

9/9/2014

**Follow up questions from August 18<sup>th</sup> Cayuga meeting – City responses in BLUE.**

1. We would like to see the complete set of possible solutions that the City considered, along with the evaluation criteria that were used to narrow the list to what was ultimately published in the CBBEL (Christopher B. Burke Engineering Limited Liability) 2012 report.

The CBBEL report, posted on the City website ([report](#)) has all study areas and proposed improvements listed. The City Council was presented these in December of 2011. The City Council then referred the study to the Mayor's Citizen Storm Water Task Force for review for further analysis. Simultaneously staff brought the proposed improvements to the Park District and School District for consideration. After hearing the Districts' concerns with particular concept plans, CBBEL was tasked with refining and re-drafting the concepts to include additional details. Once these more detailed plans were again presented to the Park and School Districts, a smaller Communication Committee was appointed by the Mayor and both Districts consisting of 2 elected officials from each Board/Council. This committee was charged with working through questions and details of the projects to bring information back to their respective Boards.

At the same time that the Communications Committee was discussing details and answering questions, the Public Works Committee was determining the priority of the proposed projects. Ultimately it was recommended to the City Council that 2 projects which required the use of Park District land (York Commons and Golden Meadows parks) and 2 projects which require the use of School District land (Madison and Bryan schools) would be prioritized based on the greatest number of homes helped for the estimated cost.

So as not to waste money in design costs, the City formulated a request letter ([letters](#)) for each district and asked them to approve the concept of each facility. Once the city receives conceptual approval, it is our intent to proceed with design of the facilities. The storm water and sanitary task force reports are good resources to explain all of the items/issues considered during the study. The task force reports and the Burke study are available on the City's website ([reports](#)).

2. We are particularly interested in knowing more about the full range of underground storage options that were identified and ruled out, and on what basis. We recognize that underground storage is significantly more expensive, but we would also like to know the costs AND benefits (most notably, the number of homes that

would benefit from the various underground solutions).

Underground storage options were identified in the Burke report and the estimated cost was provided. The storm water storage benefit was the same for above-ground and underground storage and therefore the cost is what ruled out the underground option.

3. Even more specifically, we would like to know whether (and to what extent) the City and CBBEL considered the possibility of underground storage in or near the commercial parcels where Riley's Pub, the 7-11 and other businesses are. This area has long been an aesthetic eyesore and the surface is all (or nearly all) impervious. It seems that the parcels are ripe with potential as a site for underground storage, while perhaps still supporting some level of redeveloped commercial activity and/or parking at grade.

Private property was not identified for public improvements. If/when redevelopment of these sites occurs the required storm water storage/detention would be calculated per the DuPage County Stormwater Ordinance.

4. Has the City compiled a comprehensive, top-down analysis of the full number of homes (and associated financial damage) that occurred in April 2013? If not, why not? If so, then why is that analysis not serving as the basis for the engineering analysis, rather than relying upon simulated results to guess which homes might experience significant damage?

Not all homes that experience flooding report damages to the City. The City used reported and verified site data to identify 10 study areas after 2010 events and 3 additional study areas after the 2013 event.

5. As stated in our petition, we would like to see the CBBEL contract so that we can understand the scope of work (both geographic scope and the scope of professional services) as well as their compensation structure. We do not question their professional engineering credentials, experience or expertise, but we do know that the relationship between scope and compensation structure (including whether it's a time-and-materials contract or firm fixed price), as well the potential for subsequent work (e.g., detailed engineering design, construction administration and post-construction performance evaluation) can have a significant influence on the analysis and conclusions.

Contract information is on file in the City Manager's Office and will be added to the City's website. Christopher Burke Engineering was selected using a Request for Qualification (RFQ) process in 2010-2011.

6. What is the City prepared to do to compensate adjacent homeowners for potential loss in property value and the increased cost of property insurance (or increases in minimum deductibles if necessary to secure additional coverage)?

The City does not anticipate any loss in property value as a result of park redevelopment. We cannot comment on property insurance premiums.

7. Is the City prepared to indemnify the adjacent homeowners (in perpetuity) against any perceived liability that might result from injury or fatality resulting from accidents or drowning in the detention basin? This is particularly important because the City stated that the basin would not be fenced. It must not become the responsibility of the adjacent residents to incur costs to prevent people (including children) or animals from passing through the adjacent residential properties.

The City has not indemnified any homeowner in the past and is not prepared to provide individual homeowner indemnifications in the future.

8. Please clarify at what specific water event level the detention basin will start to take in water from Crescent Avenue. Will it be only in a 100 year flood or greater, as stated? Similarly, at what specific water event level will the spillway begin to take on water from the detention basin?

The design has always shown that storm events with a 5-year frequency will bypass the detention site. Therefore, storm water will not enter the site until the 5-year water surface elevation is exceeded. The detention facility is designed for a 100-year magnitude storm. Flows from storm events that exceed a 100-year frequency will be safely conveyed through the emergency overflow route.

9. The Park District has requested a shut-off valve. Has the City approved a shut-off valve, and if so, at what water event level will it be used?

The facility will operate without human intervention; no shut off valve will be installed. If the facility capacity is exceeded, overland flow routes will be used to safely direct water downstream.

10. As requested in the public forum, we want the City and CBBEL to fully explore the possibility of shifting the proposed "overland flow route" to the north side of the site rather than along the south side. We also still need materially better information about the dimensions of this flow route -- a dimensioned scale cross-section drawing would go a long way toward helping us understand and envision it. Similarly, if CBBEL can provide a photograph or two of other similar facilities, that would assuredly help as well.

The facility will be designed to convey excess flows safely from the facility via the overflow route. In discussing this with Park District officials, a vehicle access point needs to be maintained to the south of the tot-lot. Larger service vehicles will not fit between the pool and the tot-lot. In addition, engineers from V-3 in a peer review agree the overflow will not work between the pool and tot-lot due to elevation differences and narrow area. Pictures of similar facilities are attached at the end of this document.

11. Given that the way the overland flow route was described (as being wide enough to accommodate emergency vehicles), what would the City do to protect against other vehicles driving along it, either knowingly or inadvertently? This is particularly important given its immediate proximity to the playing fields.

The area south of the tot-lot is currently being used as a "drive way" for maintenance

vehicles. The City will work with the Park District and public safety officials to coordinate restricted access as needed.

12. It would also be helpful to see photographs of other existing detention basins, with similar slopes, terracing and/or erosion control measures comparable to what is being proposed here.

Four examples of dual-purpose (park and storm water detention) facilities are attached. They include Arrowhead Park, Eagle Park, and Three Meadows Park in Naperville and Pottawatomie Park in Tinley Park.

13. Similarly, as requested in the public forum, it would greatly help to see drawings and photographs of comparable detention facilities that have been built in such close proximity to homes and playgrounds.

See response to #12. All of these facilities are adjacent to homes and include playgrounds and/or playing fields.

14. Does the stated cost include rebuilding the fields for full playability, including stands and so forth? What, if any, additional costs will there be for the Park District?

The estimated costs include field construction and amenities as shown on the concept plans.

15. We need to know how this would be paid for. Is the full \$7 million to come out of the City's operating budget? Or does the City intend to borrow long-debt in order to raise these funds? We ask because we believe this is a short-term, very expensive, cost-ineffective solution that will help only a small number of residents while creating risks for many more.

The estimated cost of the York Commons Park project is approximately \$3.2M, not \$7M. It is anticipated that General Obligation bonds will be issued or a low interest IEPA loan will be obtained for storm water improvements. City staff continues to research and pursue grant opportunities.

16. In our research detention basins such as the proposed one result in decreased soccer field playability, not increased. Please address this point.

Fields will be designed to drain and maximize playability. Based on the meetings between the City and the Park District (and their engineering consultants), all parties are comfortable with the proposed level of playability of the fields.

17. How much capacity would be lost if the southern boundary of the basin were to be shifted to the north by 6 to 12 feet?

Between 0.5 and 1.0 acre-feet of flood storage would be lost by moving the southern boundary between 6 and 12 feet to the north. A portion of this lost flood storage can potentially be made up by using 3:1 side slopes (instead of 4:1) for the north boundary.

18. What is the City prepared to do to protect the adjacent homes against damage during construction?

Construction fencing would be installed prior to the start of construction – fencing will keep all construction activity on site.

19. Has the City's and CBBEL financial analysis factored in the lost property tax revenue associated with the adjacent homes if they are irreparably damaged and/or ultimately lost as a result of the proposed detention basin?

The City and CBBEL do not believe that the proposed detention basins will negatively impact the adjacent homes.

20. We appreciate the two proposed additional intake points from the Cayuga Avenue drain line, but it would help to get a better understanding of precisely where those intake points would be, and what types of construction impacts would occur for the residential properties where they are located.

These are conceptual plans. This information would be finalized in engineering design. It would be designed to help alleviate flooding on Cayuga.

21. Of the 38 homes that would benefit, do any belong to elected officials? If so, what steps have those officials taken to recuse themselves from any involvement in the analysis and deliberations of these alternatives?

No elected city officials live in the affected area on Crescent Ave.

22. Are there any conflicts of interest between any elected officials in the City of Elmhurst and the engineering consultant team? If so, how have those conflicts of interest been addressed?

CBBEL was selected using the RFQ process. No conflicts of interest were identified.

23. The York Commons detention basin is being designed for a 100 year storm. What will happen with all the extra water that runs off during a 500 year storm like the one from 2010? York Commons will be full in that case. The water won't be able to go north due to the tracks acting as a berm. It won't be able to go back to Crescent via the storm sewer. It won't be able to go east due to the park ending. The only places are the spillway and adjacent Cayuga homes. The spillway can't go into the storm sewers as they will be full in a 500 year flood. At what water event level will the York Commons parking lot be full, leaving the water to flood Cayuga and downstream homes? The spillway must be able to handle storm sizes above what York Commons is being designed for (100 year storm). Please provide us with modeling of what would happen in a 500 year storm. This will provide important data as to where the water will end up during a storm of that magnitude.

During a 500-year magnitude storm, the emergency overland flow route has the

capacity to convey excess flows from York Commons Park to the intersection of York Street and Cayuga Avenue. From there, storm water will flow westward down Cayuga Avenue (the same direction as the current drainage pattern in this area).

24. Has the City contacted the CN railroad to inform them the structural landscape is changing within 10 feet of their tracks? If so, please share with us the City's letter and CN's response.

Our plans are conceptual and the engineer will consult with the railroad with regard to their structural requirements. Construction will be coordinated with the CN after engineering plans are complete.

25. Did 38 homes actually flood on Crescent in the June 2010 and/or the April 2013 storms? Is this based on insurance claims, reports from residents, or is this based on CBBELL storm modeling? What is the basis for the claim that 38 homes on Crescent flood and require mitigation?

The number comes from all of the above. CBBEL review/model identifies 38 homes that flood in a 100 year event.

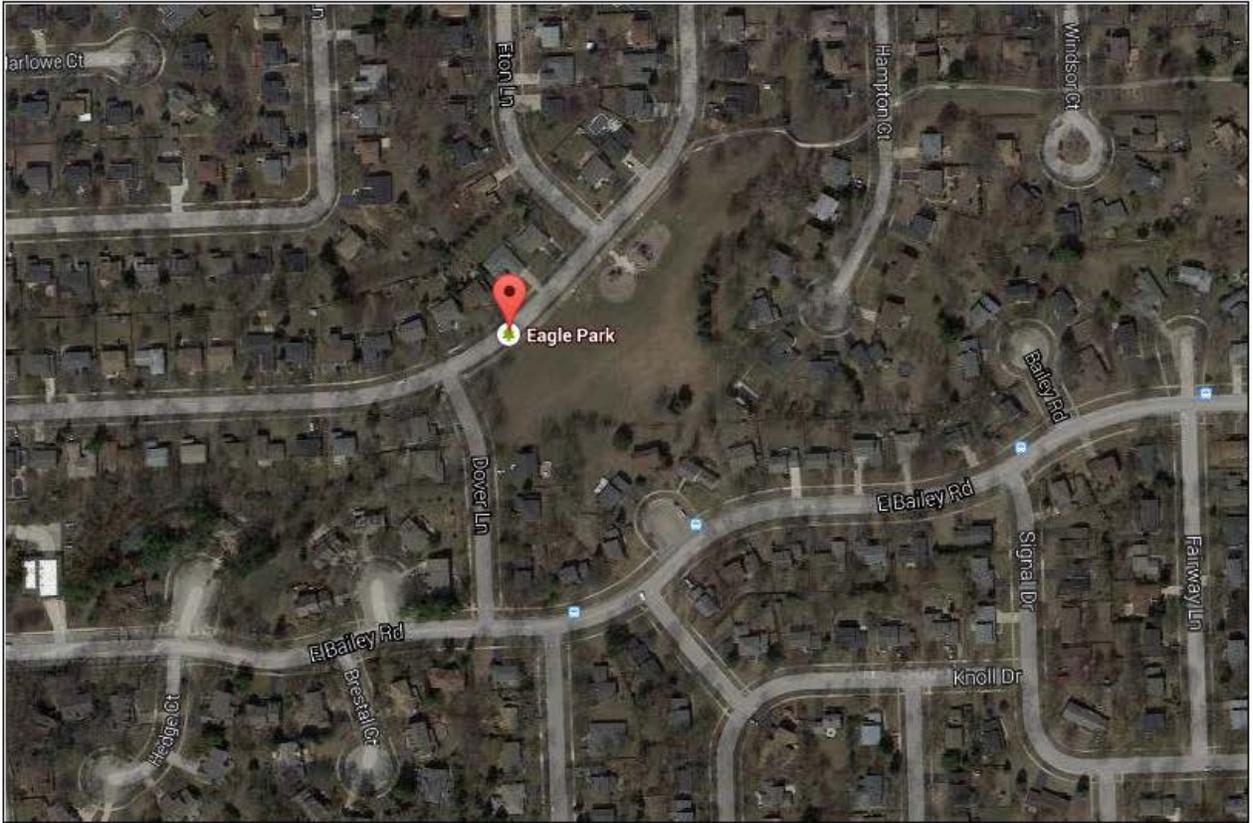
26. Exactly how much overland flood water on Crescent requires mitigation? Provide a list and description of all mitigations options considered by the City/CBBELL for the overland flooding on Crescent, including the cost, effectiveness, and impact of each.

This information is in the CBBEL report. It should also be noted that Crescent Avenue is not the only flood-prone area that will benefit as a result of this project. Two downstream flood problem areas (the Washington Street area and the Swain Avenue/Vallette Street area) will also receive flood reduction benefits from the York Commons Park project.

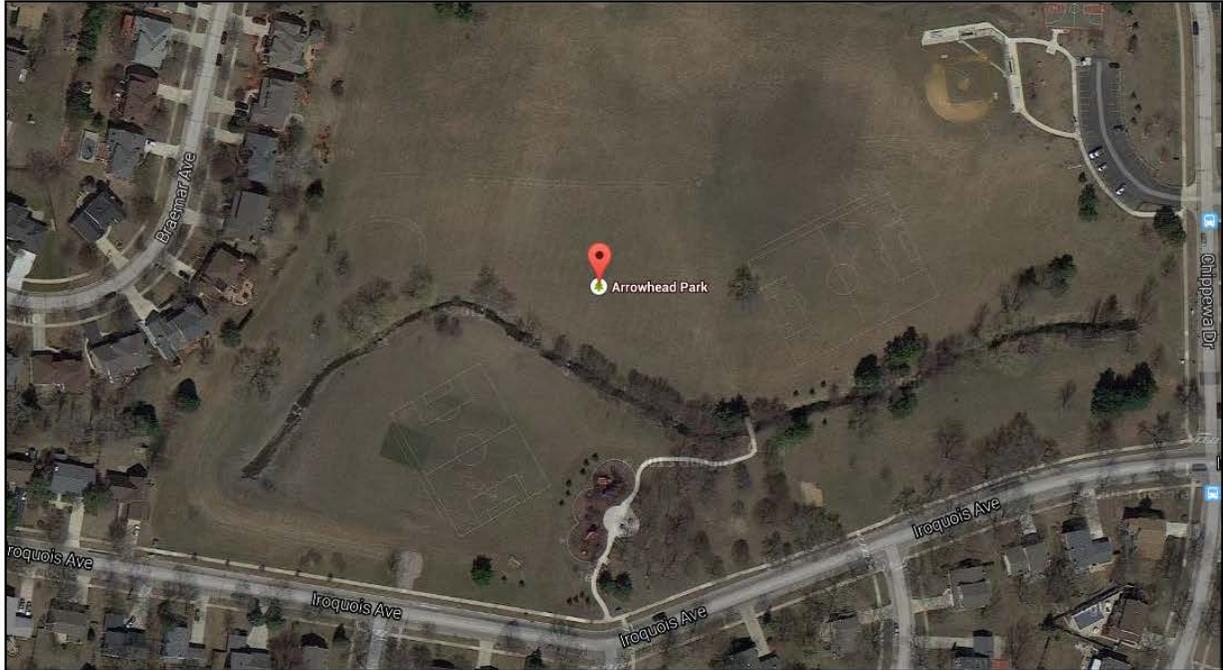
27. If the proposed York Commons detention facility is installed, does the City/CBBEL guarantee that no homes on Cayuga will flood as a result of any detention overflow? If not, under what circumstances can the facility overflow and what would the impact of overflow be for homes on Cayuga? Is the City/CBBEL prepared to compensate any Cayuga homeowner whose home floods as a result of the installation of a York Commons water detention facility?

See response to #23, by designing the emergency overland flow route to safely convey any excess flow toward the intersection of York Street and Cayuga Avenue, there would be no impact on homes along Cayuga Avenue.

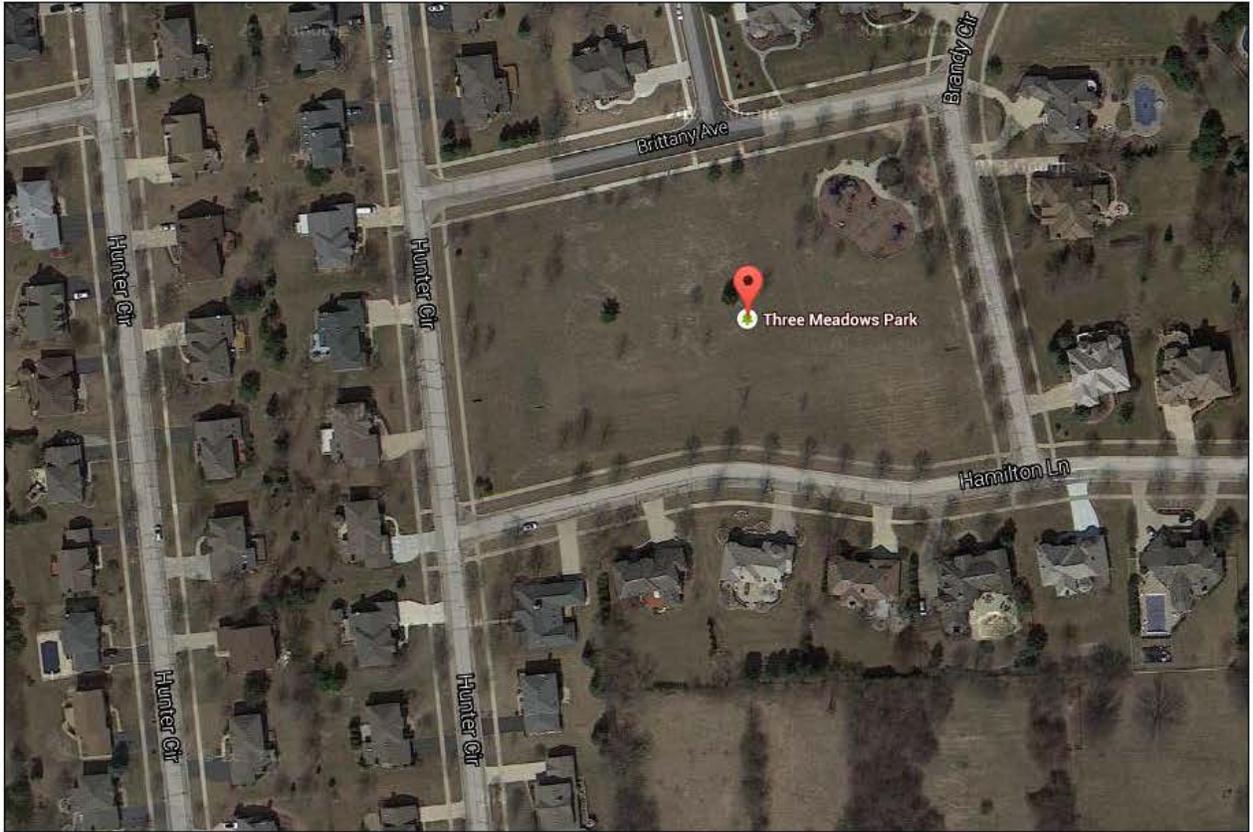
# Eagle Park – Naperville



# Arrowhead Park - Naperville



## Three Meadows Park – Naperville



# Pottawatomie Park – Tinley Park

