Plan Moving Forward – Phase 3

Analyze Elevation Survey Collected by the City

- SEH will need to analyze the elevation data collected. The location of the elevation surveys will dictate if we can calibrate flows using our models made in previous phases or if we will need to create additional models.
- It appears that the best elevation data will likely come from the Floral Lane area. This may be the best area to estimate the July 2017 flow rate and calibrate to, however our previously made models are not detailed in this area and an additional model would likely need to be made.

Meet/Call with DNR

- Based on the analysis of the elevation data, SEH can prepare a calibration plan for moving forward.
- This plan should be discussed with the DNR at this point to make sure they are on board before additional work is completed.

Topo Surveying

- Meet with and/or call people listed above to get more information. City can do some of this initially.
- If Phase 3 moves forward, Riley Mondloch and/or Brad Woznak may need to go to La Crosse and meet with John Zoreb, the Schmidts, 3320 Floral Lane owners, and possibly the Woolevers to collected additional survey data and ensure all the needed data was collected.
- Survey additional locations if needed.
- SEH survey channel, culverts, and bridge in the upper Floral Lane area.

Modeling – Floral Lane Area (assuming this is the best area after elevation analysis)

- *ONLY POSSIBLE IF SUFFICIENT NUMBER, QUALITY, AND LOCATION OF HIGH WATER SURVEYS OBTAINED
- Create a detailed RAS2D or SRH2D model of the upper Floral Lane area near the two driveway crossings that experienced the most flooding and extending down beyond the Floral business.
- Use photos and survey to recreate conditions – with 2 of the 3 culverts completely blocked
- Run model until water levels match recorded – note flow rate required to cause those water levels
- Estimate confidence interval, and take the flow rate on the high side to be conservative
- Adjust to the full 0.61 Sq Mi Drainage area – the bridge/culvert area is 96-97% of the total 0.61 sq-miles draining to the top of the coulee ditch system
- Determine return period of storm
- Use the determined return period to extrapolate actual 2017 flows to the 100 year flows
    - DNR will need to confirm if and how return period estimation and flow adjustment can be done. The plan should be discussed with them prior to proceeding with the rest of phase 3