STORM WATER

Input Session	Existing Storm Water Concerns
1	• Mill Street flooding in two sections
1	• Water flows under Huffman St. like a river
1	• Like the traffic peak demand issue, storm water management is also a concern. The general lay of the land in this part of town is a gradual slope south toward the river. Much of the neighborhood directly to the north of the subject property up to Ogden Avenue is relatively flat without sufficient pitch to clear rainwater during heavier storms. Compounding the problem is the relatively high clay content of the soil in this area, slowing its' absorption ability. Over time, this area has experienced the tear down of original homes and replacement with homes of a larger footprint resulting in a reduction of open ground to absorb rainfall. Additionally, there has been the gradual fill-in of swales between houses that also inhibits flooding. During peak rainfalls the ground water overwhelms the existing storm sewer system's capacity and flooding occurs. During dry or lighter rain events the system seems adequate to handle the run-off.
1	• Streets and yards are flooding too easily
1	• Underpass floods easily and disrupts traffic
1	• Complicating this situation is the fact that certain infrastructure components: roadways, commuter parking and storm water management are currently at their respective capacity limits, at least during peak usage periods.
2	• Neighbors are having to sand bag
2	• Adding too much residential is going to have a huge impact on storm water
3	• High density puts demands on water infrastructure. Flooding is a major concern.
3	• The immediate neighborhood will get crushed with heavy storm water issues.
3	• 5-6 residents have had flooding issues. Northeast and northwest neighborhoods.
4	• Resident has to clean leaves out of sewer and gutters weekly. This is giant issue.
4	• Same problem on Western, Main, Eagle, 8th – real problem in this area; this is the opportunity to fix it. Hard to fix that area without digging up pipes and taking people out of their houses.
4	• Residents can't get flood insurance because they are not technically in a flood zone.
4	• Resident lives in a new home; building a new sewer line to a parkway; footprint is bigger. Big trees on Loomis crush those old pipes; water detained on street found the lowest point to enter into the sanitary pipes that were broken and backed up. Need investment on the city's part to connect those main lines with new pipes to isolate storm sewer from sewage.
4	• 17 years in house; neighborhood built in 40/50's; sit at the low point on Sleight Street; every time it rains the street fills up. Water will sit and then all the water goes away. The whole street fills up; ducks come and swim in the streets. With the development, it will stop up the water more than it is already. Should rip up the streets and put in bigger storm pipes. Tremendous issue – we call the city to put out blockades to prevent driving through flooded streets but they just bring a sign.
4	• Don't make it worse.
4	• Corner of 6th/Loomis – before the City owned it, there were big lawns and bushes; couldn't see the cars. Wasn't a flooding problem; lot of teardowns on resident's block; bigger homes – water runs different now.

5	• Flooding on 600 N. Main Street has become progressively worse over the past years. Detention would be beneficial.
6	• In the Bennington community they flood with any heavy rain, backed up storm drains and that adds to traffic flow problems especially on Columbia.
6	• Even with storm water help it's not fixed, is impacting neighborhoods south of Chicago. Huffman and Benton. South of Chicago on Julian. There are flooding issues.
6	• On 8th between Brainard and Loomis also has issues. Webster routinely floods as well.
6	• Pilgrim Addition also has flooding
6	• Current storm water pipes aren't fit for current usage
6	• Ellsworth between 6th and 7th is also bad.
6	• Just south of the tracks don't have water issues. Concerned this development will bring water issues.
6	• Columbia, Estates park was flooded with the last rain
6	• Flooding issues even at the top of the hill
6	• Any greenspace that was east on 5th is not being developed. It could compound the issue.
7	• Flooding is a major issue, especially at the low points on streets.
8	• Flooding is a major issue, especially at the low points on streets.
8	• Neighbor at 705 N. Slate has flooding issues. Sewer system can't handle the current capacity. Any heavy rains they cannot leave their driveway.
8	• 8th Avenue was flooded in the recent storms and could be accessed.
8	• Pilgrim has similar flooding issues.
8	• When the engineers in the past have looked at flooding, they have looked at cheaper alternatives and can create issues where issues didn't exist in the past. At School and Wright it now floods where it didn't in the past.
9	• Brainard floods after any heavy rainfall (resident lives between 6th & 7th)

Input Session	Design Considerations
1	• Development may affect that need for larger pipes if necessary, retention pond or vault.
1	• Discussion on permeable pavers and more greenspace.
1	• If developing the subject property creates more ground water run-off, it will only exacerbate the flooding issues directly to the north. While much of the subject area is already paved, any new
1	• Improved storm water management
1	• Larger storm sewer is needed
1	• Detention pond or vault is needed at Kroehler Lot as storm water pipes go down Loomis, right by it.
1	• Infrastructure needs to be updated
1	• Storm water vault needed at 5th and Washington to help address Brained and Ellsworth flooding
2	• Need to widen the drain pipes/update infrastructure. Pipes are too old/small
2	• We need to figure out a way to make a multi-use detention pond out of Naperville North field. Drop park down 6' and add soccer field that would be usable 90% of the year.
2	• Onsite storm water management
3	• Resident was under the impression that there is an engineering algorithm that would require a retention pond or vault.
3	• Consider permeable pavers to help with flooding.

3	• Infrastructure is old, if add to the area need to improve and upgrade the storm water system. In 2015, a storm water study was completed that showed the underground drainage needs to be enlarged.
4	• This is the opportunity for the city to fix the flood water issue. Basements were flooded last
4	• Infrastructure needs to be updated to handle the increased density since system was built.
4	• Resident would like more permeable services. Flood issues arose when Kroehler lot was built.
4	• Shift the water back up to a detention pond or vault
4	• Add pervious pavers to any additional parking lots
4	• Lack of greenspace for water to be absorbed. Streets are the areas for water to back up into; keep out of the houses; shift to back up to the retention areas.
4	• We shouldn't settle for not making it worse. We have the land, political will and revenue as part of this development to fix the issue
5	• Kroehler lot should be redeveloped to include greenspace, storm water detention, but also up to 50% townhomes or similar
6	• System is under capacity and gets backed up. The development cannot make it worse. Need to add detentions or underground vaults to handle water.
7 & 9	• NA
8	• City should take the opportunity to improve the flood water situation.
8	• Storm water basins in the Kroehler lot would help the communities flooding issues.

Input Session	Miscellaneous Comments
1	• Flooding two years ago on museum, seems wasteful. (privately funded)
1	• Rain flows downhill, larger homes increasing footprint; further grading.
2	• Help storm water problems from surrounding areas
2	• Ground can't handle any additional moisture
3	• A portion of the money needs to be used to improve infrastructure. Pipes were built for 1952.
3	• Most of the flooding is north of the tracks. Participants were asked to send specific data about flooding events to Ryan so that they can map out flooding issues to help better understand the problem.
4	• Main thing to figure out needs in terms of storm water and flooding
4	• Water from surrounding neighborhoods ends up in the neighborhood on the north side of 5th Ave Issues may have stemmed from building of Jewel on Ogden.
4	• Ryan encourages residents to send us emails and photos regarding their. flooding issues. Ryan will map these issues.
4	• Resident would like someone other than city engineer to provide rain water survey.
4	• Ryan will work with city staff to obtain flooding history.
4	• This is the chance to solve the storm water issue.
4	• Water pressure is decreasing. Service lines are 1/2 to 3/4" and the new tear downs are putting in 1" to 1-1/2" service lines
5, 7 & 8	• NA
6	• Current water pressure for some residents is bad

9 • The city needs to chip in and deal with the storm water issue.