

**Office of the City Engineer**

**John C. Rooney, P.E.**  
Assistant Commissioner of Public Works/  
City Engineer



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July 28, 2017

Legistar Item: 83-17

To: Alderman Terry McCarthy, Chairman  
Public Works and Services Committee

From: John Rooney *JCR*  
Assistant Commissioner of Public Works/City Engineer

Re: Ruby Avenue

I looked at Ruby Avenue after fairly significant rainfall on February 27, 2017. From the attached photos it is pretty clear there exists a minor issue with curb & gutter near the two driveways at 3731 and 3723 Ruby Avenue. With nearly all frost now gone from the soils I doubt we will find any different issues after survey other than what is depicted in these photos.

In short, there is no major issue with road drainage. The road has sufficient longitudinal grade and crown to adequately drain the roadway as you can see in the photo "looking south". This is nothing that the City Engineer's Office would design for an improvement. The small pockets of water that pond near the two addresses mentioned above are the result of some minor curb & gutter settlement.

A couple things to note:

1. We have 1000's of feet of curb & gutter scattered all over our 250+ lane miles of road that are in far worse shape than this. This boils down to a maintenance issue that needs to be prioritized by DPW. I would imagine a very low priority.
2. If the resident claimed they solicited someone to repair/replace their driveway and the contractor told them they would not do it unless the curb and gutter was repaired that is still a viable option to repair. The contractor (and nearly all that do this type of work in the City of Racine) should know the City will reimburse them for replacement of curb & gutter in their removal limits to do their work or correct a drainage issue such as this when doing private work on driveway aprons. We always have made this available and it is paid for by fixed unit prices our office establishes.
3. Regardless of the curb & gutter being repaired, the issue of sump pump discharges freezing in the right-of-way will continue to exist given the right combination of prolonged sub-freezing air & pavement temperatures. Fixing these two minor curb & gutter defects will not prevent icing from sump pump discharges.

We have developed a cost estimate to install an under-drain system behind the curb & gutter to remove sump pump discharges into the roadway. The cost for this work is estimated at approximately \$18,000, with property owners receiving the benefit paying about \$82 per front foot. If the Committee agrees to proceed with this improvement, then a preliminary resolution should be introduced.

The repair of the curb & gutter itself is in the hands of DPW, or the property owner as mentioned above if they elect to replace their apron.

JCR:njp

**Estimate on Assessment**

Total Estimated Cost: \$16,930

Address	LF of Affected Frontage	Cost/Ft	Cost	Cost plus 6%
3711 Ruby	47	\$82.18	\$3,862.67	\$4,094.43
3723 Ruby	90	\$82.18	\$7,396.60	\$7,840.40
3731 Ruby	69	\$82.18	\$5,670.73	\$6,010.97
Total Frontage	206		\$16,930.00	\$17,945.80

**RUBY AVENUE DRAIN TILE ESTIMATE**

Item	Description	Unit	Quantity	Cost	Cost
1	8" PVC Pipe	LF	220	\$35	\$7,700
2	Connect to Existing Inlet	LS	1	\$500	\$500
3	Connect to Existing Sump lines	EA	2	\$200	\$400
4	6" Concrete Driveway, Remove and Replace	SF	368	\$10	\$3,680
5	Restoration	SF	870	\$5	\$4,350
6	Curb & Gutter R & R	LF	10	\$30	\$300

**Total     \$16,930**

Drive patch	46	8
Restoration	174	5









