

MEMORANDUM

TO: Finance, Expenditure and Legal Subcommittee

SUBJECT: Western Sarpy Clear Creek Flood Reduction Project
Sponsor Memorandum of Agreement

DATE: January 25, 2010

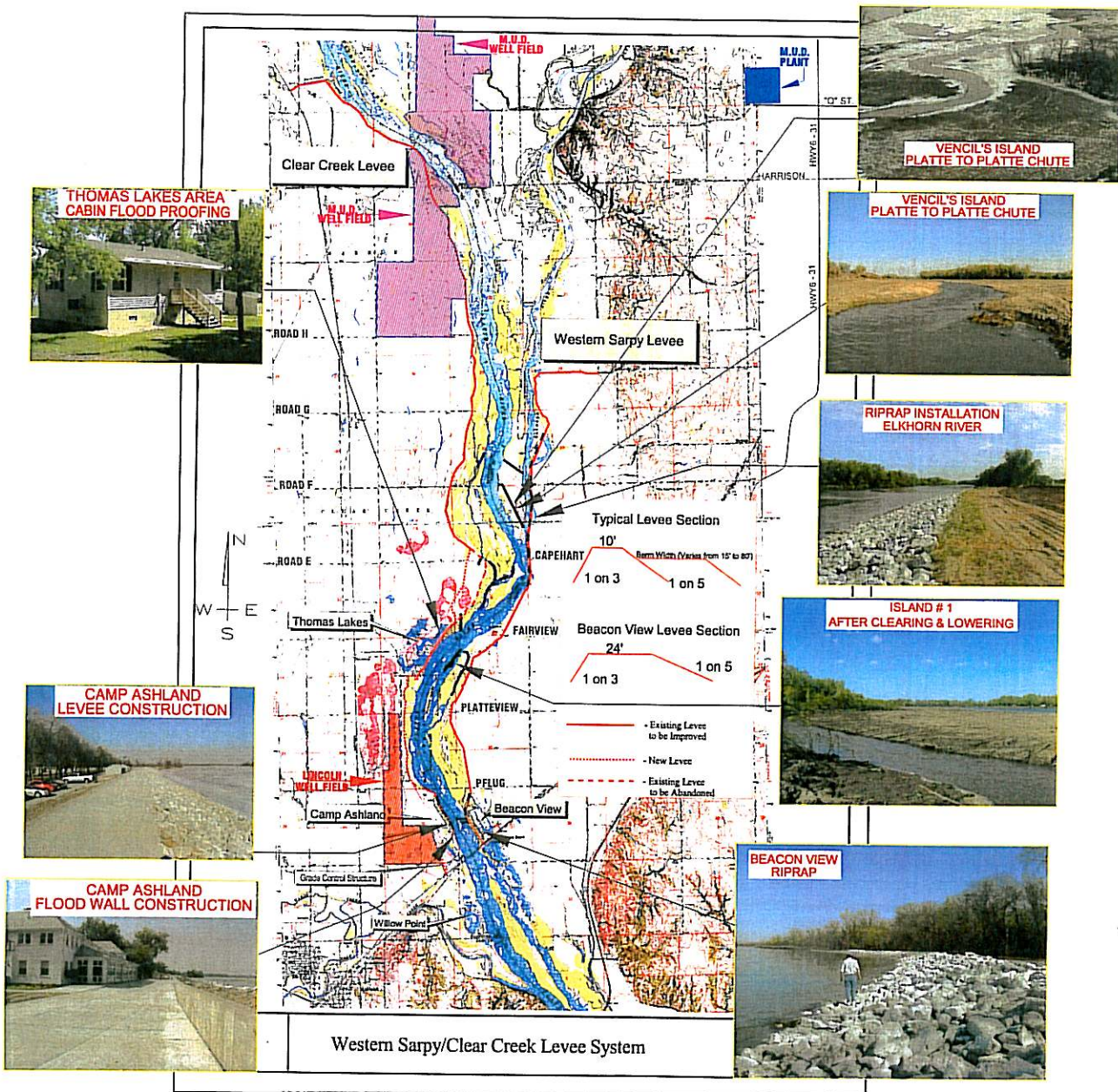
FROM: Martin P. Cleveland, Construction Engineer

Enclosed is a proposed agreement between the project sponsors (Lower Platte North NRD, Lower Platte South NRD, Pappio-Missouri River NRD) and Clear Creek Drainage District, regarding the federal Western Sarpy Clear Creek Levee Project along the Platte and Elkhorn Rivers upstream of Hwy 6 (see Fact Sheet).

The purpose of this agreement is to document and clarify understandings and decisions concerning this flood control levee rehabilitation project being constructed by the US Army Corps of Engineers. The project hasn't changed from what the Board approved years ago, but there are some design and operational details that the Corps felt needed to be solidified before proceeding further on this project that is well under construction. Of particular note is this project is a 50-year flood design and the Corps and sponsors don't want to see a 100-year or higher FEMA approved levee pursued in the future. The primary area for this concern is the upper Clear Creek Levee on the Saunders County side of the river where the current levee is higher than the 50-year flood level in many places and is being allowed to remain as such. The agreement also addresses the fact that any future rebuilds or rehabs will all be to the 50-year level.

- **It is Management's recommendation that the Subcommittee recommend to the Board of Directors that the General Manager be authorized to sign the proposed Western Sarpy Clear Creek Flood Reduction Project Sponsor Memorandum of Agreement, subject to form as approved by District Legal Counsel.**

WESTERN SARPY/ CLEAR CREEK LEVEE PROJECT WITH COMPLETED FEATURES



WESTERN SARPY / CLEAR CREEK FLOOD REDUCTION PROJECT
SPONSOR MEMORANDUM OF AGREEMENT

December 21, 2009

PURPOSE. This Memorandum of Agreement (MOA) is entered into by and between the Papio-Missouri NRD, the Lower Platte North NRD, the Lower Platte South NRD, and the Clear Creek Drainage District for the purposes of establishing a mutual consensus on the final level of protection of the federally constructed Western Sarpy / Clear Creek Flood Reduction Project.

SCOPE OF AGREEMENT. The levee and berm design elevations, as established for the open-water 151,000 cfs discharge for the project reach located downstream from the confluence of the Platte and Elkhorn Rivers and the 106,000 cfs discharge upstream from the confluence, shall not be exceeded during or after construction in an attempt to increase the overall level of flood protection for the entire levee system or any segment of the system. The level of protection shall not be increased in an effort to obtain FEMA accreditation as part of the National Flood Insurance Program.

The design levee top profile shall be maintained throughout future operation and maintenance of the project. Post-flood reparations shall not exceed pre-project levee top elevations. The pre-construction levee top elevations of the Upper Clear Creek Levee segment, which exceed the design discharge elevations, shall be maintained throughout future project operation. Future reparations to this levee segment shall maintain the pre-project levee top elevations.

No variance or waiver of this MOA shall occur without the consent of the signatories of this agreement and the Omaha District Levee Safety Officer.

COMMUNICATION OF AGREEMENT. This MOA is to be incorporated into the US Army Corps of Engineers Operation and Maintenance Manual for the Western Sarpy / Clear Creek Flood Reduction Project. It represents the final position of the Papio-Missouri NRD, the Lower Platte North NRD, the Lower Platte South NRD, and the Clear Creek Drainage District on the level of protection for this project as it will be maintained in the future under the PL84-99 Rehabilitation and Inspection Program.

REFERENCE DOCUMENT. This MOA contains language which is equivalent to a final position statement developed by the Omaha District, US Army Corps of Engineers and attached herein for guidance during final design, construction, and future maintenance of the Western Sarpy / Clear Creek Flood Reduction Project.

EFFECTIVE DATE. This MOA will become effective as a final position statement regarding the level of protection provided by the entire levee project upon endorsement by the following signatories:

WESTERN SARPY / CLEAR CREEK FLOOD REDUCTION PROJECT
SPONSOR MEMORANDUM OF AGREEMENT

John Winkler
General Manager, Papio-Missouri River NRD

John Miyoshi.
General Manager, Lower Platte North NRD

Glenn Johnson
General Manager, Lower Platte South NRD

Harold Kolb
President, Clear Creek Drainage District

MEMORANDUM FOR FILE THROUGH CENWO-ED

SUBJECT: Omaha District Engineering Position Regarding Design, Construction, and Future Maintenance of the Upper Clear Creek Levee Segment of the Western Sarpy / Clear Creek Flood Reduction Project.

1. A meeting held on December 4, 2009 between Mr. John Bertino, Chief, Engineering Division; Mr. David Ray, Chief, Geotechnical Engineering Branch; Mr. John Remus, Chief, Hydrologic Engineering Branch; and Mr. Randall Behm, Chief, Flood Risk and Floodplain Management Section established the Engineering Division position on the final design, construction and future maintenance of the Upper Clear Creek Levee (UCCL) segment of the Western Sarpy / Clear Creek Flood Reduction Project. This position statement has been developed to ensure that the intent of the levee system to provide equal and opposite level of protection from upstream to downstream and from left-bank to right-bank is rigidly adhered to and that future repairs or modifications to the system result in no measurable increase in level of protection.
2. This memorandum is to be incorporated into the Operation and Maintenance Manual for the Western Sarpy / Clear Creek Flood Reduction Project. It represents the final position of the Omaha District Engineering Division on the design of the UCCL segment and future maintenance under the PL84-99 Rehabilitation and Inspection Program. Elements of this position statement are as follows:
 - A. The UCCL top crown width shall be established and maintained at no greater than 10-feet throughout future operation and maintenance.
 - B. The landward levee side slope connecting the top of levee to the landward berm will maintain a slope no flatter than 3 horizontal on 1 vertical.
 - C. The landward berm will not exceed the levee design elevation as established for the open-water 151,000 cfs discharge for the reach located downstream from the confluence of the Platte and Elkhorn Rivers and the 106,000 cfs discharge upstream from the confluence.
 - D. Maintain existing levee top profile throughout future operation and maintenance of the UCCL segment. Post-flood reparations shall not exceed the pre-project levee top elevations.
 - E. The riverward levee side slope, while not identified to be modified during the construction phase of the levee system, shall be maintained with a minimum slope of 3 horizontal to 1 vertical during and after future flood events.
 - F. The level of protection of the UCCL segment shall not be increased in an effort to obtain FEMA accreditation as part of the National Flood Insurance Program.

3. No variance or waiver of this position statement shall occur without the consent of the Hydrologic Engineering Branch, Geotechnical Engineering Branch, and the Levee Safety Officer of the Omaha District.

4. Copies of this memorandum are also being provided to the three project sponsors; the Pappin-Missouri River Natural Resource District, the Lower Platte South Natural Resources District, and the Lower Platte North Natural Resources District, as well as the Omaha District Project Manager, Mr. Robert Mattson (CENWO-PM-C).

5. Questions regarding this position statement for the UCCL segment of the Western Sarpy / Clear Creek Flood Reduction Project should be addressed to the signatories of this memorandum.

John J. Bertino Jr, P.E.
Chief, engineering Division

John I. Remus II, P.E.
Chief, Hydrologic engineering Branch

David P. Ray, P.E.
Chief, Geotechnical Engineering Branch

Sign-off
ED-HB Behm
Ed-HD Kay
ED-H Remus
ED-GA Flere
ED-GA Jones
ED-GB Taylor
ED-G Ray
ED Bertino