MUNICIPALITY OF BLUEWATER
BAYFIELD MAIN STREET
RENEWAL

WELCOME

PUBLIC INFORMATION MEETING
OCTOBER 19th, 2016

Municipality of Bluewater

BMROSS engineering better communities

PROJECT TIMELINES

- **AUGUST 2013** – PRELIMINARY DESIGN PHASE INITIATED IN CONJUNCTION WITH BAYFIELD STORM WATER DRAINAGE MASTER PLAN PROCESS

- **FALL 2013** – PROJECT ADVISORY TEAM (PAT) FORMED
  - Bluewater Heritage Advisory Committee
  - Bayfield Heritage Advisory Committee
  - Bayfield Ratepayers Association
  - Bluewater Municipal Council
  - Bayfield & Area Chamber of Commerce

- **FEBRUARY 2014 –** SEVEN (7) PAT MEETINGS HELD BETWEEN FEBRUARY 2014 AND OCTOBER 2015

- **JUNE 10, 2014 –** PUBLIC INFORMATION MEETING

- **OCTOBER 2015 –** PRELIMINARY DESIGN CONCEPT FINALIZED

- **OCTOBER 19, 2016** – PUBLIC OPEN HOUSE

PROJECT COMPONENTS

- **SIDEWALK MATERIAL** – SIDEWALKS TO BE CONSTRUCTED USING EXPOSED AGGREGATE CONCRETE (DECORATIVE CONCRETE WITH AN EXPOSED AGGREGATE SURFACE)

Installation technique

Texture Blow Up

- **SIDEWALK LOCATION –** NEW SIDEWALK ALIGNMENT TO INCORPORATE A MEANDERING ROUTE AS SHOWN ON DRAWINGS
- **STREET LIGHTING** – UTILIZE SAME LIGHTING FIXTURES THAT ARE CURRENTLY IN PLACE BUT INVESTIGATE USE OF LED BULBS WITHIN EXISTING FIXTURES
- **HYDRO SERVICING –** INDIVIDUAL HYDRO SERVICES ON WEST (SOUTH) SIDE OF MAIN STREET TO BE BURIED
- **PARKING SPACES –** USE OF GRANULAR SURFACING RATHER THAN ASPHALT

PROJECT COMPONENTS

- **STORMWATER DRAINAGE –** COMBINED APPROACH USING TRADITIONAL (BURIED PERFORATED PIPE) AND BIORETENTION AREAS DISPERSED ALONG STREET

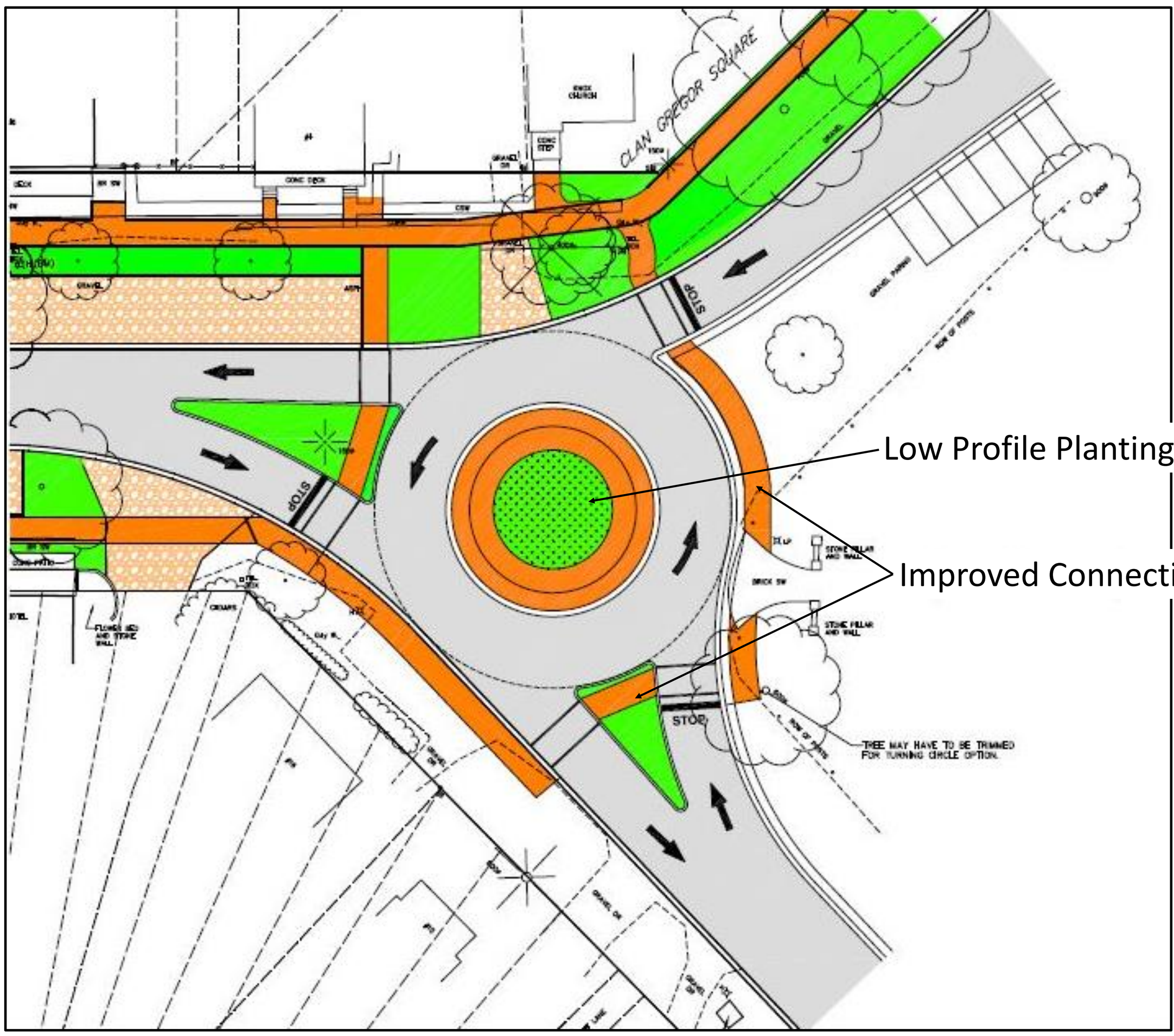
Bioretention Boulevard Planters,
King Street – Kitchener

- **ACCESSORIES (TRASH RECEPTACLES, BENCHES, ETC.)** – MAINTAIN CONTINUITY WITH CLANGREGOR SQUARE COMPONENTS

- **TREE PLANTING** – A TREE PLANTING PLAN HAS BEEN INCORPORATED INTO THE DESIGN. SOME TREES PLANTED IN 2015/2016 TO ALLOW FOR NEW GROWTH AS SOON AS POSSIBLE

PROJECT COMPONENTS

- **Gateway (Entrance to Main Street Adjacent to Clan Gregor Square) –** A TRAFFIC CIRCLE IS PROPOSED FOR THIS AREA TO PROVIDE IMPROVED TRAFFIC ROUTING, BETTER CONNECTIVITY TO THE PARK AND MAIN STREET, AND A STATEMENT PIECE TO DEFINE THE ENTRANCE TO THE HISTORIC SHOPPING DISTRICT.



NEXT STEPS

- **COLLECT INPUT FROM PUBLIC FOLLOWING PIC**

- **REVIEW FEEDBACK WITH STAFF AND ENGINEERS**

- **FINALIZE ENGINEERING DESIGN** – FINAL ENGINEERING DRAWINGS WILL BE COMPLETED AND APPROVALS FINALIZED
  - Environmental Compliance Application (ECA) required from the MOECC
  - Ausable Bayfield Conservation Authority (ABCA) to review SWM Design

- **PHASING –** PHASING OF IMPLEMENTATION COULD BE PURSUED TO SPREAD OUT COSTS OVER A NUMBER OF YEARS

- **COUNCIL PRESENTATION** – PRESENT PRELIMINARY DESIGN AND PROJECT PHASING BUDGET TO BLUEWATER COUNCIL FOR APPROVAL

- **IMPLEMENTATION –** MAIN STREET PROJECT INCLUDED IN CAPITAL WORKS BUDGET FOR BLUEWATER

WAYS TO CONTROL STORMWATER ON YOUR PROPERTY

An essential part of stormwater management is keeping water from leaving your property or at least slowing its flows as much as possible to protect the watershed and lake.

RAIN BARRELS

- Stormwater from your roof is diverted into a barrel connected to your downspouts and stored for later use to water your gardens.
- Drastically reduce runoff by 65-70% if used and maintained properly.
- Can reduce domestic water use, lowering water bills and demands on municipal water system, especially during peak summer periods.
- Can include special features such as spigots for attaching garden hoses, filters, mosquito-proof mesh, and child and animal-proofing.

CISTENS

- Advanced rainwater collection system also referred to as “rainwater harvesting”.
- Traditional rain barrels are limited to 150-300 litres of water so collection and storage of rainwater is limited with typically only 3% of stormwater being captured per event.
- With a 2,000 sq. ft. home you could collect 4,500 litres of water during a one inch rain event.
- Cisterns depending on the size can hold between 350-5,400 litres of water.
- Cost of potable water to care for gardens can be expensive if on water metres.

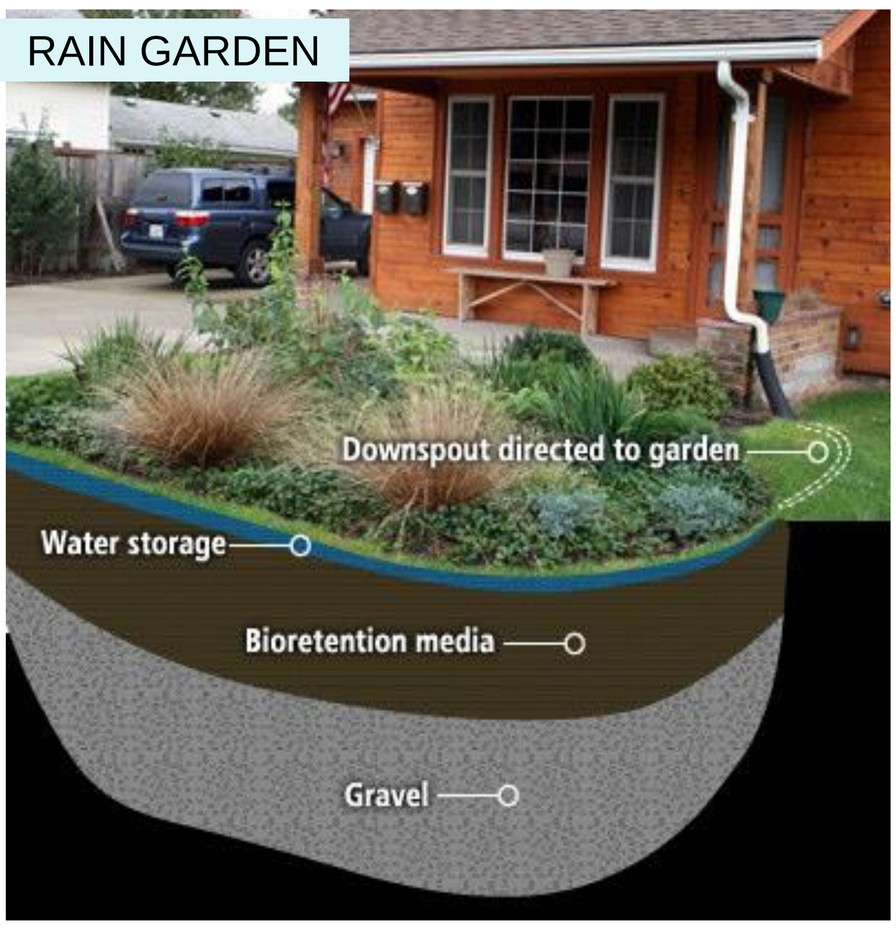
SOAKER HOSES

- In the summer months homeowners can use 30% to 70% of their water supply outdoors for watering vegetation.
- When using sprinklers, 50% of the water can be lost to evaporation, wind drift or runoff.
- Connect low-pressure soaker hoses designed specifically to work with rain barrels or cisterns.
- Soaker hoses provides “drip irrigation” to gardens which is a slow & steady supply of water directly to the soil which is more efficient than using a hand held hose or sprinkler .

WAYS TO CONTROL STORMWATER ON YOUR PROPERTY

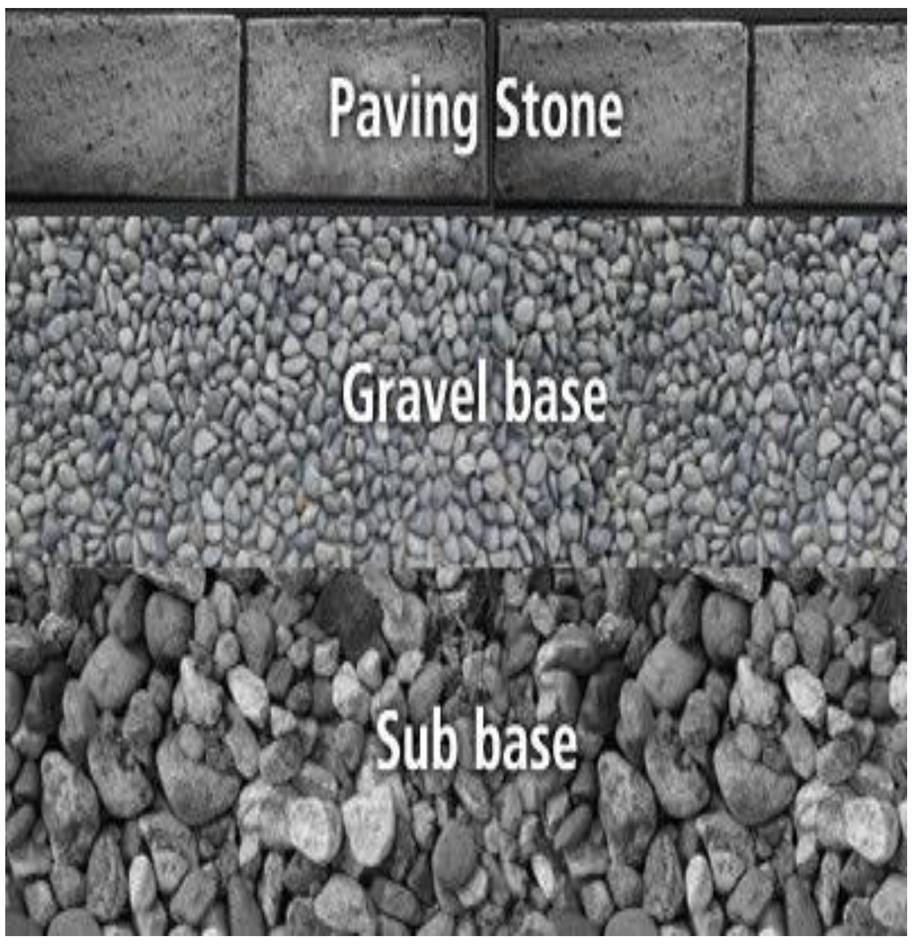
DOWNSPOUTS

- Runoff should not be discharged immediately beside buildings or on a grade which would direct flows to buildings as this could lead to foundation damage and/or basement flooding.
- Extend and aim your roof downspouts away from foundations and paved surfaces out onto flower beds, rain gardens, treed areas or onto the grass, as this will allow the rain a chance to soak naturally into the ground
- Keep gutters clean which helps move water to the intended adsorption areas.
- Take care not to direct downspouts to impervious driveways, patios or walkways as this could pose as a safety hazard due to pooled runoff and ice formation in winter months.



RAIN GARDEN

- Capture clean rainwater from your roof, driveway and sidewalks & divert it into a low maintenance perennial garden that is designed to catch stormwater and allow it to soak slowly into the ground.
- A rain garden can mimic the natural and pollution removal activities of a forest or meadow and absorb runoff more efficiently (30-40%) than a standard grass lawn.
- Locate in a wet spot, a place where water naturally flows, or a place where water can be diverted.
- A good option that helps lower the impact of impervious surfaces & polluted runoff because they are low-tech and sustainable while at the same time creating habitat for birds & butterflies and beautifying your neighbourhood.



PERMEABLE (POROUS) SURFACES

- Concrete and asphalt driveways and walkways prevent rainwater and snow from soaking naturally into the ground.
- Where possible, consider using gravel, wood chips, stepping stones or interlocking brick for your walkways instead of asphalt or concrete.
- Where you need a more solid surface such as a driveway or patio, consider using a porous pavement made from interlocking cement blocks or brick pavers with spaces that allow rainwater to seep into the ground.
- Be creative by considering various combinations for walkways, patios & driveways such as interlocking paving stones and grass or mulch.
- If you must pour concrete or asphalt, keep the area as short and narrow as possible.

BAYFIELD RAIN GARDEN

- **RAIN GARDENS –** SIMILAR TO THE INFILTRATION BASINS PLANNED FOR MAIN STREET, RAIN GARDENS ARE DESIGNED TO COLLECT STORMWATER RUNOFF AND ABSORB AND FILTER, USING NATIVE PLANTS AND FILTER MEDIA, BEFORE DISCHARGING

What is a Rain Garden?

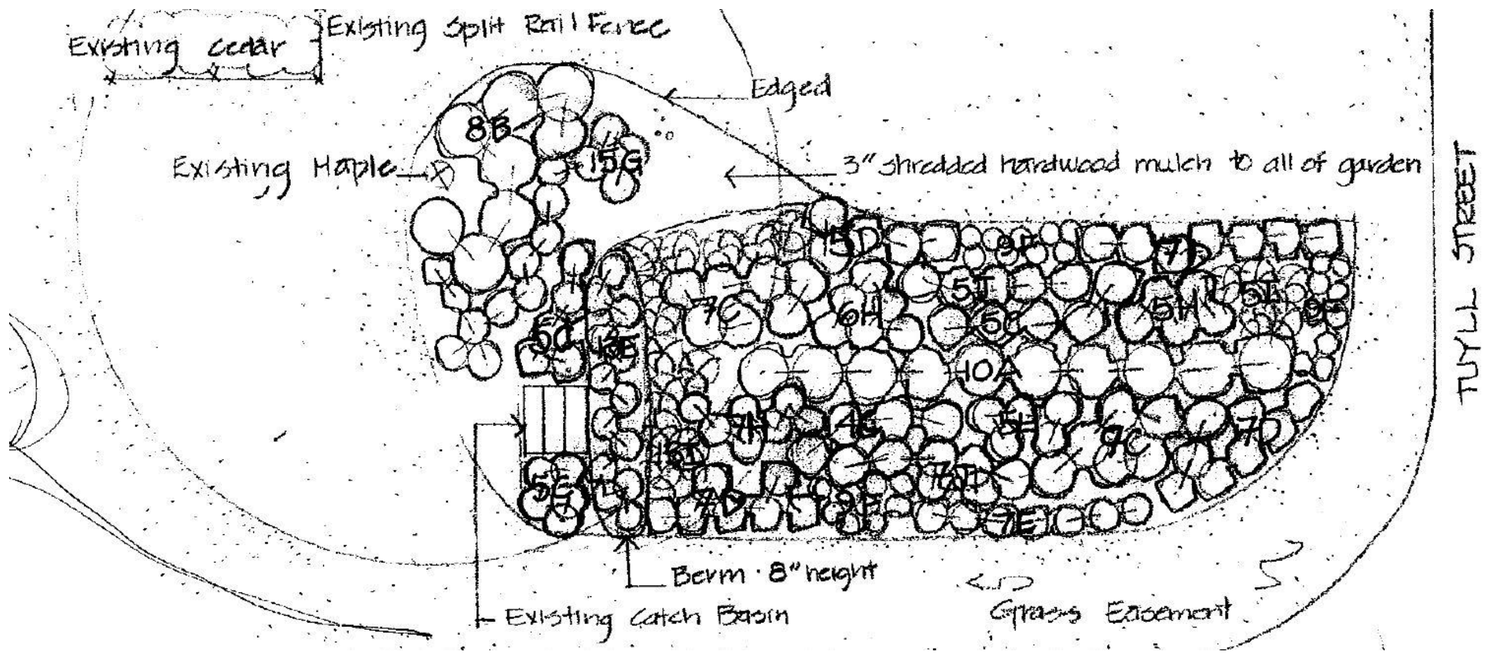
A rain garden is a shallow basin planted with deep-rooted native wildflowers, grasses and shrubs that filter and absorb stormwater runoff and the pollutants it carries. Their extensive root systems filter stormwater runoff by removing nutrients, sediments and pollutants before it enters our groundwater and waterways.

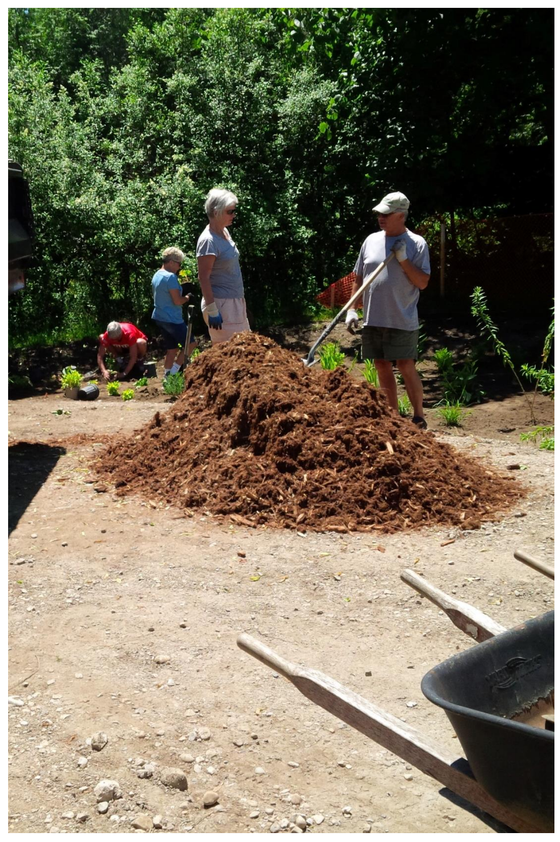
Why Plant Natives?

In addition to helping to prevent erosion and improving water quality, native plants provide essential food and habitat for local wildlife. Their seeds and nectar provide a valuable food source for birds, butterflies and other insects. Natives plants are those that were here prior to European settlement. They are well adapted to local conditions and require very little care once established.

BAYFIELD RAIN GARDEN

- **RAIN GARDENS AT PIONEER PARK –** CONSTRUCTED IN SPRING 2016 WITH A GRANT FROM GREAT LAKES GUARDIAN FUND AND ASSISTANCE FROM PIONEER PARK ASSOCIATION, AUSABLE BAYFIELD CONSERVATION AUTHORITY, MUNICIPALITY OF BLUEWATER AND BMROSS.





BAYFIELD MAIN STREET RENEWAL

IMAGING EXERCISE

Looking southeast toward the Albion

Looking southeast toward JMR

Looking southeast toward the Red Pump

Looking northwest toward the Library

Looking north along Main Street

Looking northwest toward the Library