

Village of Colfax  
Streets Committee Meeting  
Monday, August 26, 2019  
5:30 p.m. at Village Hall  
613 Main Street, Colfax, WI

## Agenda

1. Call to Order
2. Roll Call
3. Cedar Street – Legion Dr. to Third Ave – Possible Recommendation to the Village Board
4. Adjourn

Any person who has a qualifying disability as defined by the American With Disabilities Act that requires the meeting or materials at the meeting to be in an accessible location or format must contact: Lynn Niggemann Administrator-Clerk-Treasurer's Office, 613 Main Street, Colfax, (715) 962-3311 by 2:00 p.m. the day prior to the meeting so that and necessary arrangements can be made to accommodate each request.

**\*\*\*\*\*It is possible that members of and possibly a quorum of members of the governmental bodies of the municipality may be in attendance at the above-stated meeting to gather information- no action will be taken by any governmental body at the above-stated meeting other than the governmental body specifically referred to above in this notice.\*\*\*\*\***

# Contractor Estimate

From: Bobcat Pro (715)962-3345 E8148 state road 170 Colfax, WI 54730	No. 72319
To: Village of Colfax	Work Performed at:

Date: 7-23-19  
Your Work Order No.: \_\_\_\_\_  
Our Bid No.: \_\_\_\_\_

French drain for Mark Halpin  
Fabric (est)

Dig out area 6 feet wide 12 feet long 15 feet deep  
Replace with 2 loads of 3" x 6" screened rock for drain area  
Using sand dug out from area, put on top of rock 2' thick for filter area

Using topsoil from area dug out replace on top of affected area around drainage screen provided by the village

Rock \$831.50  
4 hours backhoe \$500  
2 hours truck \$200

\*\*\*\*\* if area dug out caves in, material list prices will increase as well as labor\*\*\*\*\*

Total \$1,531.50

*Will have revised quote on Monday.*

Due upon receipt invoices not paid in 30 days from invoice date incur 1.5% interest

This is a  Partial  Full invoice due and payable by:

\_\_\_\_\_ Month \_\_\_\_\_ Day \_\_\_\_\_ Year

in accordance with our  Agreement  Proposal No. \_\_\_\_\_

Dated \_\_\_\_\_ Month \_\_\_\_\_ Day \_\_\_\_\_ Year

**MEMORANDUM**

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To: Village Board of Colfax, WI

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From: Lisa Fleming

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Date: August 16, 2019

Project No.: 00-0008.23

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Re: Drainage Issue at Cedar Street

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Village Board:

You have requested a review of potential issues at the drainage of a back yard whose address is on W 3<sup>rd</sup> Ave, but the issue is located on his back yard which abuts Cedar Street in the Village. I met with the contractor and with Rand, DPW of Colfax on Thursday, August 15, 2019. We reviewed the drainage, the street configuration and possible alternatives.



One thing we have asked Rand to do was call in Diggers hotline so that we could know what if any utilities are in the ditch along the proposed house's back yard. This is important because it may impact the decision the Board may wish to make. He will report back to me once they have marked the locations of the underground utilities in the area.

We will go through alternatives and offer suggestions. Understand these are not engineered suggestions, and as such may or may not work on a regular basis.

### **Background**

The back yard of the property on W 3<sup>rd</sup> St. has flooded over the years on and off according to Village sources. Cedar Street was milled and resurfaced in the last three years and the landowner is concerned that the flooding has gotten worse, as they feel the roadway was raised vertically. There are two things of note in the back yard, it has been a low spot previously, and there is a large tree that has been cut down and the stump left in place.

Regarding the weather, we just completed a study for another community nearby, and the precipitation Error! Bookmark not defined. level has been significantly above average for the last five years. Significantly means about 10% greater than average, and storms have come in inopportune times. What we mean by that is the storms or snowfalls have come at times one on top of another, or during times of frost when there are significant melts. This past season winter of 2018-2019 was a good example. We received over 60 inches of snow in February, on frozen ground, and then had melts and rainstorms in March and April. This caused ponding in areas where traditionally we have not seen it and in slower infiltration rates.

Soil information is not available in this backyard. Based on what we have experienced throughout the rest of the Village in reconstruction of roadways, it is not uncommon to have a silt/clay/shale layer on top before we reach the sand layer. We suspect this might be the case in this instance. From visual review the water does not infiltrate as fast as other parts of the area which may be sitting on cleaner, sandier soils.

There is no underground stormwater in place along the entire area. All stormwater is surfaced drained. Once it reaches a flat area it infiltrates as best it can depending on the season and the soil capacity. The lack of a storm water system in such a flat area is difficult to overcome.

There is a large commercial building just north of the back yard. The roof and driveways drain down into a very shallow ditch and then make a 90-degree bend to the extremely shallow ditch along the east side of the back yard. The roadway is draining from the railroad property and down to W 3<sup>rd</sup> Ave., and then the water drains in the extremely shallow ditch on the west side of Cedar St., or adjacent to the backyard in question.

The landowner is concerned about the roadway being raised and causing the problems. Even if the roadway were lowered 6" it would not significantly change the drainage pattern to the shallow ditch and then spread out to his back yard. What is happening is that the roadway is now truly impervious and as such is coming to the low area-backyard-before infiltrating. Before there was area for the water to infiltrate on the roadway itself according to others from the Village.

## Options

Options presented will be in order from least expensive except for the first one-which is to engineer the roadway and stormwater system for the area. We have ignored the issues of the last spring 2019-many, many, houses had water in their basements that never did before. In this case no matter what the backyard is the low spot and would have had flooding. We are striving for everyday flooding issues that might be encountered.

### Option 1

Hire a professional engineer to evaluate the storm water issues in the area of drainage, not just the isolated area in question. Determine a long-range plan for stormwater installations for this work. Some easements might be required, or it might involve digging up some streets in pretty good conditions (like Cedar St). This is difficult for most communities to justify when there are so many streets that need work. Estimated cost ranges from \$25k-\$50k for the actual engineering, and \$250k to \$500 k for the reconstruction of what would need to be done.

### Option 2

Do nothing-area continue to have a flooding issue and does not resolve itself.

### Option 3

Rand and I are both hoping there are not utilities within the r/w along Cedar Street. Even if they are there and they are in Village right of way, Village is within their rights to ask them to lower their line-based on what you expect to dig out, or relocate outside of your r/w-which means they would have to get easement from property owner.

If there are none, you could then work on providing a deeper ditch. Determine if we will be accessing private property. If so then it would still involve getting an easement from the property owner for access to cut the backside of the ditch on his property. Depending on the slope the owner might like to see it could extend a distance into the yard. Typically, a 3:1 slope is a riding lawn mower mowable slope. You could also consider digging out the poor soils in the ditch to reach good sand, or the drainage pond with stones and filter fabric as previously discussed. This would be tricky as the contractor would have to use a trench box and fill it back in as he goes. Work on making the ditch on the north side (commercial building) of the back yard, turn into the ditch without overflow into the back yard. Restoration would involve topsoil seed, mulch. Guess estimate would be \$10k-\$50k.

#### Pros

- The Village will have addressed their problem-roadway water in their roadway ditch. It is evident that the house in question does not have gutters or has had work done to keep the water away from the foundation. The tree that has been removed now has a rotting stump left in the back yard, it is possible water is following old roots towards the foundation and allowing water to build up pressure against the foundation causing leaks.
- Under most conditions this option should work, but not in extreme conditions. Even storm sewer is not designed to hand extreme conditions, ponding occurs until it drains away.

#### Cons

- There might be utility conflict and it might cost the village money to move existing utilities or might not be able to be moved.
- There will be tree roots encountered-there are silver maples existing in the area of the work and will have to come out.

- If you must go onto private property-landowner might not like the ditch as they have had level lawn to mow in the past and might not grant an easement.
- Controlling roof water will be difficult from the commercial company along the north backyard line.
- Not a total engineered fix-if the water overflows the ditch it will get into the back yard.
- If install drainage area with rocks and fabric-can certainly become frozen under right conditions an might not work, again causing flooding into the back yard.

#### Option 4

This option involves installing an underground pond on private property. As discussed above it should work for most situations. You have an estimate of around \$1500 plus fabric to be added, so let's say \$5,000. However, you are now allowing a private landowner to drain and infiltrate a Village street water and neighboring commercial property. There are so many issues that could go wrong with this opportunity-

- Consult with your Village Attorney for the use of this option-The questions below are our thoughts on the type of questions you should be asking them.
- Would you need an easement-I should think that is only good business?
- What type of easement, temporary to build only? Or permanent so you can service it? How will you access the middle of the back yard?
- If restoration does not go as well as landowner likes-who will make sure it is resolved? Is the grass growing? Does it need regrading due to erosion because of rain before vegetation establishment?
- Will you install and turn it over to the landowner?
- Will the landowner make some improvements to help his situation-gutters? Tearing out the stump? Backfilling and compacting? Making sure his lawn next to the foundation is as high as possible to prevent infiltration to his basement?
- What happens if they continue to have problems and now this system you installed was not properly engineered? Who will the liability be assigned to?
- Would you make this temporary until the street is reconstructed? If so, would it be tied to the deed, so all parties know about it-or have a MOU?
- What happens if there is a hazardous spill and it ends up in this drainage system? And I mean from either party, Village, commercial building, or landowner-where does the responsibility lie? Who pays to clean it up?
- Lastly , does this set a precedence for work throughout the Village to take care of other similar issues on private property?

#### Option 5

- Purchase the property, tear down the house, regrade it to better facilitate a new building and resell the lot. Or use it for a site for a future storm water pond. Price could range from \$100k to \$250K.

From a purely engineering standpoint our recommendation is for the Village to handle its street storm water and deal with those issues. Consulting your attorney after this discussion is the next step in our opinion before moving forward with any considerations.