



January 27, 2023

Mr. Mark Siefert  
City of Crest Hill  
2090 Oakland Avenue  
Crest Hill, IL 60403

Re: City of Crest Hill (City) Complete and Ongoing Project Status Update

Dear Mark,

The following is an update on recent water supply projects. These efforts are related to both the shallow groundwater source (wells) and the receipt of Lake Michigan water.

## 1. Lake Michigan Allocation Application

This effort is ongoing and discussed in a separate letter.

The following table provides next steps resulting from this project.

Next Steps		
Project Name	Purpose	Start Date
Water Model Calibration and Main Replacement Plan	Plan to further reduce water loss over the next 10 years.	Q1 2023
United States Route 30, Theodore, and Broadway Water Main Lining Design	Previous leak experience points to important water main along these major roads as a large contributor to annual water loss.	Q2 2023

## 2. Corrosion Control Desktop Study

This effort is ongoing. The Illinois Environmental Protection Agency (IEPA) requires corrosion control treatment (CCT) studies whenever there is a change in the water sources. This is to examine the differences between the source water chemistries in order to prevent lead and copper corrosion following the switch. These estimated chemistry differences are used to develop a demonstrative study that will test different treatment methods and determine which is most effective at preventing corrosion. The City, along with other potential Grand Prairie Water Commission (GPWC) members, has enlisted Cornwell Engineering Group (Cornwell) for these efforts as they are highly respected by the IEPA. Additionally, it is most efficient to have one consultant working on all CCT studies for the switch to Lake Michigan water. It is anticipated that a submittal to IEPA will be made at the end of February 2023.

The following table provides next steps resulting from this project.

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### Next Steps

Project Name	Purpose	Start Date
Corrosion Control Demonstrative Study	Approximately a 1.5-year-long process that is likely to include several flow-through pipe loops, with acclimation period and varying levels of phosphate doses. The City will need to harvest several lead services and send them to Cornwell for scale analysis and the flow-through studies. At the beginning of the study, City staff will also need to collect well water for several weeks and send it to Cornwell to acclimate the pipes. The demonstrative study will end with a Cornwell PowerPoint presentation of findings and recommended CCT to IEPA.	Q2 2023

### 3. Well No. 14

This project is ongoing. As previously discussed with the City Council, an additional shallow well is needed to supplement the City's water production through 2030. This well will be located in an easement near retention ponds behind the Menards department store. Raw water will be pumped to the existing Well No. 10 treatment facility. The project includes constructing the well and test pumping to determine necessary treatment methods before retrofitting the Well No. 10 treatment plant. It is anticipated that bidding of the well hole will be at the end of April 2023 and the water main will be at the end of July 2023.

The following table provides next steps resulting from this project.

### Next Steps

Project Name	Purpose	Start Date
Source Water Protection Plan	New IEPA paperwork. Shows the pollution sources near City wells and potential for pollutants to reach those wells by examining aspects such as flow paths. Strand Associates, Inc.® will be preparing a very short report just to meet IEPA requirements. This report must be submitted by July 2023.	Q1 2023
Well No. 10 Retrofit Design	Anticipate bringing Well No. 10 filter vessel up to capacity with Well No. 14 water and bypassing the rest (depending on iron levels of Well No. 14 water). Upsizing the chlorine and fluoride system will also be needed.	Q3 2023

### 4. Alternative Water Supply Implementation Plan

This project is complete. The existing water model was used to determine improvements necessary to change the distribution system from decentralized to centralized. The study recommends the following system improvements for the receipt and distribution of Lake Michigan Water.

- a. Construct an Eastern (Primary) Delivery Point, which is located on the existing Well No. 10 Caton Farm Road site. This includes a maximum day 2,900 gallon per minute (gpm) GPWC delivery structure, 3.5-million-gallon standpipe, receiving and pumping station with four 950 gpm pumps, and sodium hypochlorite boosting system.

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- b. Construct the Western (Secondary) Delivery Point, which is possibly also located along Caton Farm Road. This supplies mainly the Low-Pressure Zone. This also includes a maximum day 1,000 gpm GPWC delivery structure and receiving station with a pressure reducing valve, meter, and chlorine boosting system.
- c. Upsize the Root Street and Sak Drive water main. Replace approximately 10,500 linear feet of 8- and 10-inch water main with 12-inch water main.

The following table provides next steps resulting from this project.

Next Steps		
Project Name	Purpose	Start Date
Design of Eastern and Western Deliver Points and Root Street and Sak Drive Upsizing	All upgrades included in IEPA Project Plan submitted in November 2022 for the State Revolving Fund funding. Construction of these items is anticipated to begin in 2024.	Q1 2024

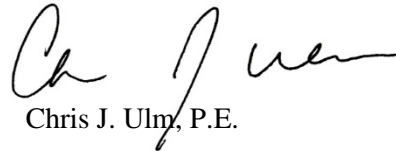
If you have any questions, please call 815-744-4200.

Sincerely,

STRAND ASSOCIATES, INC.®



Corrina M. Petrou



Chris J. Ulm, P.E.