

CITY OF WHITE BEAR LAKE



2022 PAVEMENT REHABILITATION PROJECT

CITY PROJECT NO.

22-01

**PROJECT PRESENTATION
OCTOBER 27, 2021**



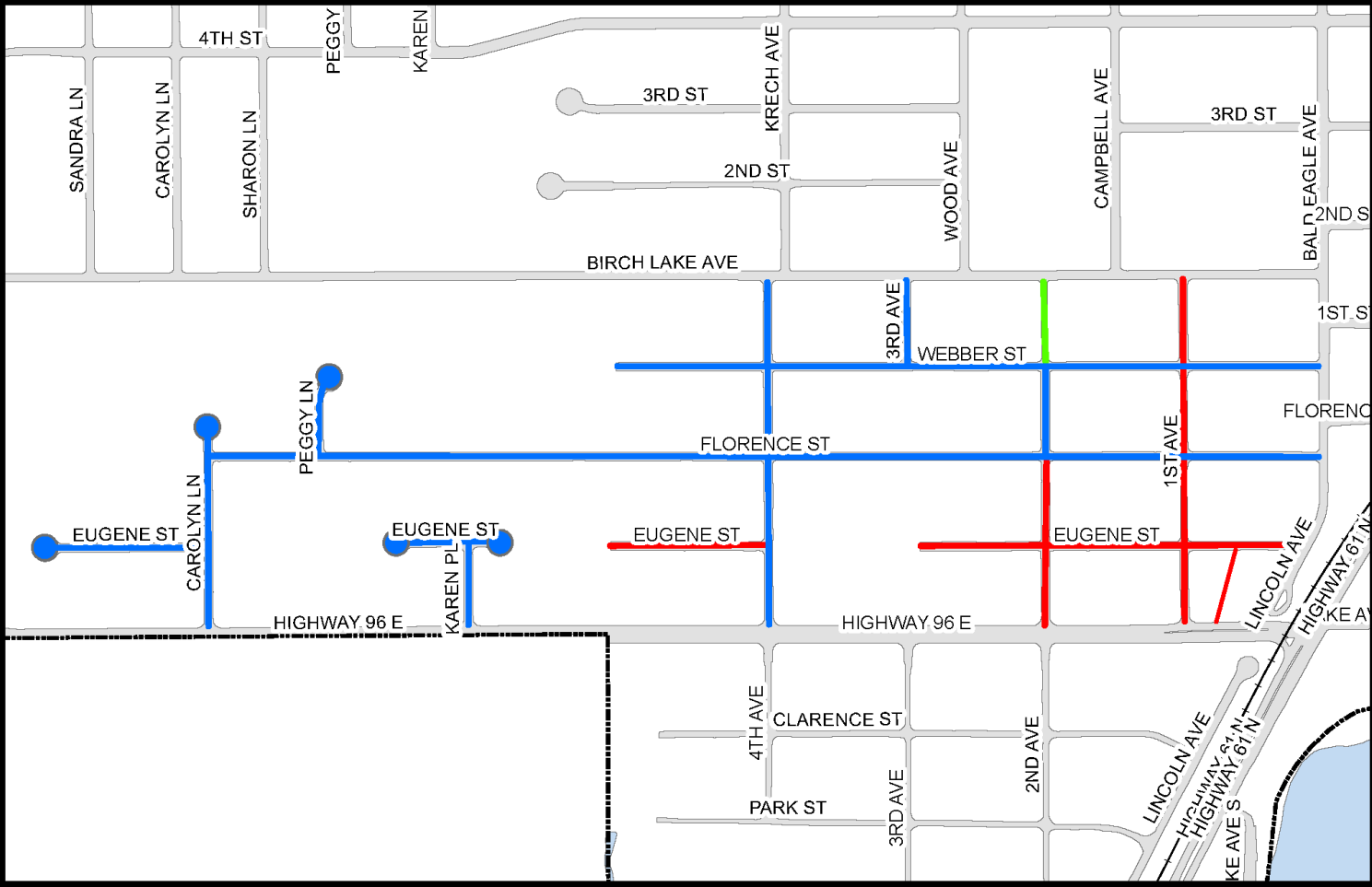
ENGINEERING DEPARTMENT



Paul Kauppi	City Engineer/Public Works Director
Nate Christensen	Civil Engineer
Dan Holzemer	Senior Engineering Technician
Carisa Vermeersch	Engineering Secretary
Connie Taillon	Environmental Specialist



2022 Street Rehabilitation Project 22-01

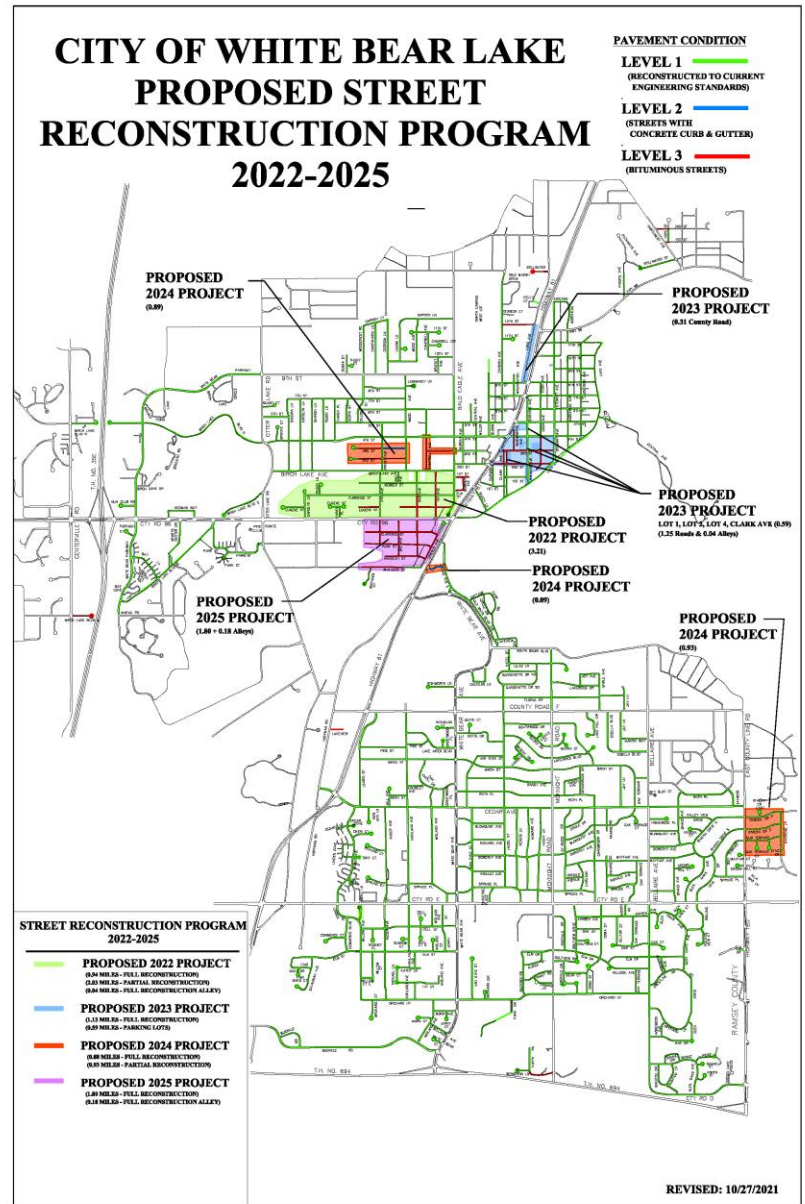


-  Reconstruction
-  Full Pavement Rehabilitation
-  Mill & Overlay

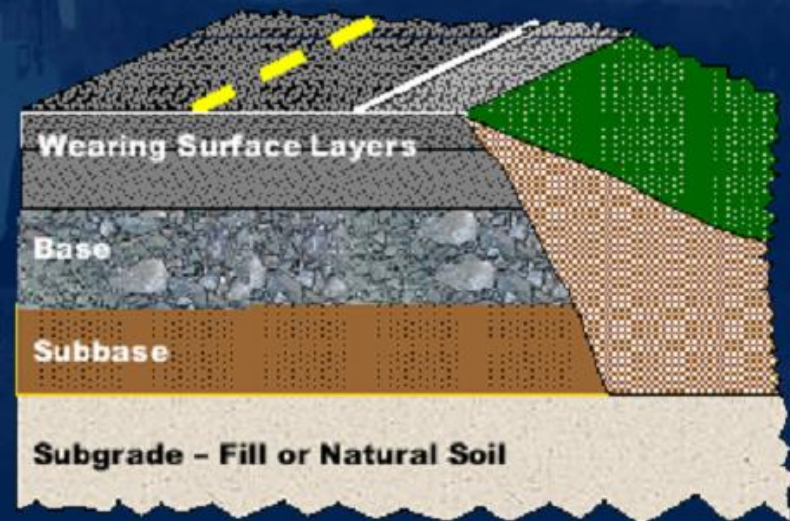


REHABILITATION PROGRAM OVERVIEW

- MILES VARIES EACH YEAR
- 94% WITH CURB & GUTTER
- 23% COMPLETED CITYWIDE (SINCE 2011)



- Pavement or Pavement Structure
 - Wearing surface layers
 - Base
 - Subbase
 - Subgrade



LRRB Pavement Rehabilitation Selection



Causes of Pavement Deterioration

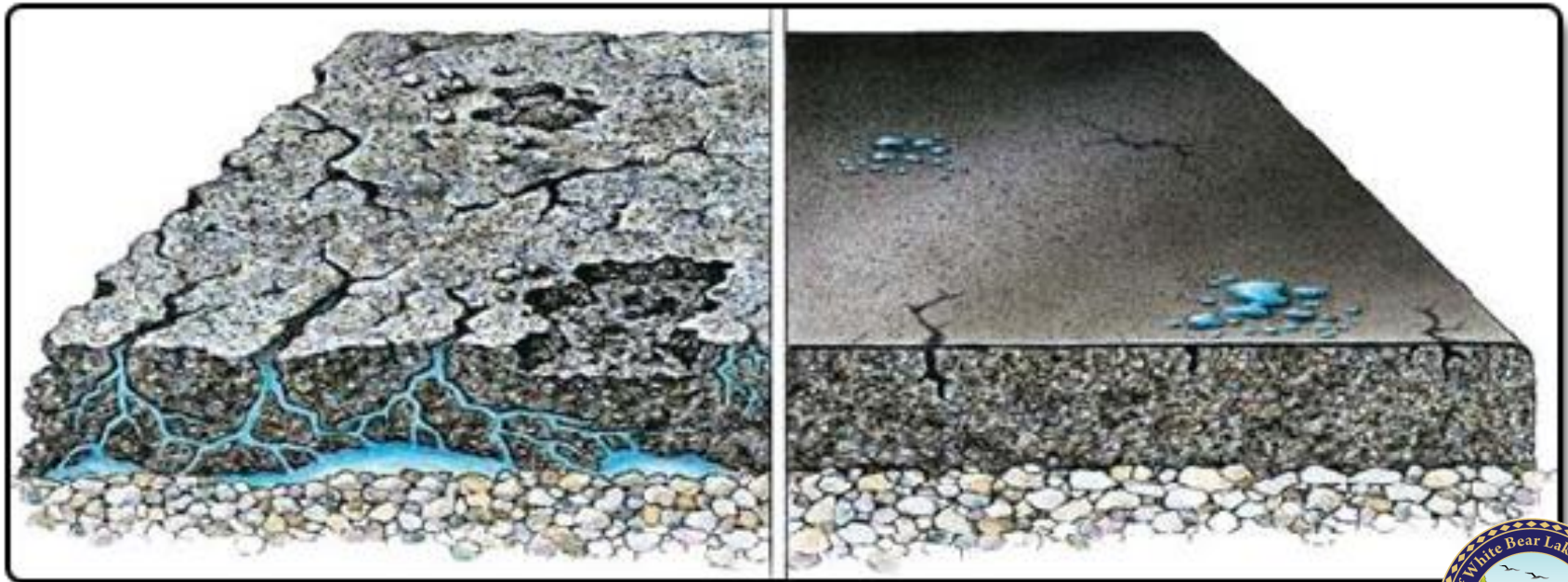
- TRAFFIC VOLUME
- VEHICLE WEIGHT
- POOR DRAINAGE
- TEMPORARY CONDITIONS
- ENVIRONMENTAL DAMAGE

2017. 1

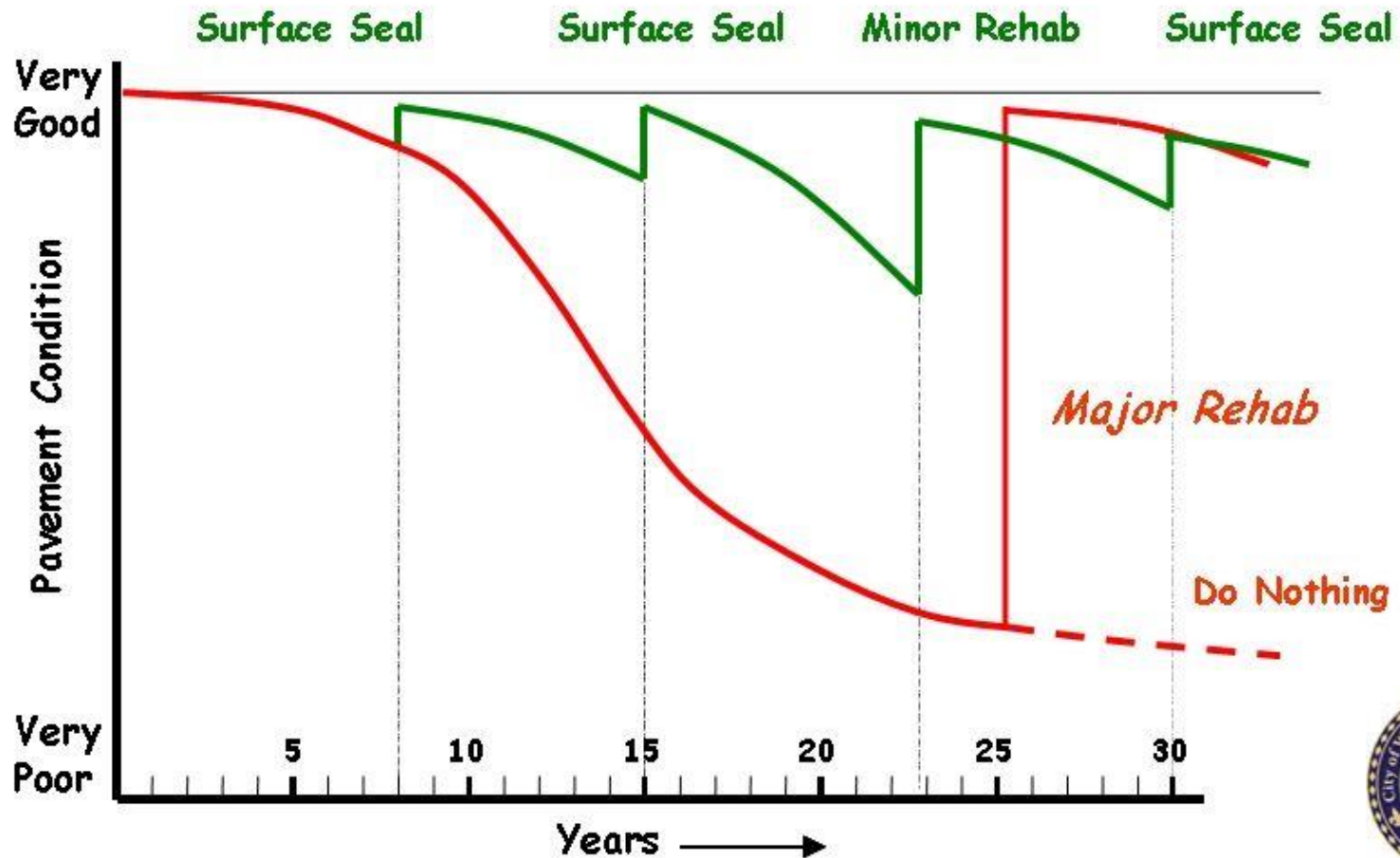


Before

After



*Pavement Management with
"Good Roads Cost Less"
Preservation Strategies*



Pavement Preservation: CRACK SEALING



Pavement Preservation: Aggregate Seal Coating





Driveway Replacement Program

Once we hire a contractor, usually in early Spring, the City will send additional information including prices.





Sanitary Sewer Wye Replacement Program





Water Service Replacement

Corroded galvanized water service pipe.

PROJECT FUNDING



- CITY CONSTRUCTION FUNDS/BONDS
- MUNICIPAL STATE AID
- ASSESSMENTS TO BENEFITED PROPERTIES



ASSESSMENT POLICY



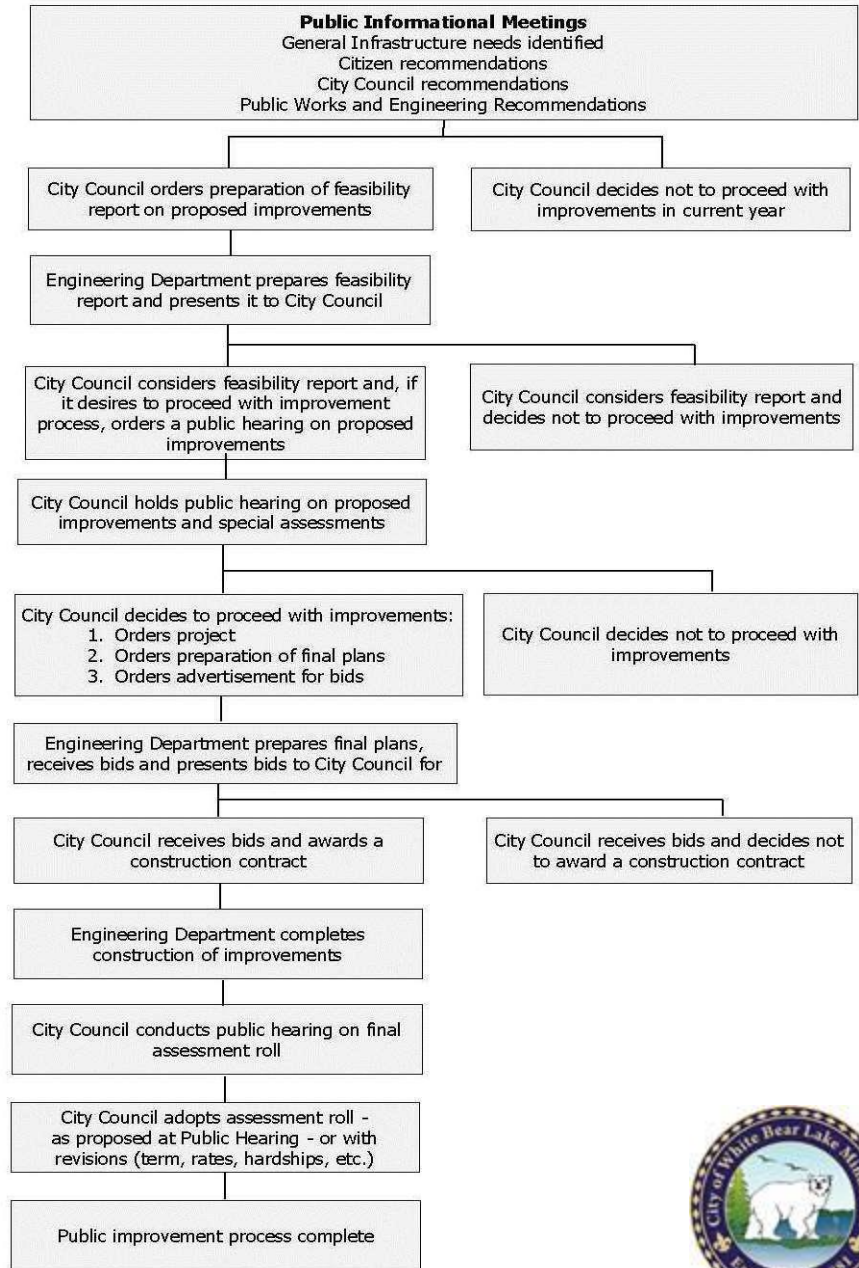
- UNIFORM, FAIR AND BENEFIT THE PROPERTY
- APPRAISAL REPORT
- FOLLOW STATE STATUTE 429



Public Improvement Process

ANTICIPATED SCHEDULE

- FEASIBILITY REPORT TO CITY COUNCIL IN **JANUARY 2022**
- PUBLIC HEARING NOTICE TO PROPERTY OWNERS IN **FEBRUARY 2022**
- PUBLIC HEARING IN **FEBRUARY 2022**
- CONSTRUCTION APPROXIMATELY MAY-OCTOBER 2022



Assessments



- **Minnesota Statutes, Chapter 429 - Assessment Process**
 - Assessment must be fair, uniform and benefit the property
 - Benefit is evaluated by a qualified, licensed professional appraiser
 - Public Notice
 - Public Hearing
 - Appeal Process

- **Assessment Breakdown**
 - Street (Based on assessable frontage per foot)
 - Storm Sewer (\$0.12/SF lot area)
 - Sanitary Sewer Service* (\$1,300+ each)
 - Water Service* (\$1,200+ each)



ASSESSMENT PROCESS



- City Council Orders Assessment Hearing in August 2022, the hearing is scheduled for September 27, 2022
- City will mail final assessment notice
- City Council holds Assessment Hearing and levies the Assessment
- At this point the property owner has 30 days to pay a portion or all of the assessment to the City, without penalty.
- After the 30 days the City will turn over the remaining balance to Ramsey County to place on your property taxes for 15 years with interest. (the rate last year was 3.29% per annum of the unpaid balance)



Construction Process

- Private Utility Work (Xcel Energy, Comcast and CenturyLink)
- Temporary Mail Box Installation
- Erosion Control
- Tree Removal (if necessary)
- Pavement Removal
- Underground Utility Work
 - Water Shut Off (to replace hydrants or other watermain repairs)
 - Sanitary Sewer Wye Replacement
 - Storm Sewer
- Subgrade Compaction and Gravel Base Placement
- Install Curb and Gutter
- Install New Concrete Driveways and Aprons
- Pave First Lift of Bituminous
- Install New Bituminous Driveways and Aprons
- Sod Installation/Restoration
- Final Lift of Bituminous



Private Utility Work

Step 1





Private Utility Work

Xcel Energy will install new gas mains in the construction areas. They will contact you directly regarding this work, which will start prior to any work on the street.





Private Utility Work

If you have any questions or concerns about the installation, please contact Xcel Energy at (800) 895-2999.



Mailbox Removal and Installation of Temporary Mailboxes

Step 2





Installation of Temporary Mailboxes

Temporary mailboxes will be installed at the beginning of the project in strategic locations identified by your Letter Carrier.





Temporary Mailboxes

The Post Office will label the boxes, and you will be provided a map indicating the location of your particular box.





Temporary Mailboxes

The Post Office will label the boxes, and you will be provided a map indicating the location of your particular box.



Erosion Control

Step 3





Erosion Control

Erosion control prevents construction debris from entering the storm sewer.





Erosion Control

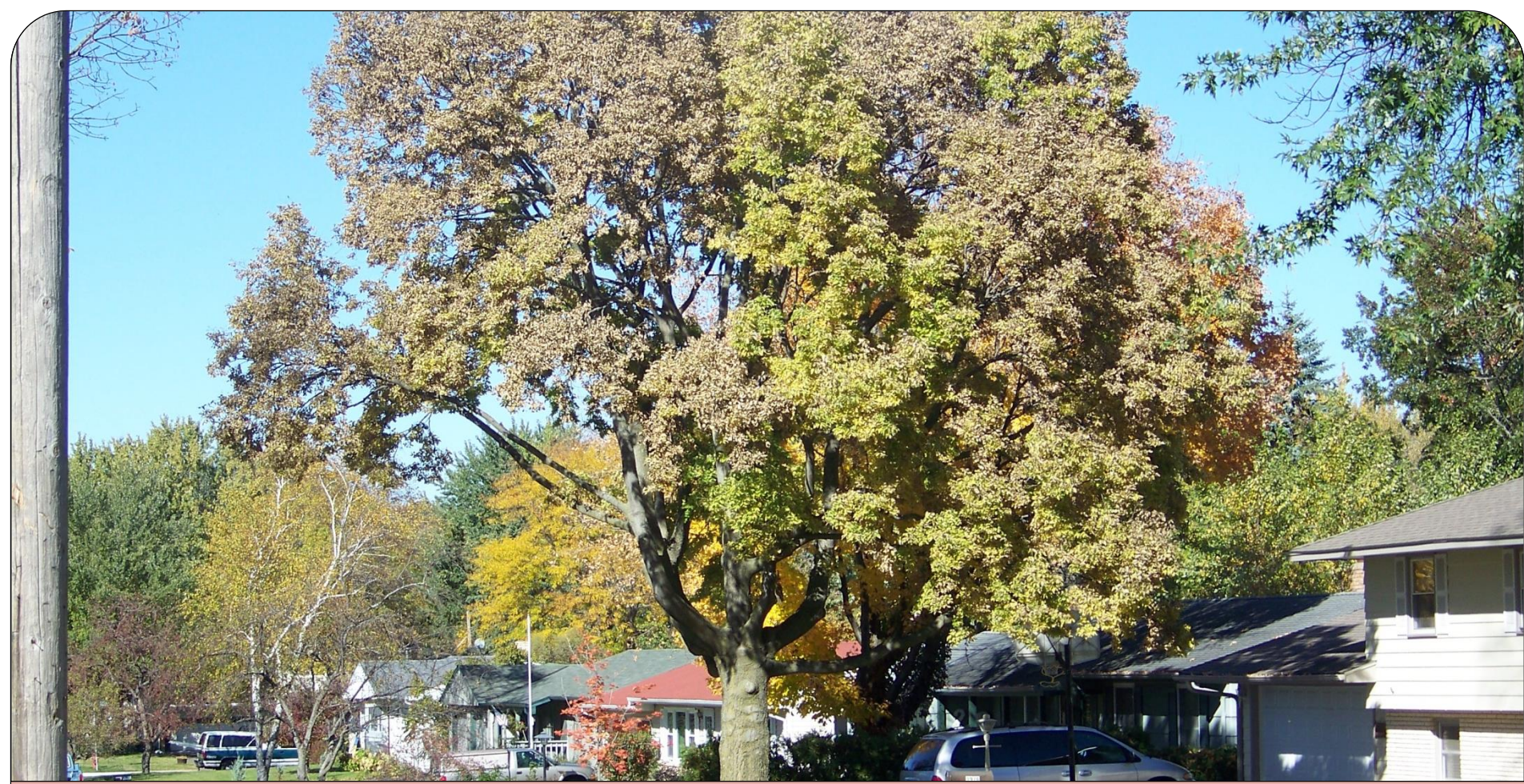
Erosion control prevents construction debris from entering the storm sewer.



Tree Removal

Step 4





Tree Removal (if necessary)

We strive to preserve all healthy trees in our urban forest. However, there may be a limited number of trees on the street construction project whereby removal is unavoidable.





Tree Removal (if necessary)

You will be notified if our tree has been marked for removal. At that time, you will be given information on the City's Tree Replacement Program.



Pavement Removal

Step 5





Pavement Removal

One of the first steps in any reconstruction process is, of course, demolition.

For street projects, this means removing the existing pavement. This process is done in phases rather than the entire project area being done at once.





Pavement Removal

Contractors will remove the pavement with large backhoes and haul it away in dump trucks, or they may grind it up in place.



PAVEMENT REMOVAL



Underground Utility Work

Step 6

Water Shut Off

Sanitary Sewer Wye Replacement

Storm Sewer Modification

Sanitary Sewer Modification





Water Shut Off

When hydrants are replaced or other watermain repairs are needed, your water may have to be shut down for a period of time. This work is typically scheduled between 9:00 a.m. and 3:00 p.m. The Engineering Department will try to notify you of this work 24 hours in advance.

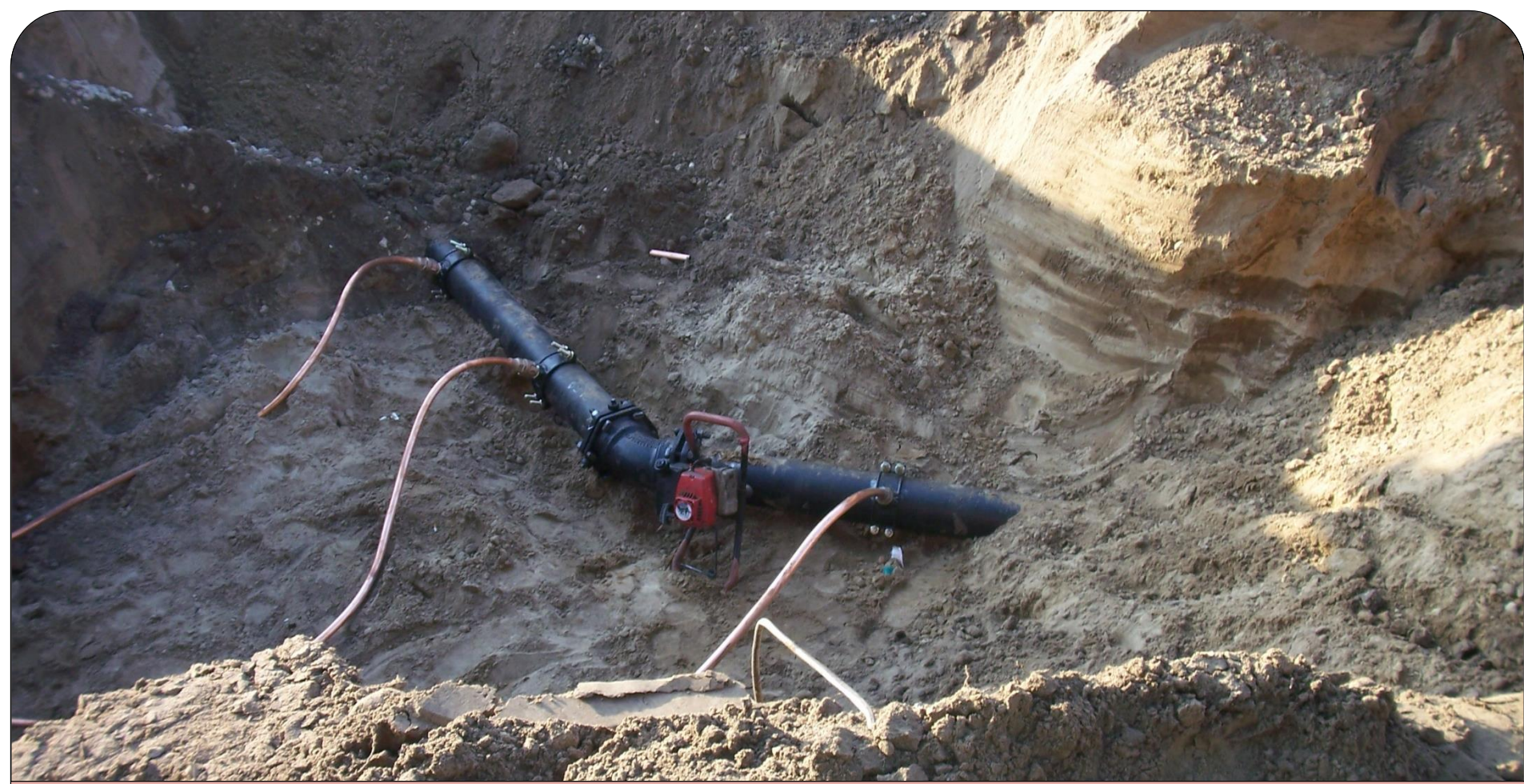




Sanitary Sewer Wye Replacement

Residents within the street reconstruction project can have their sanitary sewer service connection and a portion of sanitary sewer pipe replaced as part of the City's Residential Sanitary Sewer Wye Replacement Program.





Water Service Replacement

Residents within the street reconstruction that have galvanized or lead services shall have their service connection replaced from the main to the water shut-off as part of the City's Water Service Replacement Program. Residents shall be assessed. (\$1,200 in 2019))





Storm Sewer

Storm sewer work is typically done in only one location or intersection at a time, and usually won't affect access to your driveway.





Storm Sewer

If your driveway will need to be blocked for installation of storm sewer pipe or structures, City staff and crews will notify you beforehand so you can get your vehicles out for the day.



Subgrade Compaction and Gravel Base Placement

Step 7





Subgrade Compaction and Gravel Base Placement

After all underground utility work has been completed, the subgrade soils are compacted and a new gravel base for the street is hauled in.

These processes are vital to ensure a solid foundation for the street.





Subgrade Compaction and Gravel Base Placement

The Contractor will use vibrating compactors which will cause various degrees of vibration which may be felt in your home.

This will translate into shaky walls – make sure hanging items or breakables on open shelving are secured or removed.



Install Curb and Gutter

Step 8





Install Curb and Gutter

Once the gravel base placement is complete, concrete curb and gutter will be poured. Modern slip-form machines allow this work to proceed very quickly with a single crew, often completing over 5,000 feet per day.





Install Curb and Gutter

One or two days prior to pouring the curb, crews will mark your driveway openings with small white stakes. These stakes indicate the proposed extents of the curb opening (lowest “drive-able” portion of the curb).





Three-Foot sloped "wing"



Install Curb and Gutter

All driveways will also include a three-foot wing on each side which slopes up to match the full height of the curb.





Install Curb and Gutter

After the curb and gutter has been placed, you will not be able to access your driveway for 5 days, or until the Contractor has ramped your driveway with gravel. You will be able to parallel park in the street during the evenings, taking extreme care not to hit the newly-placed curb.



CURB REPAIRS



CURB REPAIRS



Install New Concrete Driveways and Aprons (and Sidewalk?)

Step 9





Install New Concrete Driveways and Aprons

Next, concrete aprons are installed for existing concrete driveways that had a portion removed.





Install New Concrete Driveways and Aprons

For residents having full driveway replacement as part of the City's program, this work is also completed.

As a courtesy reminder, the Contractor will knock on your door to let you know that they will be beginning work on your driveway.





Install New Concrete Sidewalk?

The City is looking at adding possibly adding sidewalk to Florence Street, 4th Avenue, and Karen Place.



Pave First Lift of Bituminous

Step 10





Pave First Lift of Bituminous

Once the curb and gutter are placed, the Contractor will haul in more gravel to place between the curbs and then compact it.

The Contractor will then begin paving the first lift of bituminous.





Pave First Lift of Bituminous

You will not be able to drive on the paved portion of the road for at least two hours or until they have finished rolling the newly paved roads. We ask that you take extreme care not to make sharp turns on the new bituminous pavement.

New asphalt is very hot (**approximately 300°F**) when placed. Parents should keep children and pets a safe distance away from the new pavement until it cools.



Install New Bituminous Driveways and Aprons

Step 11





Install New Bituminous Driveways and Aprons

For those residents having full driveway replacement as part of the City's program, this work is now completed.

As a courtesy reminder, the Contractor will knock on your door to let you know that they will be beginning work on your driveway.





Install New Bituminous Driveways and Aprons

Vehicles can be driven across the new asphalt; however, we recommend that you do not park on the new bituminous for at least 5 days. The longer it cools off and cures, the better it is for the aprons.

We also ask that you take extreme care not to make sharp turns on the new bituminous.



Sod Installation and Restoration

Step 12

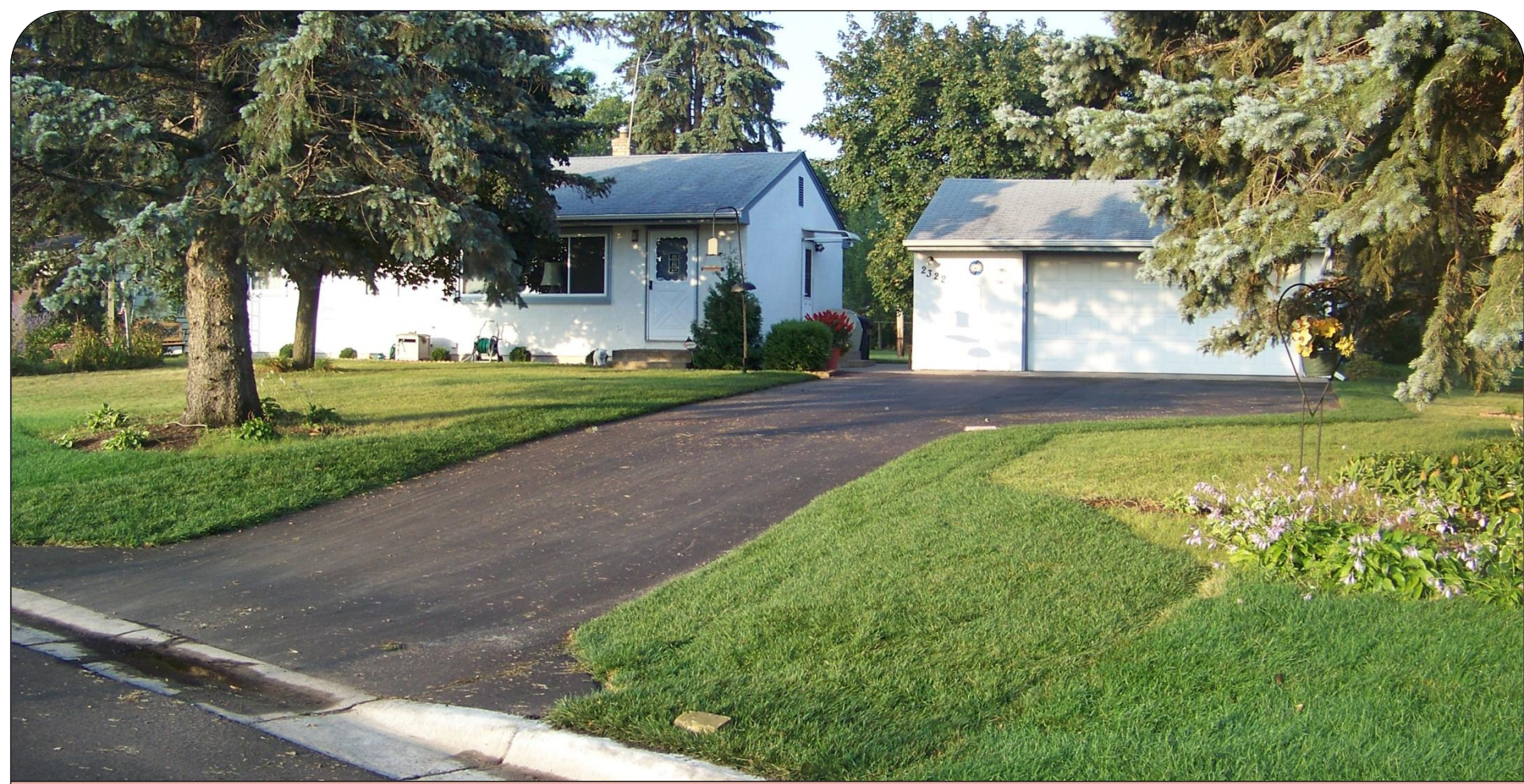




Sod Installation and Restoration

The Landscape Contractor will grade and backfill the boulevards with topsoil and lay the sod.





Sod Installation and Restoration

For residents that had new driveways installed and **paid for sod restoration**, the Contractor will also be completing that work.



Final Lift of Bituminous

Step 13
(The Final Step)



NEW PAVEMENT





Final Lift of Bituminous

The last step in placement of your new street is laying the final lift of bituminous.





Final Lift of Bituminous

You will not be able to drive on the paved portion of the road for at least two hours or until they have finished rolling the newly paved roads.

We ask that you take extreme care not to make sharp turns on the new bituminous pavement.





Final Lift of Bituminous

New asphalt is very hot (approximately 300°F) when placed. Parents should keep children and pets a safe distance away from the new pavement until it cools.



This is a brief overview of what to expect when we “come to your neighborhood”.



Construction Process





Xcel Energy may install new gas mains in the construction area. They will contact you directly regarding this work.

If you have any specific questions or concerns, please contact Xcel Energy.



Private Utility Work



WHO TO CALL



City of White Bear Lake Engineering Department	(651) 429-8531
City of White Bear Lake Police Non-Emergency	(651) 429-8511
City of White Bear Lake Utility Billing Clerk	(651) 429-8565
Xcel Energy	(800) 895-2999
White Bear Lake Post Office	(651) 762-1437

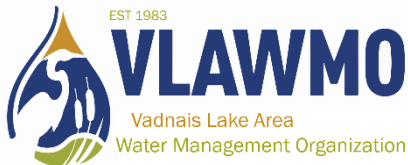


City of White Bear Lake



Raingardens & Street Renovation

A partnership with the City of White Bear Lake, residents, and the Vadnais Lake Area Water Management Organization (VLAWMO)



Raingardens and Street Renovation

- Convenient and cost effective time to install a curb cut raingarden
- Local expertise and financial resources available



10th St. & Morehead Ave

What is a raingarden?

A garden with a small depression that captures rainwater runoff from roofs, driveways, and streets during storms and briefly holds the water until it is absorbed by the soil.

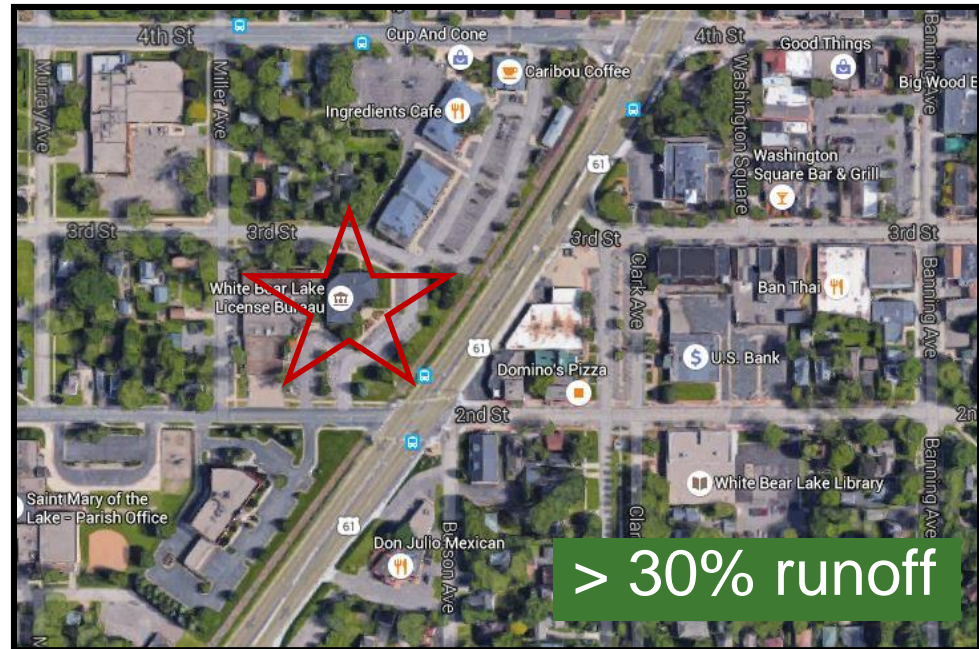
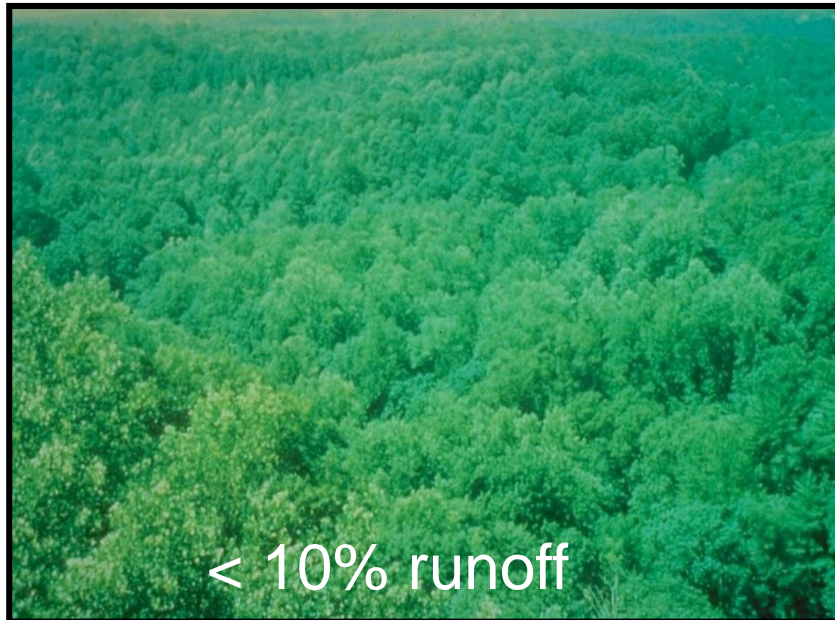
Why are raingardens important?

By helping water soak into the ground, raingardens prevent stormwater from running off your property and street and into the storm sewer system.



Why are raingardens important?

In undeveloped areas such as forests or prairies, soil and plant roots absorb much of the water from rainfall and snowmelt.



As land is developed, there is an increase in impervious surfaces (rooftops, streets, driveways, and parking lots)

Impervious surfaces prevent water from soaking into the ground, causing an increase in stormwater runoff.

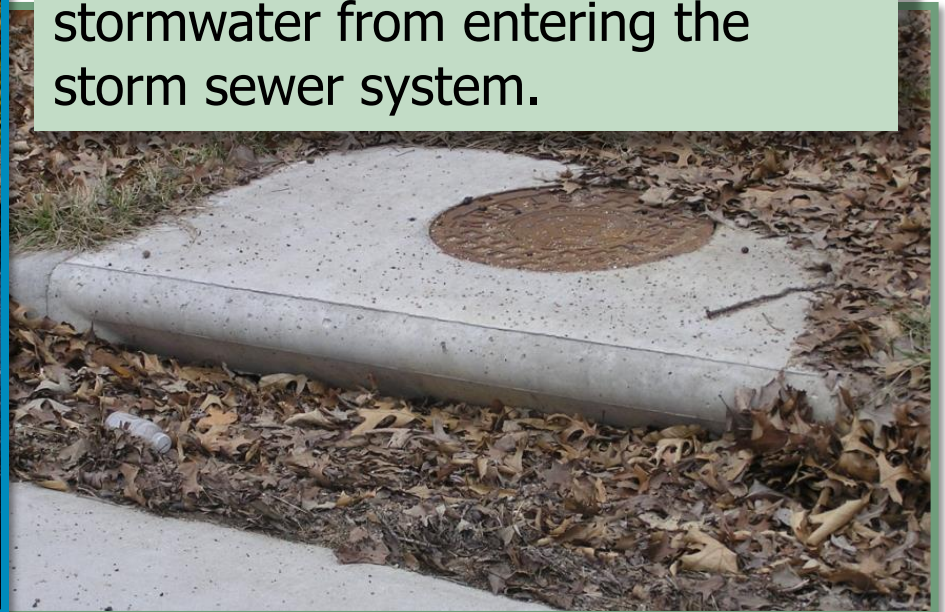
Why are raingardens important?

Stormwater runoff picks up sediment, road salt, oil, gas, leaves, fertilizers, pesticides, and trash from impervious surfaces and lawns and are washed into storm sewers and ultimately to lakes, wetlands and streams.



Raingardens mimic pre-development conditions by capturing and soaking stormwater runoff into the ground.

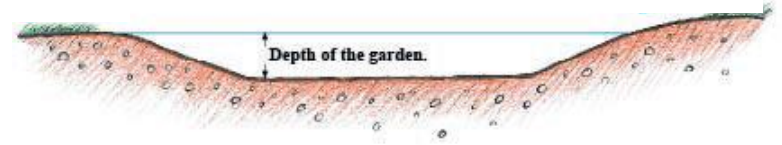
Raingardens reduce the volume of runoff and prevent polluted stormwater from entering the storm sewer system.



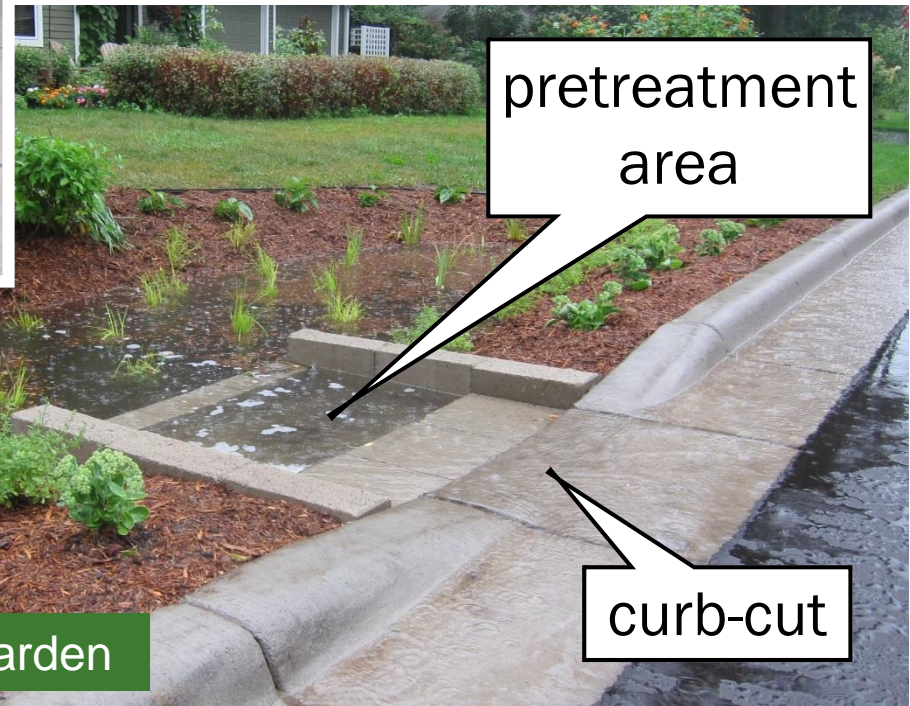
How do raingardens work?



“downspout”
(non curb-cut)
raingarden



Typical cross section



Curb cut raingarden

Cost share information

If your site is a good fit for a raingarden:

City responsibility:

- Provide a curb-cut as part of street renovation at no cost to the landowner (\$600-\$700 value)



VLAWMO Cost Share Program:

- Provide raingarden design, at no cost to the landowner
- Reimburse 50%-90% of the cost of materials and approved labor.
- Provide guidance & monitoring for 10 years following installation

Homeowner responsibilities:

- Pay for a portion of the construction cost (10% to 50% depending on available funding)
- Sign a maintenance agreement with VLAWMO agreeing to maintain the raingarden for 10 years.

Past Projects



8th St. & Johnson Ave.

Past Projects

10th St. & Morehead Ave.

2018



2020

Past Projects



6th St. & Johnson Ave.

Past Projects



2020

Cottage Park Rd & Old White Bear Ave.

Past Projects



2021

Lakehill Circle

Interested in a curb cut raingarden?*

Add your name and contact information to our interest list at the front table

-or-

contact:

Connie Taillon

Phone: 651-429-8587

Email:

ctaillon@whitebearlake.org

**Not all sites are suitable for a curb cut raingarden. Sites are selected based on soil type, street drainage, and available funding.*

Other cost share opportunities

VLAWMO Cost Share Program (VLAWMO.org)

- “downspout” raingardens
- Native landscaping
- Shoreline and streambank restoration
- Pervious pavement
- Rain barrels

contact:

Tyler Thompson

Phone: 651-204-6071

Email:

Tyler.Thompson@vlawmo.org

THANK YOU!



Thank you for taking the time to view this presentation. We hope it helps you to understand the process and what to expect during the entire pavement restoration project. We look forward to serving you in the 2022 construction season.



~ The White Bear Lake Engineering Department