



# State of North Dakota

## Office of the State Engineer

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March 17, 2016

Darrell Vanyo, Chairman  
Flood Diversion Board of Authority  
P.O. Box 2806  
211 Ninth Street South  
Fargo, ND 58108

Dear Chairman Vanyo,

The Flood Diversion Board of Authority (Diversion Authority) is in the process of planning and permitting the large-scale flood control project known as the FM Diversion. The stated intent of the project is to reduce the 100-year flood event from 42.4 feet to 35 feet at the Red River Fargo gage. On March 8, 2016, members of the engineering staff at the Office of the State Engineer (OSE) and I met with representatives from Cass County, officials from the City of Fargo (City), and the Governor to discuss the permitting requirements of the OSE. This letter fulfills my commitment to explicitly describe what will be needed to obtain a construction permit from the OSE.

As part of the FM Diversion, a dam and staging area (FM Dam) are proposed to be located upstream of the City. The FM Dam will require a Permit to Construct or Modify a Dam, Dike, Ring Dike, or Other Water Resource Facility (Construction Permit) from the OSE.

On February 22, 2016, the OSE received a draft Construction Permit application (Draft) from Terry Williams, United States Army Corps of Engineers (USACE) St. Paul District Project Manager. The Draft included a cover letter along with detailed plans and specifications for the diversion inlet structure, as well as a substantial amount of supporting information for the FM Dam. The cover letter from Ms. Williams noted that "a dam permit is not a legal prerequisite to federal construction," but the USACE will, "be applying for the permit out of comity." The OSE disagrees with this portrayal and maintains that an approved OSE construction permit is a prerequisite to the construction of any portion of the FM Dam in North Dakota.

In addition to a completed Application/Notification to Construct or Modify a Dam, Dike, Ring Dike, or Other Water Resource Facility (SFN 51695), North Dakota Administrative Code section 89-08-02-02 requires the following information be submitted before any Construction Permit Application will be considered complete:

TODD SANDO, P.E.  
STATE ENGINEER

1. Plans and specifications for the proposed structure
2. Evidence establishing a property right for the property that will be affected by the construction of the dam, dike, or other device

### Plans and Specifications

The OSE received detailed plans and specifications on October 28, 2015, from the USACE, which included a set of Design Documentation Reports (DDR) for the various technical aspects of the project. In discussions with USACE technical staff regarding the project on March 3, 2016, the OSE became aware that a revision of the DDR set was underway and would be finalized by the beginning of April 2016. The OSE did receive a draft copy of the Hydraulics and Hydrology (H&H) DDR, and many outstanding questions were answered as a result. Due to the refined information the upcoming DDR set will contain, the OSE will withhold any comments on design or requests for additional information until the more detailed information is submitted.

### Property Rights

For the purpose of permitting dams in North Dakota, the top of the dam is typically used to determine the impacted properties where evidence establishing a property right would be required. What is meant by "evidence establishing a property right" is not defined in the governing North Dakota Century or Administrative Codes. Therefore, the Diversion Authority has the latitude to develop various methods as to how land rights will be obtained from both willing and unwilling owners.

For the FM Dam, the top of the dam is proposed to be at 930 feet North American Vertical Datum of 1988 (NAVD 88), which creates a reservoir that would cover approximately 45,390 acres in North Dakota alone. However, the USACE has stated that the FM Dam is not intended to be operated above the top of the limited service spillway at 925 feet NAVD 88. The State Engineer has agreed to only require evidence establishing a property right for the area below the top of the limited service spillway. At 925 feet NAVD 88, the FM Dam would inundate approximately 29,260 acres of land in North Dakota. Therefore, the Diversion Authority must provide evidence establishing a property right for the lands inundated by the FM Dam below the elevation of 925 feet NAVD 88. Again, the form of that evidence is flexible but must demonstrate a realistic plan for the procurement of the necessary property rights. If that plan relies on agreements other than traditional flood easements, the plan should address the various criteria used.

According to OSE staff analysis, approximately 10,380 acres of the area in North Dakota inundated by the FM Dam below 925 feet NAVD 88 are within Richland County. As Richland County is not a member of the Diversion Authority, it is uncertain whether the Diversion Authority has the power of eminent domain in Richland County. From a legal standpoint, an explanation of how the Diversion Authority will secure land rights from unwilling owners in Richland County is required by the OSE.

As stated previously, the OSE staff must have an opportunity to review the updated DDRs prepared for the FM Diversion in order to have a comprehensive understanding of how the structure will be constructed and how the project will operate. As such, the Diversion Authority must supply the OSE staff with the updated DDRs, when available. If the above referenced items required for a complete permit application are not received by the OSE, the construction permit application will be considered incomplete and the application will not be processed.

The State of North Dakota and the North Dakota State Engineer have a long established track record of supporting, both through policy and financially, North Dakota communities in their efforts to protect infrastructure and residents from potentially catastrophic flood events. To that end, it is also the duty of the OSE to ensure that any proposed project is held to the requirements outlined in the governing North Dakota Century Code and North Dakota Administrative Code.

If the Diversion Authority or their technical design team has any questions regarding the OSE permitting process, please contact Aaron Carranza at 701-328-4813 or by email at [acarranza@nd.gov](mailto:acarranza@nd.gov).

Sincerely,



Todd Sando  
State Engineer

cc: State of North Dakota Governor Jack Dalrymple  
City of Fargo Mayor Dr. Tim Mahoney  
City of Fargo Interim City Administrator Bruce Grubb  
Representative Al Carlson, District 41  
Senator Gary Lee, District 22