

Completed Projects – 2010

4th Avenue Stormwater Project:

- The existing stormwater pipe system under Fourth Avenue between McDonald and Donnelly Streets did not have the capacity to carry the amount of water necessary to prevent flooding.
- A new line was installed along the length of the road.
- A portion of the pipe line went under the CF Rail Road tracks by Pisces Rising using a technique called “Jack & Bore”.
- New sanitary sewer lines and structures were installed at 4th Ave & McDonald St while the intersection was open for the stormwater project.
- At the corner of Donnelly Street and Fourth Avenue, two new stormwater inlets were constructed and a Nutrient Separating Baffle Box was installed under Fourth Avenue.
- This will help to remove the sand and debris that is washed from the streets before it reaches Lake Dora.
- This project was partially funded by the Lake County Water Authority.



Hydraulic rams for Jack & Bore



Steel casing with auger being set in place



Top section of baffle box being set in place

Flexstorm Inlet Filter Baskets:

- Thirty five stormwater inlets in the downtown area were installed with Flexstorm Inlet Filter Baskets.
- These baskets are installed under the metal grates to capture the leaves and debris that is washed off the streets.
- The organic material captured is held in the basket and dried out in between rains, which prevents it from decomposing and being washed into the lake at the next rain event.
- This project was partially funded by the Lake County Water Authority.



Flexstorm inlet filter at 6th Avenue and McDonald Street

Underground Stormwater Storage and Exfiltration at Highland St. and 1st Ave.:

- During the reconstruction of the intersection at Highland St. and 1st Ave., a StormTech underground stormwater storage and exfiltration system was installed.
- It is designed to capture stormwater runoff from Highland Street and store it underground in the large yellow chambers and surrounding stones. The water filters into the ground after the rain event.
- The system was designed with three sections for ease of maintenance in the future.
- This was a cooperative project with Lake County Public Works.



StormTech Chambers with filter fabric wrap and stone



Chambers surrounded with stone and filter fabric

Groveland Rd Stormwater Pipe Installation:

- Stormwater running of the north end of Groveland Road had eroded the hillside and created deep ravines and exposed a large reclaimed water pipeline.
- This area has become the southern portion of the nature park and has been developed for bike trails.
- Structures were installed at the top of the hill and connected to the existing stormwater system.
- A 360-foot long continuous HDPE pipe was laid into a trench down the slope.
- A large deflection structure was installed at the bottom of the hill to disperse the water into the low area within the park.
- The slope was graded and seeded and the bike trails were re-established through the area.



Erosion down hillside before construction



Stormwater pipe installation



Hillside restored and hydroseeded



Discharge structure at base of hill

Pine Street & Jackson Street Stormwater Pipe Repair:

- A 23" x 54" elliptical pipe between Pine Street and Jackson Street has been crushed down to a height of only 8 inches and was further blocked by an old tire.
- This blockage affected the entire northeast section of town by preventing flood waters from being drained away during heavy rains.
- A 20-foot section of pipe was cut out and replaced with galvanized corrugated steel pipe.
- Other blockages were removed from the pipe system further downstream that significantly improved the drainage capacity of the Pine Street system.



View inside crushed pipe between Pine Avenue and Jackson Street



Excavation of crushed section of pipe