

ATTACHMENT E
INTERIM MEMORANDUM NO. 2 – SCOPE ITEM 4



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January 22, 2009

Mr. Ron Mentzer, Director
Community Development Department
City of Warrenville
3S258 Manning Avenue
Warrenville, Illinois 60555

Re: September 2008 Flood Investigation
Interim Memorandum No. 2
Scope Item 4

Dear Mr. Mentzer:

We have concluded our research on Scope Item 4 of the September 2008 Flood Investigation. The following is a summary of our results for this item:

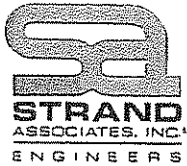
Scope Item No. 4: Based on records and information provided by DuPage County, verify if the floodplain maps for the city of Warrenville were modified as a result of the construction of Fawell Dam. If modified, summarize what modifications occurred and provide an opinion on whether or not these modifications were processed and correctly implemented.

From our evaluation discussed below, we discovered that all Federal Emergency Management Agency (FEMA) floodplain maps included Fawell Dam. All maps and the FEMA hydraulic model were developed for the West Branch DuPage River (WBDPR) after the construction of Fawell Dam, and appear to have considered the impacts of the dam on floodplain elevations.

To evaluate this task, the following Federal Emergency Management Agency (FEMA) documents and maps were collected and reviewed:

1. Warrenville Flood Hazard Boundary Map 170218A (dated 10/24/75).
2. DuPage County Flood Hazard Boundary Map 170197A (5/13/77).
3. FEMA FIS HEC-2 model revised August 1977.
4. Warrenville Federal Insurance Rate Maps (FIRM's) 1702180005B (9/29/78), 1702180001C (10/18/83), and 1702180002C (10/18/83).
5. Naperville FIRM 1702130007B (3/1/79).
6. DuPage County FIRM's, 1701970050B (4/15/82), 1701970035B (4/15/82), 17043C0409H (12/16/04), 17043C0702H (12/16/04), and 17043C0702H (12/16/04).
7. Warrenville Flood Boundary and Floodway Maps 1702180001 and 1702180002 dated October 18, 1983.
8. DuPage County Flood Insurance Study by FEMA dated March 2007.

The National Flood Insurance Act of 1968 was the first legislation that directed FEMA to identify flood prone areas within the United States. As the entire country needed to have



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floodplain maps, not all areas could be mapped immediately. As funds were appropriated by Congress to complete the mapping task, FEMA began by starting with the most populated and fastest growing areas. Many of the first maps developed were called Flood Hazard Boundary Maps and did not necessarily include any modeling of waterways, but were generally based on topographic data and aerial photography.

The first floodplain map of any kind for the City of Warrenville was completed on October 24, 1975, several years after the construction of Fawell Dam. The map was only for the corporate limits of Warrenville, and therefore only included a small portion of the area between Fawell Dam and Interstate 88. On May 13, 1977 Flood Hazard Boundary Maps were completed for unincorporated DuPage County and included the area from where the Warrenville Map stopped through Fawell Dam to the corporate limits of Naperville.

The first hydraulic model of the WBDPR for use by FEMA was completed in 1977 and used to develop the first Flood Insurance Rate Maps (FIRM's) for the City of Warrenville, which were completed September 29, 1978. The first FIRM's for unincorporated DuPage County were completed in 1982. The hydraulic model and FIRM's included the impacts of Fawell Dam on floodplain elevations.

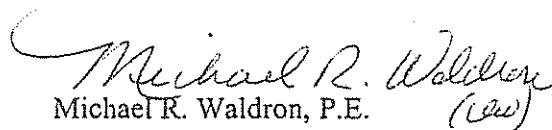
FEMA Floodplain and Floodway maps were updated periodically until the most recent major updates were made to them in 2004. Note that minor updates are made periodically through Letter of Map Change, but do not warrant the maps to be reissued.

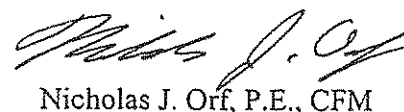
The current hydraulic model utilized by FEMA for floodplain determinations is the original WBDPR model completed in 1977. This model does not include Diehl Road or Ferry Road. We have reviewed the Ferry Road Bridge Over West Branch DuPage River Hydraulic Report, As-Built Drawings of Ferry Road, and East-West Tollway Reconstruction Plans in order to determine if the low beam elevations of each respective bridge were below the hydraulic model estimated 100-year floodplain elevations. The low beam elevations for Ferry Road and I-88 bridges were above the 100-year flood elevation by a foot or more. The as-built plans for Diehl Road Bridge have not been received from the County yet, but our initial research indicates that the low beam elevation is also more than one foot above the 100-year flood elevation.

Please feel free to contact us if you should have any questions or wish to discuss our results.

Sincerely,

STRAND ASSOCIATES, INC.


Michael R. Waldron, P.E. (law)


Nicholas J. Orf, P.E., CFM