MINUTES OF SPECIAL MEETING
SOUTHEAST CASS WATER RESOURCE DISTRICT
OFFICE OF MOORE ENGINEERING, INC.
WEST FARGO, NORTH DAKOTA
MARCH 27, 2013

The Southeast Cass Water Resource District met on March 27, 2013, at 2:00 p.m. at the office of Moore Engineering, Inc., West Fargo, North Dakota.

Present were Mark Brodshaug, Chairman; Dan Jacobson, Manager; Lance Yohe, Manager; Carol Harbeke Lewis, Secretary-Treasurer; Chad Engels and Stuart Dobberpuhl, Engineers for the Board; Mike Thorstad, West Fargo City Commissioner; Jim Brownlee, West Fargo City Administrator; Kevin Bucholz, Dustin Scott and Chad Zander, Engineers for the City of West Fargo; Barry Johnson, Chris Brungardt, and George Grossman, West Fargo Public Works; Brett Coleman, Terryl Williams, Bill Csajko, Jon Sobiech, Aaron Buesing and Elliott Stefanik, Corps of Engineers; John Glatzmaier, CH2MHill; Gregg Thielman, Houston-Moore Group; Mark Bittner, Fargo Engineering Director; Craig Hakanson, City of Horace; Tim Solberg, Cass County Planner; and Kay Anderson, Cass County GIS Coordinator.

Sheyenne-Maple Flood Control Projects – study to identify potential impacts as a result of the proposed Fargo-Moorhead Area Diversion

A preliminary study was conducted to identify potential impacts to the Sheyenne-Maple Flood Control Projects as a result of the proposed Fargo-Moorhead Area Diversion. Specifically, the hydraulic impacts caused to the project due to a reduction in flood water elevations at the project outlet and the hydraulic impacts caused to the project due to a reduction in flows at the project inlet.

Maps were reviewed showing the elevation of the land near the Sheyenne River and the Sheyenne-Maple Flood Control Projects, compared to the water profiles under existing conditions and for different scenarios with the Fargo-Moorhead Area Diversion in place.

Chad Engels explained that currently, under high water or flooding conditions with 4,500 cfs in the Sheyenne River, 2,600 cfs goes over the Sheyenne-Maple Flood Control District #2 inlet structure and 2,000 cfs continues to flow in the river. The gates at the control structure south of I-94 are closed to prevent water from flowing into the City of West Fargo and the water continues over the weir and through Sheyenne-Maple Flood Control District #1. The Fargo-Moorhead Area Diversion design reduces the flow into the Sheyenne River from 2,000 cfs to 1,500 cfs. This lowers the water surface profiles in Sheyenne-Maple Flood Control District #2 and the Sheyenne River and provides additional benefit to the protected area.

Mr. Engels said they looked at possible modifications to Sheyenne-Maple Flood Control District #2 to create some additional benefits. Variations of splitting the 1,500 cfs and gate operation were discussed.

Conclusions of the preliminary study are as follows:

- The area of land below the water surface profile for the 100-year event is substantially less with the Fargo-Moorhead Area Diversion in place. This is especially the case for the area north of West Fargo. At the location of the north pump station, the difference in water surface elevation from the 100-year FIS model to the 100-year condition with the Fargo-Moorhead Area Diversion in place is about 5.5 feet.
- The Sheyenne River is a perched channel from Horace to West Fargo. With 1,200 to 1,500 cfs flows in the Sheyenne River, water surface elevations remain relatively high in comparison to the adjacent ground.
- If the Sheyenne-Maple Flood Control District #2 inlet structure is modified for a flow split resulting in 650 cfs to remain in the river, water surface elevations in the river and Sheyenne-Maple Flood Control District #2 will be below adjacent ground for the most part.

Aaron Buesing said the Sheyenne-Maple Flood Control District #1 gates will not likely go away, but maybe there is a way to keep minimal flow through town a higher percentage of the time. Kevin Bucholz said they do not open the gate now due to potential problems with something becoming lodged in the opening, which would prevent them from closing it.

Mr. Buesing said the Corps of Engineers has looked at operation of the Sheyenne-Maple Flood Control Projects in conjunction with the Fargo-Moorhead Area Diversion Project. They want to avoid silting in the channel, but there may be an opportunity to do some things that might improve things for residents and the environment. Brett Coleman suggested the project sponsor contact the Corps of Engineers if there is a desire to make modifications to the existing project.

Mark Bittner asked about mitigation obligations needed. Mr. Coleman said that is something they could look into.

It was moved by Manager Yohe and seconded by Manager Jacobson to send a letter to Brett Coleman, Corps of Engineers, to request assistance with investigation of mitigation concepts for the proposed Fargo-Moorhead Area Diversion, which may include:

- Further reducing Sheyenne River flows inside the Sheyenne-Maple Flood Control Projects protection area in order to lessen flood risk by reducing water stages relative to adjacent ground;
- Bringing a small flow of fresh water through the natural Sheyenne River in West Fargo during gate closure operations; and

- Making the necessity for gate operation less frequent during summer months without increasing flood risk within West Fargo.

Upon roll call vote, the motion carried unanimously.

2013 Spring Flood Imagery

Tim Solberg and Kay Anderson met with the Board to discuss 2013 Spring Flood imagery. Cass County is willing to take the lead on the matter and will get a Request for Qualifications (RFQ) out as soon as possible. Potential funding partners include the State Water Commission, Cass County, City of Fargo and the Southeast Cass Water Resource District. Chad Engels will work with them on the imagery needed by the Water Resource District. The Board supports the county proceeding with the RFQ and will take further action on the matter at the next meeting.

Adjournment

There being no further business for the Board to consider, it was moved by Manager Jacobson, seconded by Manager Yohe and unanimously carried to adjourn the meeting.

APPROVED:

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Mark Brodshaug
Chairman

ATTEST:

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Carol Harbeke Lewis
Secretary-Treasurer