes, please provide location:

The trails just east of Prairie street that encircle the pond there are in dis-repair. The bridge was fixed but there is quite a height difference from the path to the bridge level. This path is heavily used by walkers, runners, bikers & folks with strollers. So many cracks & upheavals on the surface.

I marked the pond path with (X). St. Lawrence drive & cul-de-sac need attention for re-surfacing seems to be an overlooked area

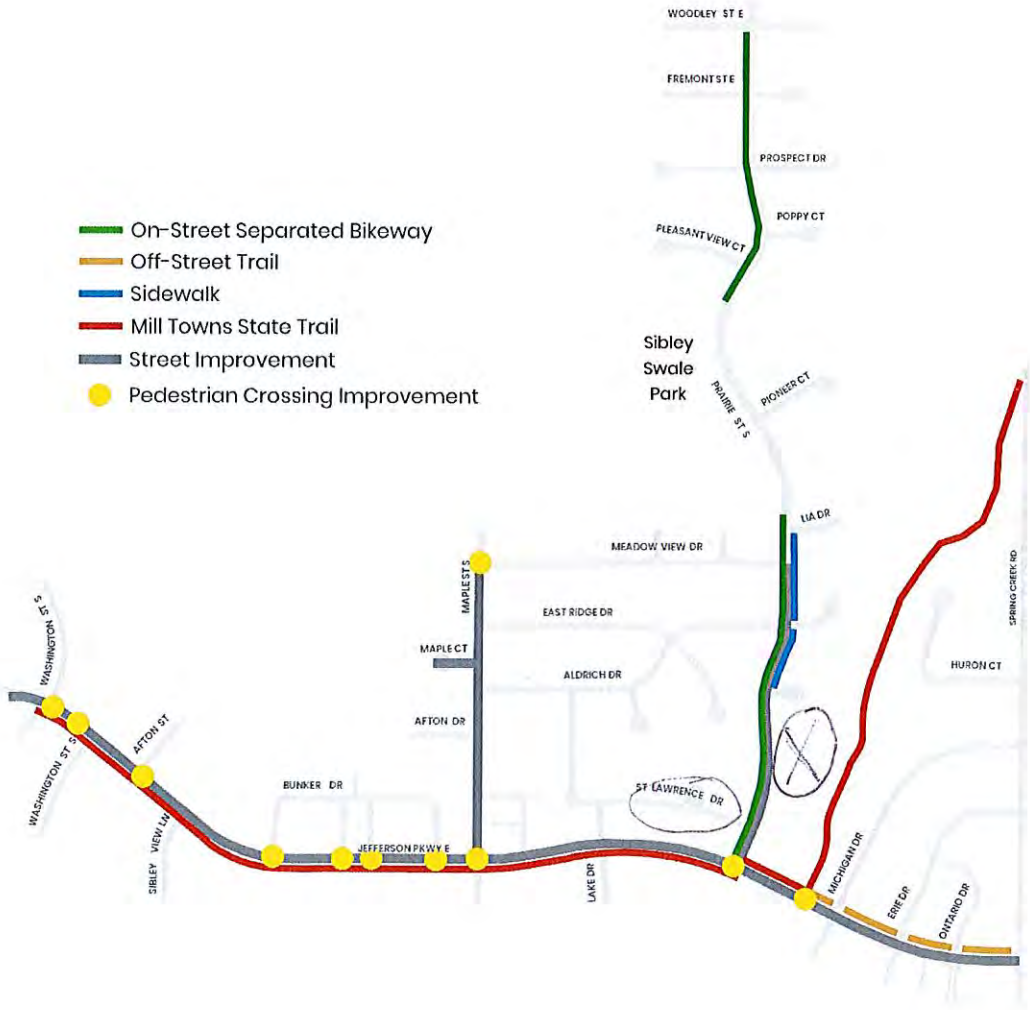
6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

I don't see the need for the bike barricades on Prairie St. The bike lane is clearly marked & separated by white striping. I walk this area a lot - there are many more people walking on the sidewalk & pond path than biking. I and everal that bikers are often staying on the sidewalk or riding on the opposite side of the road in just the space marked off by a single white line. I see the same thing on Maple - bikes stick to the sidewalk or ride on the opposite side of street & not in bike lanes.

Nothing against biking but ... Cost vs. Usage? NF is spending a lot of $

Project Location Map



Sign up for text/email updates
Scan with camera on cell phone

northfieldmn.gov/notify

Visit the project website
Scan with camera on cell phone

northfieldmn.gov/2026project

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

The City values input from residents who live along the project corridor as you have first-hand knowledge of how the streets and utilities function. Your comments / concerns will assist us during the preliminary design and layout of the project. We encourage you to take a few minutes to fill out the following questionnaire. Completed questionnaires can be collected at the Neighborhood Meeting, emailed to Jacob.Ives@northfieldmn.gov or dropped off at the Engineering Office located at Northfield City Hall, 801 Washington Street.

1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes _____ or No X

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

X I have observed street ponding after a significant rain located at:

_____ (address)

X I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

_____ (address)

___Yes or X No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

___Yes or ___ No

3. SANITARY SEWER

X We have <u>not</u> experienced any problems with our sanitary sewer service.

_____ We <u>have</u> experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

X We have not experienced any problems with our water service.

_____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or X No

If Yes, please provide location:

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

If you want safe bike lanes they should be off street bikeways

on street bike lanes are dangerous for cars, not enough room.

it should be illegal to put concrete bike lanes on roads.

roads were made for cars and vehicles with wheels.

Many bikers have said they do not like the ~~[illegible]~~ barricades on the streets.

No More Concrete on streets for separate bike lanes

Way too dangerous for Vehicles + Garbage trucks + snow plows.

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes X or No _____ Lia Drive

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

X I have observed street ponding after a significant rain located at:

North corner of Lia & Prairie (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

[redacted] (address)

___Yes or X No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

___Yes or ___ No

3. SANITARY SEWER

_____ We have not experienced any problems with our sanitary sewer service.

X We have experienced problems with our sanitary sewer service.

We have a lift station in our house (above address) that has needed replacement. We are below grade of sewer line. →

4. **WATERMAIN**

X We have not experienced any problems with our water service.

____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

____Yes or X No

If Yes, please provide location:

We believe the proposed sidewalk on the East side of Prairie from Lia Drive to Prairie View Court is redundant since there is a sidewalk on the West side of that same area. The funds could be used for 3 "pedestrian crossing improvements" at 1- Lia Drive 2- Prairie Circle & 3- Prairie View Court.

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

We have observed confusion for drivers on Prairie Street South of Woodley due to lack of lane definition for cars and bikes. There is no yellow center line for car lanes. It would also be helpful if the bike lane line was also yellow (no crossing this line).

NORTHFIELD MINNESOTA

Project questionnaire

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Roadway pavement condition

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

__X__Yes or _____ No

Storm sewer, storm water drainage and surface erosion

_____I/We have observed street ponding after a significant rain

Located at: _____

_____I/We have observed areas of erosion along the boulevard

Located at: _____

Does your home or business have a sump pump?

__X__Yes or _____ No

Address _____

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

__X__Yes or _____No

Sanitary sewer

X I/We have not experienced any problems with our sanitary sewer service

_____ I/We have experienced problems with our sanitary sewer service

Address _____

Watermain

X I/We have not experienced any problems with our water service

_____ I/We have experienced problems with our water service

Address _____

Sidewalk and trails (walking and biking)

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or X No

If yes, please provide location:

_____

_____

_____

_____

_____

_____

_____

General comments and questions

Give any additional information you would like us to consider as a part of these improvements:

_____

_____

_____

_____

_____

_____

_____

_____

NORTHFIELD
MINNESOTA

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Roadway pavement condition

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

_____Yes or ___✓___ No

Storm sewer, storm water drainage and surface erosion

__no__ I/We have observed street ponding after a significant rain

Located at: _____

__no__ I/We have observed areas of erosion along the boulevard

Located at: _____

Does your home or business have a sump pump?

___✓___Yes or _____ No

Address [redacted]

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

_____Yes or ___✓___No

Sanitary sewer

✓ ___NA___ I/We have not experienced any problems with our sanitary sewer service

_____ I/We have experienced problems with our sanitary sewer service

Address _____

Watermain

___✓___ I/We have not experienced any problems with our water service

_____ I/We have experienced problems with our water service

Address _____

Sidewalk and trails (walking and biking)

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or ___✓___No

If yes, please provide location:

General comments and questions

Give any additional information you would like us to consider as a part of these improvements:

No more bike lanes

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

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Northfield, Minnesota

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed? what area specifically?

Yes _____ or No _____ some parts are good and some are not

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

X I have observed street ponding after a significant rain located at:

[redacted] _____ (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

[redacted] _____ (address)

X Yes or ___ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

X Yes or ___ No Depends on what it is

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

[redacted] would like to connect sump pump to sanitary sewer (address) to keep sump pump run-off from sidewalk creating an ice dam on the sidewalk, this is a hazard to those who walk the area, regularly, sidewalk is wet and sustaining damage/freeze

4. **WATERMAIN**

X We have not experienced any problems with our water service.

_____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or X No

If Yes, please provide location:

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

Not interested in concrete medians in the roadway.!!!
No separated Bikeway on the roadway!!!

NORTHFIELD
MINNESOTA

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes ✓ or No ____ on my block of [redacted] Prairie

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

____ I have observed street ponding after a significant rain located at:

_____ (address)

____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

_____ (address)

____Yes or ✓ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

____Yes or ____ No

3. SANITARY SEWER

✓ We have not experienced any problems with our sanitary sewer service.

____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

___ We have not experienced any problems with our water service.

___ We have experienced problems with our water service.

_____ (address)

- had to replace water main a number of times ago @ a very significant cost

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

___Yes or ✓ No

If Yes, please provide location:

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

- Prairie St. from Woodbay to residents end feel that current bike path is safe and working very well. Bikers are few, but concur.
- We feel that money for street improvement and cleaning is more important than bike path elevations.
- Concern from others out of our city, but don't know how current Northfielders who have had elevations on their streets feel about it.

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MINNESOTA

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes _____ or No ✓

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

_____ I have observed street ponding after a significant rain located at:

The corner of Prospect + Prairie (Northwest)
_____ (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

_____ (address)

____Yes or ✓ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

____Yes or ____ No

3. SANITARY SEWER

✓ We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

✓ We have not experienced any problems with our water service.

_____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or ____ No

If Yes, please provide location:

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

When we receive a heavy snowfall, how is the bike/run lane cleared?

I live on the NW corner of Prospect Circle + Prairie. The school bus picks up ~ 12+ students each morning (grades 1 to 12). Where will those students congregate to be picked up when the streets are cleared and the bike route (with suggested curb, etc) isn't?

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes X or No ___ DR Prairie only

LAKE DR IS FINE – OTHER ROADS NEED FIXING

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

No I have observed street ponding after a significant rain located at:

_____ (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

_____ (address)

___Yes or X No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

___Yes or ___ No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

____ We have not experienced any problems with our water service.

____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

____Yes or ____ No

If Yes, please provide location:

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

No Concrete barriers -
I live on Prairie & witness people walking & running bikes every where.
Cars cross lanes when meeting on the curves & hills

NORTHFIELD
MINNESOTA

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1. **ROADWAY PAVEMENT CONDITION**

   Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

   Yes _____ or No ___X___

2. **STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION**

   _____ I have observed street ponding after a significant rain located at:

   _____ (address)

   _____ I have observed areas of erosion along the boulevard at:

   _____ (address)

   Does your home or business have a sump pump?

   _____ (address)

   ____Yes or ____ No

   If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

   ____Yes or ____ No

3. **SANITARY SEWER**

   ___X___ We have <u>not</u> experienced any problems with our sanitary sewer service.

   _____ We <u>have</u> experienced problems with our sanitary sewer service.

   _____ (address)

→

4. WATERMAIN

___ We have not experienced any problems with our water service.

___ We have experienced problems with our water service.

_____ (address)

5. SIDEWALKS AND TRAILS (WALKING AND BIKING)

Are there sidewalks or trails that you believe are missing that need to be added to the project?

___Yes or ___ No

If Yes, please provide location: [redacted]

Sidewalk on our block has tree roots from Blvd trees pushing up and leading to houses

6. GENERAL COMMENTS / QUESTIONS

Please offer any additional information you would like to be considered as a part of these improvements:

We do not need more bike paths!! They do not get used!! - Only walkers + dogs use them.

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes X or No ____ Fill potholes as observed.

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

____ I have observed street ponding after a significant rain located at:

_____ (address)

____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

_____ (address)

___Yes or X No

If yes, ~~would you~~ be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

___Yes or X No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

X We have not experienced any problems with our water service.

____ We have experienced problems with our water service.

_____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

____Yes or X No

If Yes, please provide location:

(1) Maintain what is in place & cracks/bumps.

(2) No need to add small section of sidewalk on (N) side of Prairie from Lia Dr. to 2nd court. It would <redhouse> mean taking down several mature pine trees of Beatys. The bike path on the east side of their house is already decorated with dog poop!!!

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

(1) Detail plans for "on street sparated bikeway" on SE side of Prairie: current painted bikeway goes AGAINST traffic on a curve - VERY DANGEROUS and in conflict with Msta. Biking statute to bike WITH traffic.

(2) The map does NOT show the path east off Prairie St. that goes to the Golden Bridge over Spring Creek - why NOT?

NORTHFIELD MINNESOTA

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Roadway pavement condition

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

_____Yes or ✓ No

Storm sewer, storm water drainage and surface erosion

No I/We have observed street ponding after a significant rain

Located at: _____

No I/We have observed areas of erosion along the boulevard

Located at: _____

Does your home or business have a sump pump?

_____Yes or ✓ No

Address _____

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

_____Yes or ✓ No

Sanitary sewer

✓ I/We have not experienced any problems with our sanitary sewer service

_____ I/We have experienced problems with our sanitary sewer service

Address _____

Watermain

✓ I/We have not experienced any problems with our water service

_____ I/We have experienced problems with our water service

Address _____

Sidewalk and trails (walking and biking)

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or ✓ No

If yes, please provide location:

General comments and questions

Give any additional information you would like us to consider as a part of these improvements:

NO bike curbs in the street for bike lanes. The bike lane is not used much and a curbed divider is NOT going to improve safety or usage, it only complicates street traffic and snow removal

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes X or No ____ Sealing / coating

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

X I have observed street ponding after a significant rain located at:

In front of 2000 Michigan Dr (address)

____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

_____ (address)

X Yes or ___ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

___ Yes or X No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. **WATERMAIN**

X We have not experienced any problems with our water service.

____ We have experienced problems with our water service.

[redacted] _____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

____ Yes or X No

If Yes, please provide location:

I prefer the on-street bike trails without a raised curb (like on Maple/Prairie)

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

The speed of vehicles travelling eastbound on Jefferson Parkway between Maple St. and Spring Creek road can be in excess of 45 mph. The bump outs installed between Jefferson Road and Bridgewater Elementary have made a positive impact in that area. Placing one @ Erie Dr. would be helpful.

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MINNESOTA

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes X or No _____

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

_____ I have observed street ponding after a significant rain located at:

_____ (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

[redacted] _____ (address)

X Yes or ____ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

____Yes or X No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

[redacted] _____ (address)

→

4. **WATERMAIN**

X We have not experienced any problems with our water service.

____ We have experienced problems with our water service.

[redacted] _____ (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

____Yes or X No

If Yes, please provide location:

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

Please add painted centerline on Prairie St "NOW"; and after resurfacing in 2026.

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MINNESOTA

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1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes X or No _____

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

_____ I have observed street ponding after a significant rain located at:

_____ (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

[redacted] (address)

X Yes or ____ No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

____ Yes or X No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

_____ (address)

→

4. WATERMAIN

X We have not experienced any problems with our water service.

_____ We have experienced problems with our water service.

_____ (address)

5. SIDEWALKS AND TRAILS (WALKING AND BIKING)

Are there sidewalks or trails that you believe are missing that need to be added to the project?

_____Yes or ____ No

If Yes, please provide location:

6. GENERAL COMMENTS / QUESTIONS

Please offer any additional information you would like to be considered as a part of these improvements:

~~I'm~~ I'm GOOD WITH THE PAVED TRAILS + PRAIRIE + JEFF. PARKWAY ARE OVERDUE FOR OVERLAY. I'm ALSO OK WITH PAINTED LINES FOR BIKES BUT WE DO NOT NEED MORE CONCRETE BARRIERS! I TRAVEL ON MAPLE &/OR PRAIRIE DAILY. MAPLE ST. IS TOO NARROW – PRAIRIE IS AS WELL BUT SINCE THERE ARE RARELY BIKES (IF EVER) I HAVE ROOM – CONCRETE BARRIERS MAKE THAT MUCH MORE DIFFICULT – NOT TO GET INTO THE EXTRA $$$ – SOMETIMES WE DON'T NEED EVERYTHING WE WANT.

NORTHFIELD
MINNESOTA

PROJECT QUESTIONNAIRE

2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

The City values input from residents who live along the project corridor as you have first-hand knowledge of how the streets and utilities function. Your comments / concerns will assist us during the preliminary design and layout of the project. We encourage you to take a few minutes to fill out the following questionnaire. Completed questionnaires can be collected at the Neighborhood Meeting, emailed to Jacob.Ives@northfieldmn.gov or dropped off at the Engineering Office located at Northfield City Hall, 801 Washington Street.

1. ROADWAY PAVEMENT CONDITION

Do you feel the pavement surface has deteriorated to the point it needs to be fixed?

Yes X or No _____

2. STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION

_____ I have observed street ponding after a significant rain located at:

_____ (address)

_____ I have observed areas of erosion along the boulevard at:

_____ (address)

Does your home or business have a sump pump?

[redacted] (address)

____Yes or X No

If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?

____Yes or ____ No

3. SANITARY SEWER

X We have not experienced any problems with our sanitary sewer service.

_____ We have experienced problems with our sanitary sewer service.

Same as above (address)

→

4. **WATERMAIN**

X We have not experienced any problems with our water service.

____ We have experienced problems with our water service.

Same (address)

5. **SIDEWALKS AND TRAILS (WALKING AND BIKING)**

Are there sidewalks or trails that you believe are missing that need to be added to the project?

____Yes or X No

If Yes, please provide location:

6. **GENERAL COMMENTS / QUESTIONS**

Please offer any additional information you would like to be considered as a part of these improvements:

Sibley Swale park & Prairie St: Proposed bikeway has serious flaws. 1) the existing path through Sibley Swale park is mainly used by pedestrians including small children who access the playground. This puts commuting bikes (like myself) and pedestrians in direct conflict. As a bike commuter who uses Prairie St, I stay on the right side of the street both ways to avoid the Sibley Swale park part of the path. It's too dangerous for all involved. Please keep the bikes on Prairie St the entire way with marked bike paths. Car traffic along Prairie is not that high and here cars + bikes can easily share the road with well defined bike path ~~[illegible]~~ without a separated bikeway.

NORTHFIELD ENGINEERING

Comment Card

BOLTON & MENK

Providing this information is **Optional,** but helps us better understand your concerns:

Name: [redacted]

Address: [redacted]

Email: [redacted]

Phone: [redacted]

Thank you for sharing your Feedback:

Safety. All Stop sign is needed on Maple St. and Jefferson Pky. There are many near misses. This is the busiest park in the city during the summer.

NORTHFIELD ENGINEERING

Comment Card

BOLTON & MENK

Providing this information is **Optional**, but helps us better understand your concerns:

Name: [redacted]

Address:

Email:

Phone:

Thank you for sharing your Feedback:

I'm in favor of all of the bike lane additions and path extensions. Thanks for making biking easier!

NORTHFIELD ENGINEERING

Comment Card

BOLTON & MENK

Providing this information is **Optional,** but helps us better understand your concerns:

Name: /

Address: _____

Email: _____

Phone: _____

Thank you for sharing your Feedback:

Terrible Meeting - We do Not Need the Concrete bike lane. Very dangerous for cars Garbage trucks & bikes

NORTHFIELD ENGINEERING

Comment Card

BOLTON & MENK

Providing this information is **Optional,** but helps us better understand your concerns:

Name: [redacted]

Address:

Email:

Phone:

Thank you for sharing your Feedback:

I am in favor of bike lanes & I use them. My only objection is the curbed lane on Prairie. I think the current bike lanes on Prairie are sufficient and the new plan is overkill.

NORTHFIELD ENGINEERING

Comment Card

BOLTON & MENK

Providing this information is **Optional,** but helps us better understand your concerns:

Name: [redacted]

Addres

Email:

Phone:

Thank you for sharing your Feedback:

STAFF WERE CLEARLY NODDING THEIR HEADS AND WAITING FOR NEIGHBORS TO GET TIRED OF TALKING

EVERYTHING IS A DONE DEAL AND THIS JUST RATHER TO THEM SO THEY CAN TELL THE COUNCIL THEY DID IT

NORTHFIELD ENGINEERING

Comment Card

BOLTON & MENK

Providing this information is **Optional,** but helps us better understand your concerns:

Name: [redacted]

Address:

Email:

Phone:

Thank you for sharing your Feedback:

- Notification internet interruption for those who work from home and must have connection.
- Tree replacement
- Retaining wall addition
- Responsibility to shovel sidewalk
- Plow drivers will need training & change from how they currently plow (dump at end of Prairie Circle + don't come back for hours)

- Re-paint crosswalk at Prairie St. & Prairie Circle.
- I'm interested in the safety data associated w/ the seperated bike lanes. You mention it helps increase traffic of walkers/bikers but does it help w/ safety? Do when even have a safety issue? (w/ bike lanes)
- This planning feels complete! However, those being effected by the sidewalk installation between Lia & Prairie Circle are very unhappy!

NORTHFIELD ENGINEERING

Comment Card

BOLTON & MENK

Providing this information is **Optional**, but helps us better understand your concerns:

Name: [redacted]

Address:

Email:

Phone:

Thank you for sharing your Feedback:

Very supportive of bike + pedestrian improvements around Jefferson + Afton — where the 14-year-old was killed. Please do everything you can to make the crossing there safer. There are so many kids moving through that bottle neck every day. Maybe a button-triggered crossing? Cars come quickly out of the roundabout so traffic calming is really needed going into Jefferson.

Name: [redacted]

NORTHFIELD ENGINEERING

Comment Card

BOLTON & MENK

Providing this information is **Optional**, but helps us better understand your concerns:

Name: [redacted]

Addres [redacted]

Email: [redacted]

Phone: [redacted]

Thank you for sharing your Feedback:

I am concerned about putting the concrete barrier on Prarie Street. I bike to work & around town regularly & the redesign of the bike lanes to put the bikes on one side of the road as opposed to the lanes on each side of the road have made ~~bik~~ biking on prarie & more difficult to enter the lanes from Jefferson Parkway & then the lanes stop at Woodley & I have to cross back to the side of the street I should have been on all along &

Continue on Prarie street until I get to 5th where I leave Prarie St.

The most urgent biking concern is crossing highway 3 North of Highway 19.

Note: Prarie St used to have bike lanes on each side of the street until they redesigned the road to put them both on one side of the road. This was much better in my opinion.

NORTHFIELD ENGINEERING

Comment Card

BOLTON & MENK

Providing this information is **Optional,** but helps us better understand your concerns:

Name: [redacted]

Address:

Email:

Phone:

Thank you for sharing your Feedback:

Please consider removing the Mill Town Trails off of the pedestrian walkway east of Prairie and west of Michigan off Jefferson and move over to Prairie where there will be new cement barriers

Safer for bikes — safer for pedestrian

NORTHFIELD ENGINEERING

PRAIRIE ST. – SOUTH OF WOODLEY

TO: SEAN SIMONSON

Comment Card

BOLTON & MENK

Providing this information is **Optional,** but helps us better understand your concerns:

Name: [redacted]

Address: [redacted]

Email: [redacted]

Phone: [redacted]

Thank you for sharing your Feedback: 1) INSTALL STREET LIGHT @ SIBLEY SWALE PARK.

2) DO NOT INSTALL CURBS/BOULEVARDS BETWEEN VEHICLE + BIKE LANES, VEHICLE LANES ARE TOO NARROW FOR SCHOOL BUSES + DELIVERY TRUCKS, SO VEHICLES GOING SOUTH ON PRAIRIE HAVE RIGHT WHEELS IN THE 3 FT. SAFETY LANE TO AVOID SIDE-SWIPING. THE INTER-SECTION @ PRAIRIE/POPPY/PLEASANT VIEW, AT A SMALL HILL + CURVE, IS ESPECIALLY DANGEROUS. (TOO TIGHT). VERY FEW BIKERS GOING NORTH EVEN USE THE BIKE LANE. MUCH SAFER TO USE THE FAR RIGHT (EAST) PARKING LANE FOR BIKING TO WOODLEY.