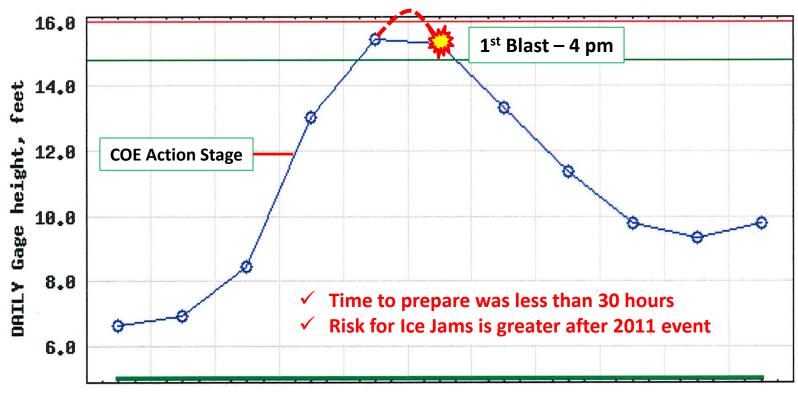




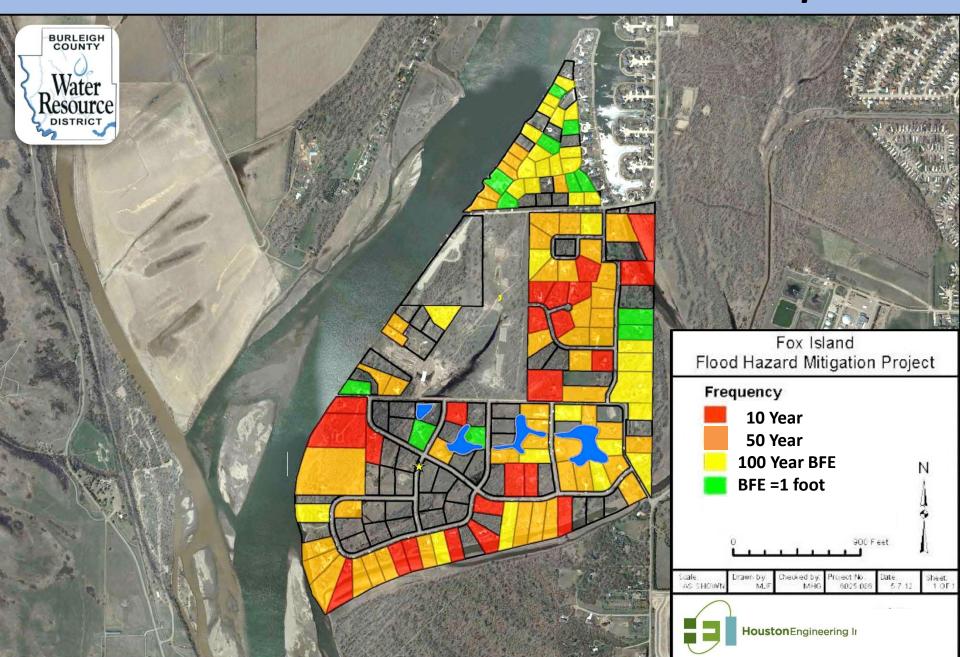


USGS 06342500 MISSOURI RIVER AT BISMARCK, ND



- Daily mean gage height
- Period of approved data
- National Weather Service Flood Stage
- Peak of record since 1953

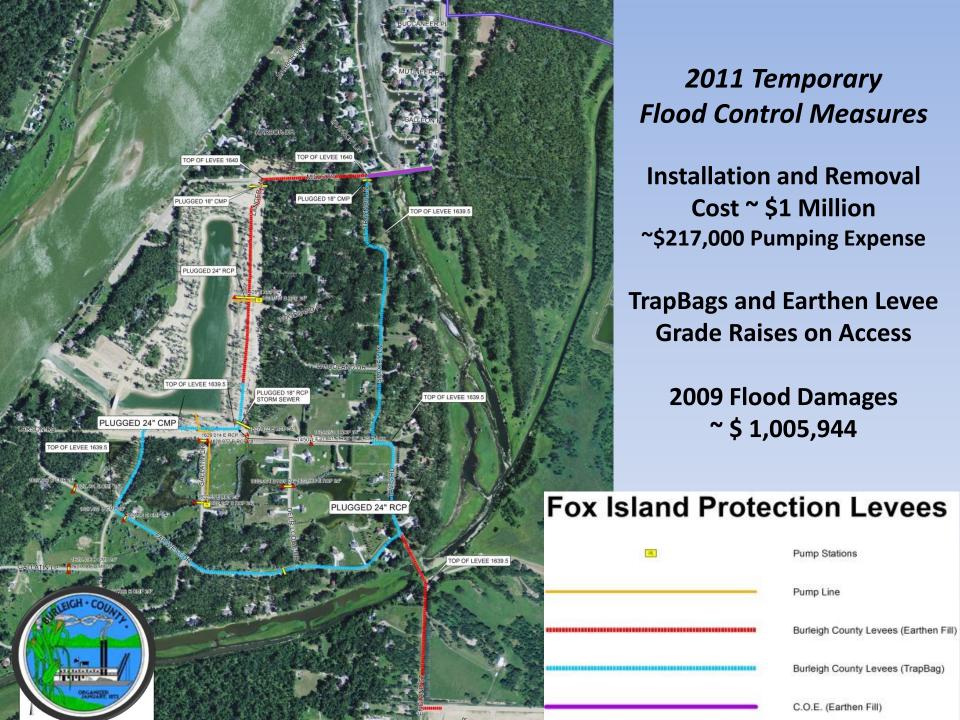
Fox Island – Residence Flood Risk Map





2011 Flood Impacts 19.3 foot stage







Burleigh County 20 Foot Protection Plan

South Side Measures

0.7 freeboard based on actual 2011 flood elevations at 150,000 cfs

Proposed Control Structure

Proposed Project Area Lead Agency

Highway Department

Water Resource District

Other

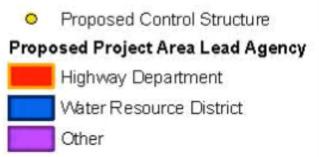








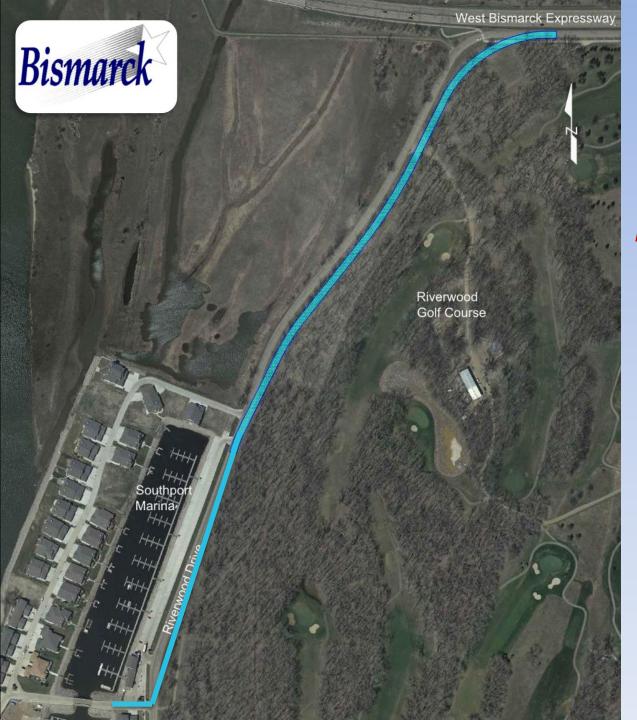
Burleigh County 20 Foot Protection Plan Fox Island/MRCC Areas











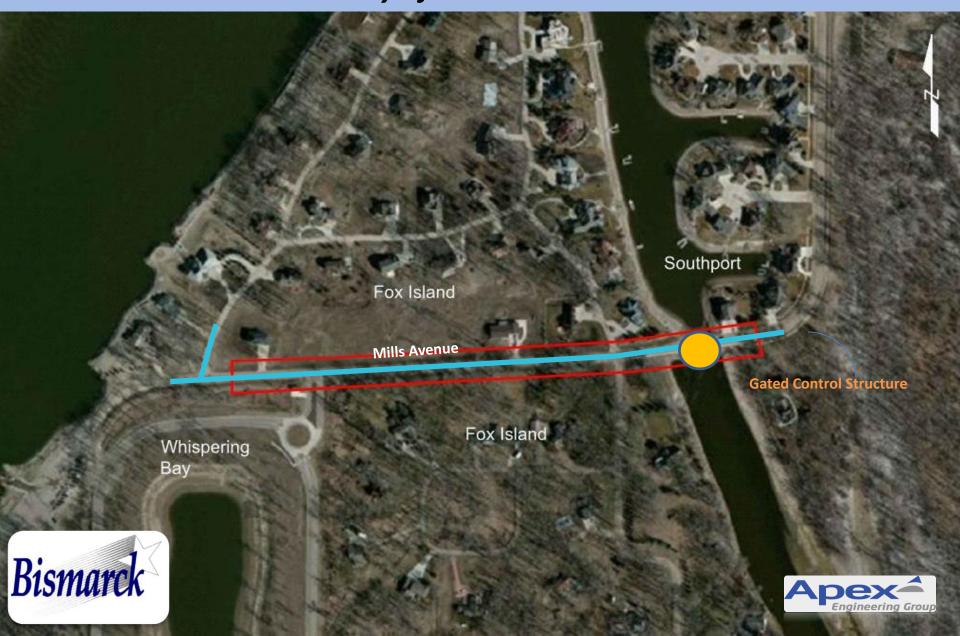
Riverwood Drive Grade Raise Bismarck Expressway to Southport Loop

Project Completed



Mills Avenue Grade Raise City of Bismarck

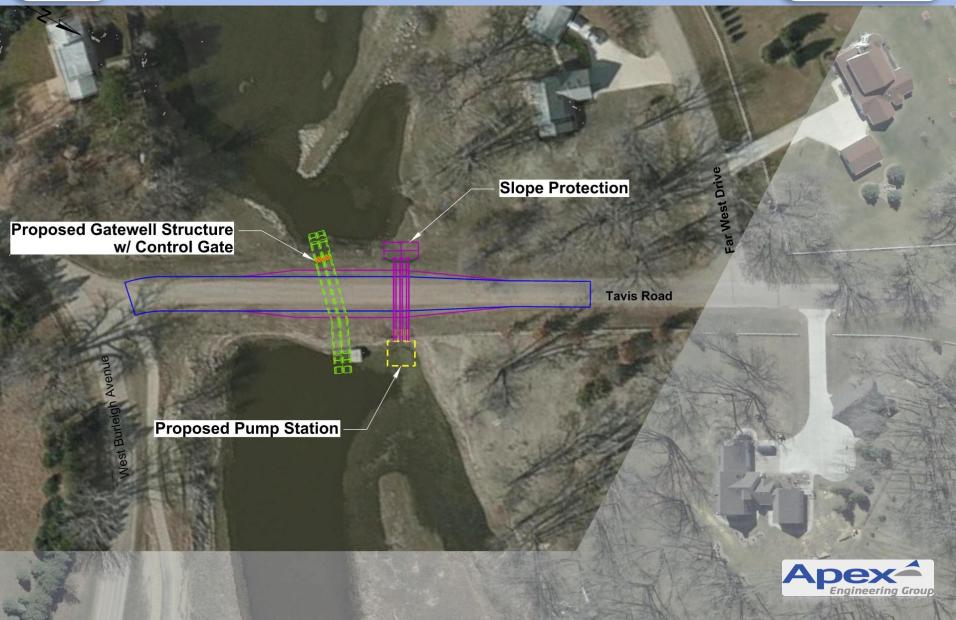
Project Completed



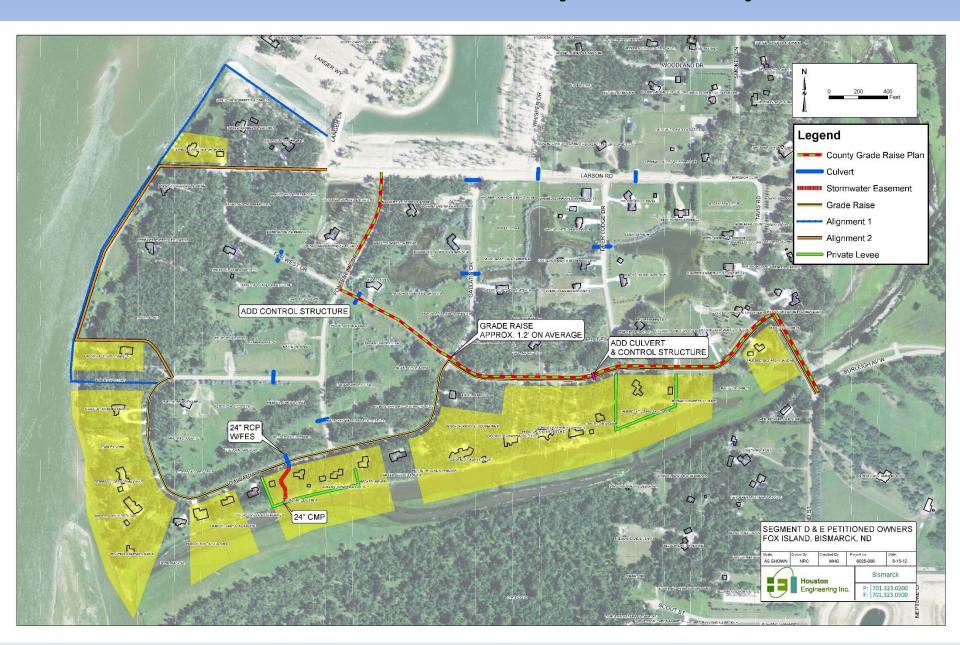


Tavis Road Project Completed Grade Raise and Control Structure





Landowner Petition - Opt-Out Map



Assessment District – Project Creation

- ✓ Process Defined in ND Century Code Chapter 61-16.1
- ✓ Preliminary Engineering Report & Assessment List
- ✓ Funding Appropriations State of ND, Burleigh County
- ✓ Assessment List filed with Burleigh County Auditor
- ✓ Notice of Hearing Publicly Advertised
- ✓ Notice Provided to Each Voting Landowner by Mail
- ✓ One Vote for Each Dollar of Assessment
- ✓ Ballots Provided
- ✓ Project Passes if more than 50% of the Votes Cast Approve
- ✓ Project Proceeds to Final Design 2016-2017
- ✓ Public Hearing on Assessment (protest) Date to be determined
- √ Construction (2017)



FOX ISLAND FLOOD CONTROL PRELIMINARY ENGINEERING REPORT

BURLEIGH COUNTY WATER RESOURCE DISTRICT

August 2016









Report Completed:

- ✓ Project Costs Updated
- ✓ Resolution Approved
- ✓ Assessment District Certified
- ✓ Notices Mailed
- ✓ Public Hearing
- √ Vote (Pending)

Flood Control Project Protection Area 2011 Event (stage 19.3 feet)





Project Funding



•	Legislative Appropriation (SB2020)	\$ 2,800,000
•	Burleigh County Allocation	\$ 920,456
•	Previous SWC Cost Share (Study)	\$ 23,900
•	Special Assessments	\$ 173,663
	Total	\$ 3,918,019
	Assessed Per Lot	\$ 2,846.93
•	Operation and Maintenance	\$ 100,000
	Assessed per Protected Lot	\$ 943.40
	Combined Assessment	\$ 3,790.33

Cost Share Equivalent ~ 73% (state) 97% (state/local)

Selected Alternative

ALTERNATIVE #5 - LEVEE FOX ISLAND FLOOD CONTROL PROJECT

BISMARCK, NORTH DAKOTA AUGUST, 2016

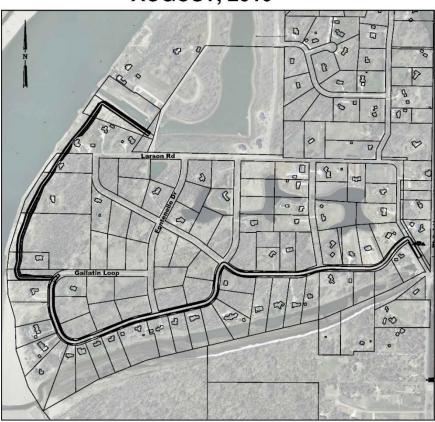


VICINITY MAP

SHEET INDEX

COVER SHEET, VICINITY, AND LOCATION MAPS

2-3. OVERVIEW
3-10. PLAN & PROFILE
11-17. CROSS SECTIONS



LOCATION MAP

RECORD DRAWING NOTES.

- BENCHMARKS OR LOCATION COORDINATE POINTS ARE NOTED AS SHOWN, AND USE THE FOLLOWING DATUM AND COORDINATE SYSTEM. KNOBS NORTH DAKOTA STATE PLANE SOUTH.

 2. ICACATON AND DIMENSIONS FOR COMPLETED REPAIRS ARE BASED ON AS CONSTRUCTED FIELD SURVEYS.

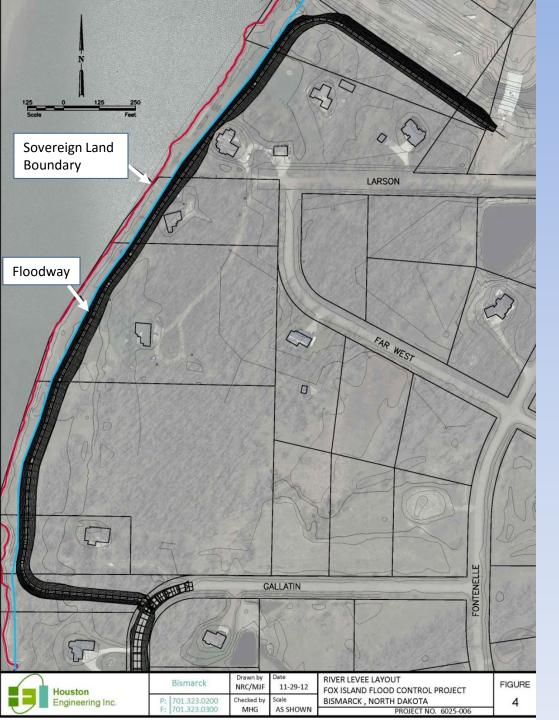
 3. THE ACTUAL EXTENT OF WORK WAS DIRECTED BY ODE FIELD PERSONNEL, AND ADJUSTED IN SOME LOCATIONS BASED ON SITE CONDITIONS ENCOUNTERED AT THE TIME WORK WAS COMPLETED.

- COMPLETED OF THE PLAN SET STRUCTURES WERE NOT IN THE LOCATION DESIGNATED ON THE PLAN SET. SUBSEQUENTLY, THE WORK COMPLETED OCCURED ON THE ACTUAL STRUCTURE, AS IT PHYSICALLY EXISTS, WITH THE LOCATION NOTED ON THE RECORD DRAWING PLAN VIEW



Roadway and Levee Segments



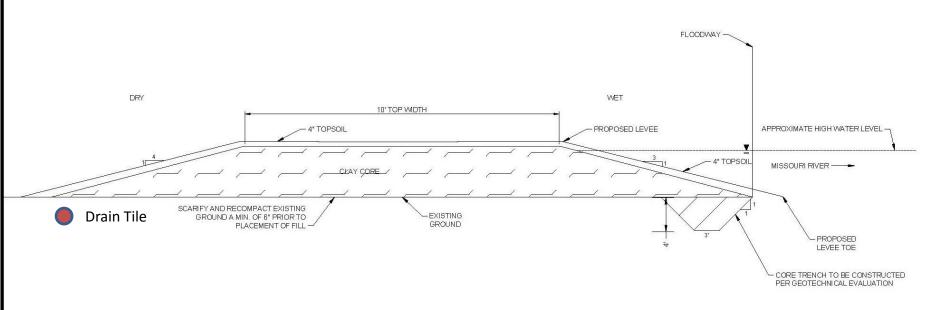


Missouri River Levee Segment





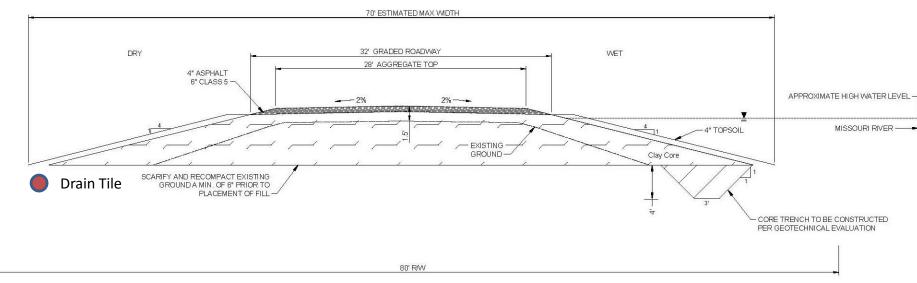
Typical Levee Section



Side Slopes - 3:1 Riverward and 4:1 Landward ROW - Varies based on height above existing ground Tree removal to limits specified by geotechnical evaluation

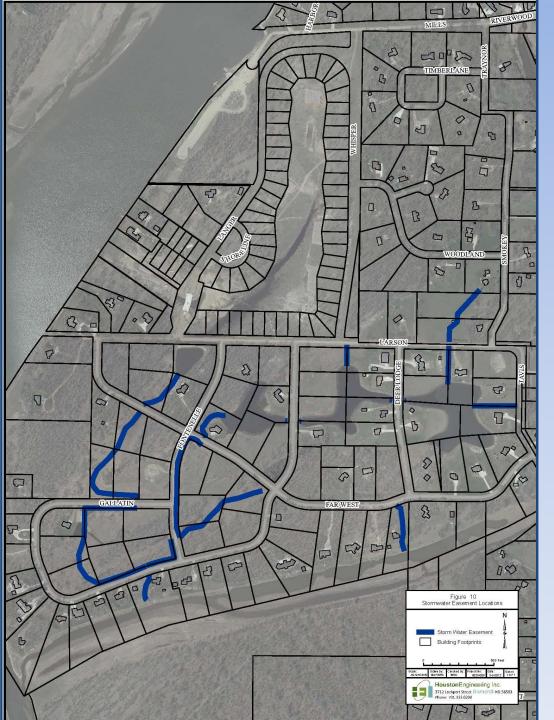
Houston	Bismarck	Drawn by AV	Date 9-9-2016	FOX ISLAND FLOOD CONTROL ALTERNATIVE #5 - LEVEE	TYPICAL SECTION	SHEET
Engineering Inc.	ALIENNATIVE #3 - LEVEL	PROJECT NO. 6025-006	1 of 1			

Typical Roadway Section



- ➤ Township Roadway Standards Safety and Signage
- Primary construction within existing 80 ft ROW
- Exceptions undetermined
- New paving and improved access
- Removal of existing ROW encroachments

Houston	Bismarck	Drawn by AV	Date 9-9-2016	FOX ISLAND FLOOD CONTROL ALTERNATIVE #5 - LEVEE BISMARCK, NORTH DAKOTA	TYPICAL SECTION	SHEET
Engineering Inc.	P: 701.323.0200 F: 701.323.0300	Checked by MHG	Scale AS SHOWN		PROJECT NO. 6025-006	1 of 1



Internal Drainage Easement and Improvement Considerations

(unknowns)

Project Issues Remaining with Final Design

- ✓ State Engineer Permit Impact Evaluation (>0.1 ft)
- ✓ COE Permit (Section 408) & Wetland Mitigation
- ✓ ROW Limitations (Temporary Construction Easements)

 Site specific impacts
- ✓ Geotechnical Unknowns
- ✓ Landowner Easements
- ✓ Storm Water Easements

Fox Island Flood Control Project Official Ballot

As the owner of Burleigh County Parcel ID No we (I) have been informed regarding the need to construct a flood control project to protect portions of the Fox Island rural residential properties. This requires the need to generate sufficient funds to complete the project. After having considered the project's benefit to our (my) properties and projected monetary assessment against our (my) properties, including an operation and maintenance assessment, we (I) cast the following vote either for, or against, the assessment of said maintenance costs. We (I) understand that this written vote is based on one vote for each dollar of assessment to be levied against our (my) property.					
$\frac{1}{\text{this project.}}$ I (we) cast our (my) votes for the creation	tion of a special assessment district to construct				
I (we) cast our (my) votes against to construct this project.	he creation of a special assessment district to				
The assessment will be applied over a twenty year repayment period starting on the 2017 tax statement and will pass or fail based by a simple majority of the actual votes cast. If you fail to cast this ballot with the Secretary of the Burleigh County Water Resource District by 5:00 p.m. October 10 th , 2016 your vote will not be counted.					
Burleigh County Water Resource Distric c/o Mona Livdahl, Secretary Fox Island Flood Control Project Ballot 1811 East Thayer Avenue Bismarck, ND 58501	t				
If for some reason you are unable to deliver or mail this ballot in the time allotted, you are encouraged to contact Mona Livdahl at 701-222-3499. Should you lose this ballot, a written letter either in favor or opposed to the project shall be considered adequate as long as it is received within the allotted time period. In addition, should you wish to rescind your vote you may do so, in writing only, at any time within the allotted time period. The Burleigh County Water Resource Board will review the vote totals on or before their October 14, 2016 meeting, and if favorable will proceed toward project design with construction occurring in 2017.					
If you have questions regarding the project, Engineering, Inc. at 701-323-0200.	please contact Michael H. Gunsch, Houston				
Signature of Owner	Date				
Signature of Owner	Date				

Official Ballot

Deadline
October 10th

Parcel ID No. ___



Questions? Fox Island Flood Control Project

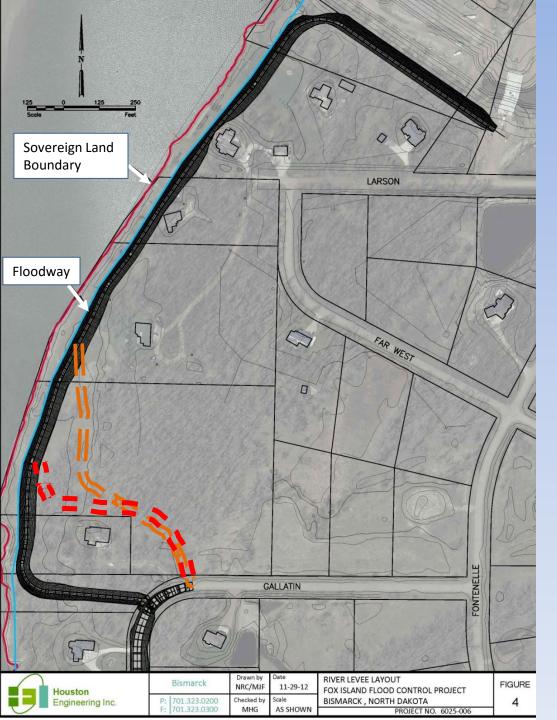
Assessed Residents Non-assessed Property Owners General Public

Information Sources

Burleigh County Water Resource District

Website: www.bcwrd.org

Power Point to be Posted – September 12, 2016



Missouri River Levee Segment

w/Alternate Routes