

Hogue Island - Bank Stabilization Preliminary Engineering Report – Addendum #1

To: Burleigh County Water Resource District

From: Michael H. Gunsch, PE, CFM, Senior Project Manager

Subject: Final Design, Special Assessment District Assessments and Notices

Date: August 5, 2023

Project: HEI No. 6025-0032-002

PROJECT UPDATE

This is an addendum to the *June 2023 - Hogue Island Preliminary Engineering Report*. The purpose is to provide an update on project status with information that is to be utilized to certify the assessment district, Public Hearing and voting process. The project design has progressed from the **60% "conservative"** plan set, used to initiate the regulatory review process, to a 95% pre-bid status.

The design plans have been refined and the Opinion of Probable Cost (OPC) updated to a status that can be voted on by the respective landowners, as well as securing cost participation from the North Dakota State Water Commission. The final project costs remain subject to DWR concurrence, as it relates to the Section 32 revetment design, costs, and the regulatory permit approvals. Should the project vote be favorable, the project manual and final plans will be completed, and the project advertised. The goal remains fall 2023 construction.

RESIDENTIAL BANK STABILIZATION

When evaluating final design several considerations were made to reduce projects costs, while retaining a reasonable level of protection, as it relates to the residential bank stabilization. These measures included the following:

- ✓ Given design status now 95%, the 10% contingency used in the unit prices was removed.
- ✓ The amount of rock that was to be placed at the toe in the river has been reduced, based on equipment placement capability, and updated bathymetry which indicates nominal sediment accumulation in the deeper scour areas.
- ✓ The amount of rock placed on the upper slope was reduced after considering the following:
 - a. The DWR requires the existing eroded slope be pulled back such that rock placement does not extend beyond the new eroded Ordinary High-Water Mark (OHWM). This condition is such that there is a "general conformance" to the new OHWM line. This action will result in additional land loss along the upper bank for shaping and construction.
 - b. Projected winter "Ice in" levels
- ✓ The rock cover depth was reduced where the residential stabilization had not fully failed, which now will use supplemental rock placement versus the 2.5-foot design depth.





- ✓ Unit prices were evaluated and reduced to account for anticipated pricing understanding that bids will dictate final costs, which remain an unknown. The NDCC allows for a certain increase in costs without required a revoting, so the objective is to be within that limit.
 - a. Note the Cost/Ton of rock on the OPC includes items incidental to the larger project, which may be reflected differently in the actual bid documents.
- ✓ The Engineering-Regulatory, Administration and Legal remain as <u>budgeted percentages</u>, however the final assessments will be based on actual costs and distribution between the Residential Stabilization and Section 32 projects, which for the assessments provided a corresponding reduction in the OPC.

Section 32 Revetments – Rehabilitation/Restoration

When evaluating the original intent, pre-eroded status and design for the Section 32 Federal Revetments, considerations were given to reduce the OPC from the previous values, which included the following:

Each Hardpoint is an integral part of the *Public Project* constructed along this riverbank. There are two types located in this reach, as illustrated in the updated plan set included with this addendum. The following summarizes the proposed work at each structure and reasoning behind the design. The cross sections provided at each structure illustrate the eroded existing OHWM location. The original sovereign land (state ownership) line, preconstruction was located on the back side of the Hardpoint. Therefore, *NO NEW Sovereign Land is being used or converted for use on this project*. The OHWM via the restoration/rehabilitation is generally being placed back to its location prior to the erosion event. *This is not a reclamation of land, as this is and remains Sovereign Land*.

Structure #2

This Hardpoint has suffered mild deterioration since its original construction and will be reinforced with a veneer or topping layer of additional rock along with rock placed below the OHWM. Without such rehabilitation, given that the river channel now on the east side, this structure is at increased failure risk, especially considering recent downstream failures. This risk is apparent based on the upstream failure migration of the Hardpoints this spring.

Structure #3

This Hardpoint has failed, and a small portion of the structural root was compromised. The design restores the structure and protects the exposed root, which will not be extended. The focus is to restore its original function. Eliminating this Hardpoint is not recommended as it is an integral part of the system design along this reach. If not restored there is an increased risk for failure along the enter reach, which could place the residential stabilization at risk.

Structure #4

This Hardpoint has failed, and a small portion of the structural root was compromised. The design is to rehabilitate the hardpoint section, without any root extension.





Structure #5

This Hardpoint surfacing has failed, and in this case the structural root was not exposed. The project design is to rehabilitate the Hardpoint. This site includes the exposed old tires that exist under the Hardpoint. The rock rip rap placement will rebury these materials as removal *is not recommended* as it creates a higher risk for future erosion and failure at this location and could compromise the existing structure. The downstream Hardpoints (Structure #6) are designed to function in conjunction with the upstream Hardpoints that are being rehabilitated or restored.

Subsequently, Structures #2, #3, #4 and #5 will be rehabilitated and/or restored to its general status prior to the erosion event. This reduces the risk for the failure of these structures or others downstream. Operation and Maintenance would continue under the current provisions of the agreement with the USACE.

REGULATORY STATUS / CONCLUSION:

Based on the above measures the OPC for the project has been modified as illustrated on *Table One*. This information has been transmitted to the ND Department of Water Resources (DWR) as well as the United States Army Corps of Engineers for use in their regulatory permit review process. It has been requested that they approve the necessary permits based on the recommendations contained in the Preliminary Engineering Report and the revised Plan Set. The DWR will be sending out its Solicitation of Views in the near future, while the USACE notices remain undetermined.

The DWR has reviewed the "no rise" floodplain submittal and has requested the completion of river modeling to confirm the status, under FEMA guidelines, due to the Hardpoints extending into the floodway, which they did prior to the recent erosion event.

SPECIAL ASSESSMENT DISTRICT

Based on the above measures the OPC for the Special Assessment District has been modified, as reflected on *Table Two*. These values are recommended for utilization at the public hearing and vote. The respective draft notices and letters are provided for the BCWRD's certification and approval to proceed with the vote, and if favorable project construction, which is targeted for October 2023.

ATTACHMENTS:

Table One – Opinion of Probable Costs

Table Two – Special Assessment District Distribution

Revised Plan Set – July 2023 (included by reference only – available on request)

Special Assessment District Letter and Notices (Approved and Mailed, etc.)





Table One

Hogue Island Bank Stablization Public Hearing - Assessment for Publication July 31, 2023

1	F		11 21, 2023	2	4			A. 1. 6. 1. 6. 1. 6. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
Lat No		Parcel Owner	Lopsoil	Seeding	Riprap	Geotex.	Cost/Property	Total Per Parcel
2 Richard Beierle	Richard Beierle		\$390.00	\$132.15	\$6,007.28	\$0.00	\$6,529.43	\$8,553.55
Structure 2	Structure 2		\$60.08	\$60.00	\$4,750.00	\$0.00	\$4,870.08	\$6,379.81
3 Sherri & Scott Neis	Sherri & Scott	Neis	\$1,037.83	\$514.63	\$41,154.70	\$666.00	\$43,373,16	\$56,818.84
4 John & Alice Homelvig	John & Alice H	omelvig	\$958.17	\$475.12	\$25,217.46	\$615.00	\$27,265.75	\$35,718,13
5 Andrew Carlso	Andrew Carlso	Andrew Carlson & Chloe Coleman	\$1,085.25	\$538.14	\$40,065.75	\$696.00	\$42,385.15	\$55,524.54
6 Nathaniel Strutz	Nathaniel Strut	7	\$947.83	\$470.00	\$59,916.06	\$855.00	\$62,188.90	\$81,467.46
Structure 3	Structure 3		\$383.58	\$190.21	\$77,257.04	\$0.00	\$77,830.83	\$101,958.39
7 William & Marilyn Strutz	William & Maril	yn Strutz	\$1,169.50	\$579.92	\$71,520.91	\$936.00	\$74,206.33	\$97,210.29
Structure 4	Structure 4		\$290.33	\$143.97	\$39,193.20	\$0.00	\$39,627.50	\$51,912.03
8 Beverly Brierly	Beverly Brierly		\$861.42	\$427.15	\$53,654.77	\$552.00	\$55,495.33	\$72,698.88
9 Laura Beyer	Laura Beyer		\$502.25	\$249.05	\$24,015.44	\$486.00	\$25,252.74	\$33,081.09
Structure 5	Structure 5		\$253.08	\$125.50	\$5,137.60	\$0.00	\$5,516.18	\$7,226.19
		Subtotal/Bid Item:	\$7.939.33	\$3,905.83	\$447.890.22	\$4,806.00		\$608.549.21

Con	struction Only:		Design/Permitting		15%	\$69,681.21	Total Eng/Ad/Legal
Residential Stabilization	62'969'988\$	72.48%	Admin/Legal		%s	\$37,163.31	31%
Section 32 Revetments	\$127,844.59	27.52%	Bidding/CMS		%8 %8	\$37,163.31	
				Total:		\$608.549.21	

\$464,541.38

Section 32 Revetments	\$167,476.42





Table Two Hogue Island Bank Stablization Assessment List

7/31/2023

Parcel No.	Subdivision	Lot No	Assessment Amount
23-140-81-50-10-030	Island Park Estates	2	\$8,553.55
23-140-81-50-10-040	Island Park Estates	3	\$56,818.84
23-140-81-50-10-050	Island Park Estates	4	\$35,718.13
23-140-81-50-10-060	Island Park Estates	5	\$55,524.54
23-140-81-50-10-070	Island Park Estates	6	\$81,467.46
23-140-81-50-10-080	Island Park Estates	7	\$97,210.29
23-140-81-50-10-090	Island Park Estates	8	\$72,698.88
23-140-81-50-10-100	Island Park Estates	9	\$33,081.09
	Total Assessment Amo	unt	\$441,072.79





PO Box 1255

Bismarck, North Dakota 58502-1255 (701) 354-1501 www.bcwrd.org

August 7, 2023

Mark Splonskowski Burleigh County Auditor PO Box 5518 Bismarck, ND 58506-5518

Re: Hogue Island Bank Stabilization Project

Special Assessment District – Notice and Assessments

Dear Mr. Splonskowski:

The Burleigh County Water Resource District has notified the residents associated with the Hogue Island Bank Stabilization Project on the Missouri River regarding a Public Hearing for creating a project to restore failed stabilization features to protect the identified area. Enclosed per our mailing to the residents, as well as in accordance with the NDCC, are the following documents:

- Notice of Public Informational Meeting July 12 (Regular Meeting 8:30 am)
- Letter to Residential Properties included in the assessment district August 7, 2023
- Notice of Public Hearing August 29th at 5:30 pm to 7:00 pm
- Resolution #2 Creating the Assessment District
- Special Assessment District Map
- Special Assessment District Breakdown
- Ballot for Project Voting Submittal Deadline Sept 26th

It is anticipated there may be questions raised by residents you may be asked to address. If you have questions regarding the project, you may contact Manager Randy Binegar, the Board's project representative, or Michael Gunsch, PE, CFM with Houston Engineering. The residents will be informed at the Public Hearing regarding the project timeline, costs, repayment period and related items.

Sincerely,

James Landenberger, Chairman

Burleigh County Water Resource District

C: BCWRD Board Members
David Bliss. Bliss Law Firm

Michael Gunsch, PE, CFM, Houston Engineering, Inc.



PO Box 1255

Bismarck, North Dakota 58502-1255 (701) 354-1501 www.bcwrd.org

TO: Hogue Island Bank Stabilization Project Residents

FROM: Burleigh County Water Resource District

SUBJECT: Informational Meeting

HOGUE ISLAND BANK STABILIZATION - MR 1321.89 TO MR 1322.22

Date: July 7, 2023 Sent via email

Dear Resident:

The Burleigh County Water Resource District will hold a public informational meeting regarding a special assessment district to stabilize the banks along the Missouri River on your properties on July 12, 2023 at 8:30 am in the Tom Baker Meeting Room; City/County Building; 221 North 5th Street; Bismarck, ND. This will be held in conjunction with their regularly scheduled July meeting. Given the project's implementation timeline if individuals desire a separate meeting to discuss the project, they should request that from the Board via email or in writing. These meetings need to occur timely as the notice and public hearing will occur shortly thereafter.

The purpose for this meeting is to receive your input regarding the process to establish the project as outlined in the Preliminary Engineering Report which is available for viewing at the Burleigh County Water Resource District website: http://www.bcwrd.org/. and previously emailed. The report is also included in the June Agenda book as well.

A discussion outlining project status will occur then public comments will be received immediately following. Input provided at this public meeting will be considered by the Burleigh County Water Resource District as the project configuration is finalized and the next steps occur to formally establish the project in accordance with ND Century Code Chapter 61-16.1.

The next step in the process, following this meeting, will be a public hearing and a vote of the residents. This will be explained in more detail during the presentation. You are invited to attend this meeting and the future public hearing. If you have any questions regarding the process prior to the meeting, please direct them to Manager Randy Binegar at 595-4947.

Sincerely,

James Landenberger, Chairman

Burleigh County Water Resource District

Enclosure

c: Michael Gunsch, PE, Houston Engineering (email)

David Bliss. Bliss Law Firm (email)

Hogue Island Landowners (Special Assessment District) (email)

USACE and DWR (email)



PO Box 1255

Bismarck, North Dakota 58502-1255 (701) 354-1501 www.bcwrd.org

TO: Hogue Island Bank Stabilization Project FROM: Burleigh County Water Resource District

SUBJECT: Special Assessment District

HOGUE ISLAND BANK STABILIZATION - MR 1321.89 TO MR 1322.22

Date: August 7, 2023

Dear Resident:

The Burleigh County Water Resource District is proceeding with the development of a Bank Stabilzation project to protect your rural residential properties from the existing and future erosion along the Missouri River. The total combined opinion of probable cost, including the Section 32 revetment rehabilitation/restoration is \$649,550. The residential portion of these costs is projected to be \$441,073. To fund these improvements, it is necessary to create a special assessment district in accordance with North Dakota Century Code Chapter 61-16.1.

Enclosed is a copy of the assessment list showing a total of eight (8) parcels to be assessed in accordance with the projected cost for each individual parcel. There will be no operation or maintenance funding provisions for the bank stabilization features constructed on the residential parcels under this project. Also enclosed is a Notice of the Public Hearing which will be held on Wednesday August 29th in the Tom Baker Meeting Room at 221 N 5th Street, Bismarck, ND from 5:30 pm to 7:00 pm, along with a copy of the Resolution adopted by the Burleigh County Water Resource District creating the project. The assessment list has been filed with the Burleigh County Auditor. Additional information is available on the Burleigh County Water Resource District website at www.bcwrd.org.

Each property owner will have 30 days from the hearing date to cast their votes either in favor or in opposition to the project. Enclosed is a ballot and a return envelope for your use. Each property owner receives one vote for each \$1 of assessment. The project will pass or fail based on the percentage of votes cast, with a simple majority required to be approved. Given the critical nature of project you are strongly encouraged to vote as soon as possible. The Board will review the votes and call the results if all properties have submitted their vote. This is necessary to advertise the project and allow bidding for construction this fall.

You are encouraged to attend the Public Hearing where any questions you have may be answered. If you have any questions, please direct them to Manager Randy Binegar, at 595-4947.

Sincerely.

James Landenberger, Chairman

mul

Burleigh County Water Resource District

Enclosure

c: BCWRD Board Members

David Bliss, Bliss Law Firm

Michael Gunsch, PE, CFM, Houston Engineering



City/County Office Building - 221 North 5th Street Bismarck, North Dakota 58501-4028

NOTICE OF ORDER AND HEARING ON SPECIAL ASSESSMENTS HOGUE ISLAND BANK STABILIZATION – MR 1321.89 TO MR 1322.22

NOTICE IS HERBY GIVEN that the Burleigh County Water Resource District will hold and conduct a PUBLIC HEARING on **Tuesday August 29**th in the Tom Baker Meeting Room, 221 N 5th Street, Bismarck, ND from 5:30 pm to 7:00 pm regarding the proposed HOGUE ISLAND BANK STABILIZATION – MR 1321.89 TO MR 1322.22. Said project having the following general nature and purpose:

Construct residential bank stabilization along the Missouri River located on Lot 3&4A, Lot 3A&4, Lot 5, Lot 6, Lot 7, Lot 8 and Lot 9 Island Park Estates, as documented in the Preliminary Engineering Report; and in the area generally described as the east bank of the Missouri River between River Mile 1321.89 to River Mile 1322.22. This work is to be coordinated with the Section 32 revetment rehabilitation/restoration project being undertaken by the North Dakota Department of Water Resources and Burleigh County Water Resource District.

NOTICE IS FURTHER GIVEN that the Burleigh County Water Resource District has adopted a Resolution, hereby included as part of this Notice.

NOTICE IS FURTHER GIVEN that:

- 1. The engineer's report, profiles, plans, specifications and estimate of cost received by this Board for the proposed HOGUE ISLAND BANK STABILIZATION MR 1321.89 TO MR 1322.22, are hereby approved and the same shall be forthwith filed in the office of the Secretary.
- 2. The Board is proceeding with the assessment of the cost of the project and public hearing process in accordance with N.D.C.C. Section 61-16.1-21.
- 3. The Board has inspected the property subject to special assessments for the Project and has prepared an Assessment List showing the projected assessment against each parcel of land benefited by the proposed Project, based on the actual work to be completed on each parcel. The resulting assessment list is included with this Notice.

Affected landowners have 30 days following the date of the aforementioned public hearing (until and through September 26, 2023) to cast their votes concerning the proposed Project and such votes must be filed with the Board Secretary at 221 N 5th Street, Bismarck, mailed to the BCWRD at PO Box 1255, Bismarck ND 58502-1255, or they may be dropped off at Fronteer Payroll Service at 4007 State Street, in the sealed return envelope labeled "Hogue Island Assessment District".

NOTICE IS FURTHER GIVEN that the Assessment List referred to in the above Resolution has been filed with the Burleigh County Auditor.

DATED THIS 7th day of August, 2023

BURLEIGH COUNTY WATER RESOURCE DISTRICT

James Landenberger, Chairman

Burleigh County Water Resource District

Water Resource

Resolution No. 2

Dated this 7th day of August, 2023

BURLEIGH COUNTY WATER RESOURCE DISTRICT BURLEIGH COUNTY, NORTH DAKOTA

RESOLUTION APPROVING ENGINEER'S REPORT, PLANS, SPECIFICATIONS AND ESTIMATE OF COST AND DIRECTING THE ASSESSMENT OF THE COST FOR THE HOGUE ISLAND BANK STABILIZATION – MR 1321.89 TO MR 1322.22

BE IT RESOLVED by the Burleigh County Water Resource District, Burleigh County, North Dakota, as follows:

- The engineer's report (including Addendum #1), preliminary plans, profiles, and opinion of probable cost received by this Board for the proposed construction of the Hogue Island Bank Stabilization MR 1321.89 to MR 1322.22 (the "Project") on August 7, 2023, are hereby approved and the same shall be forthwith filed in the office of the Secretary.
- 2. The Board shall proceed with the assessment of the project cost and public hearing process in accordance with N.D.C.C. Section 61-16.1-21. The project assessments are to include project costs, as well as coordination with the rehabilitation/restoration of the Section 32 Revetements, per the recommendations contained in the engineer's report. There is no operation and maintenance provisions included in this project.

ATTEST:

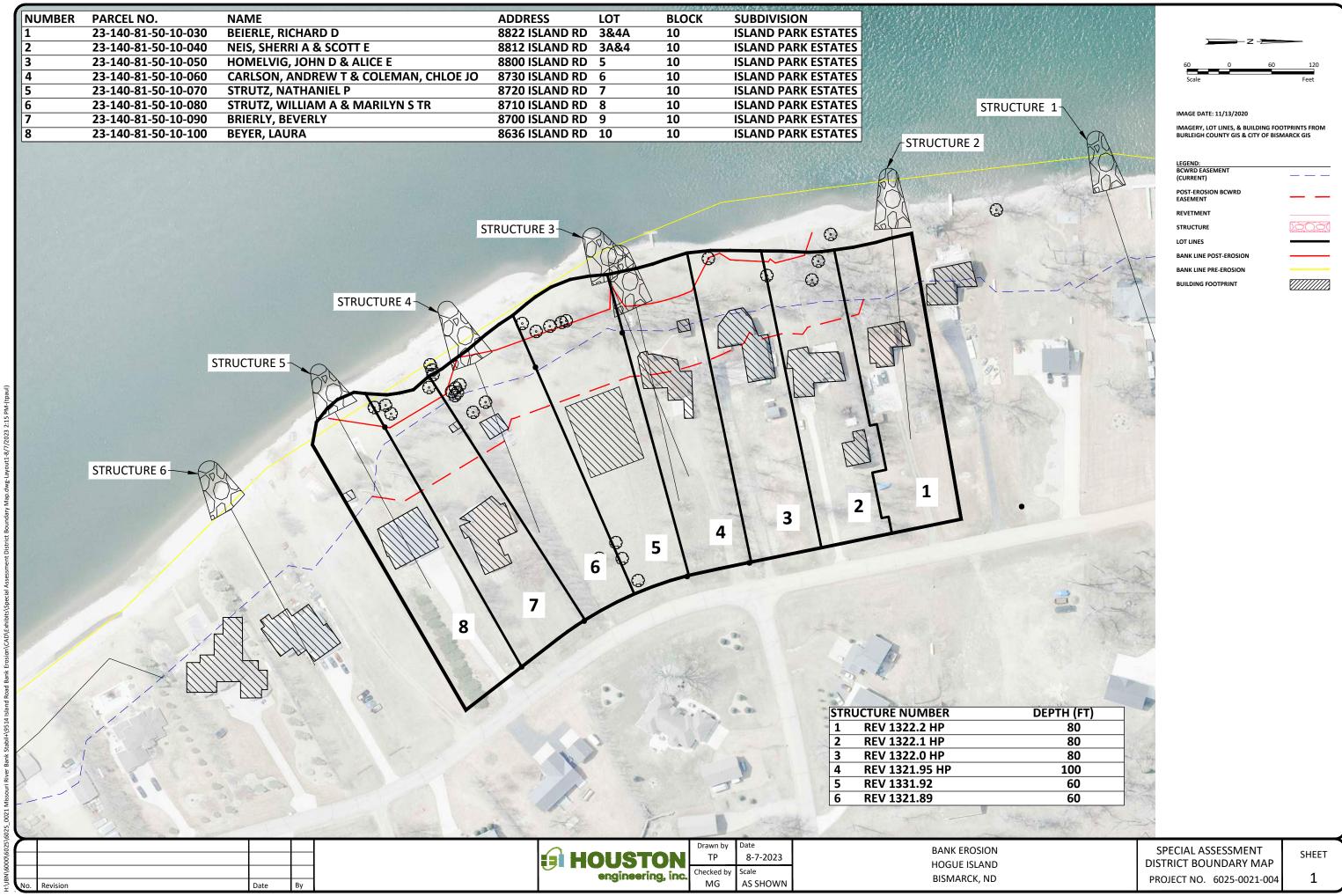
BURLEIGH COUNTY WATER
RESOURCE DISTRICT

ecretary James Landenberger, Chairman,
Burleigh County Water Resource District

The governing body of the political subdivision acted on the foregoing resolution on this 7^{th} day of August, 2023 as follows:

Adoption moved by Mgr. Palm	Seconded by Mgr. Binegar
· · · · · · · · · · · · · · · · · · ·	
Roll Call Vote (List Last Names)	
"Aye" Smith, Reep, Palm, Binegar, Landenberger	
"Nay"	
Absent	

...and after vote the presiding officer declared the resolution adopted.



Hogue Island Bank Stablization Special Assessment List

8/7/2023

Parcel No.	Subdivision	Lot No	Parcel Owner	Assessment Amount	Percentage
23-140-81-50-10-030	Island Park Estates	2	Richard Beierle	\$8,553.55	100%
23-140-81-50-10-040	Island Park Estates	3	Sherri & Scott Neis	\$56,818.84	100%
23-140-81-50-10-050	Island Park Estates	4	John & Alice Homelvig	\$35,718.13	100%
23-140-81-50-10-060	Island Park Estates	5	Andrew Carlson & Chloe Coleman	\$55,524.54	100%
23-140-81-50-10-070	Island Park Estates	6	Nathaniel Strutz	\$81,467.46	100%
23-140-81-50-10-080	Island Park Estates	7	William & Marilyn Strutz	\$97,210.29	100%
23-140-81-50-10-090	Island Park Estates	8	Beverly Brierly	\$72,698.88	100%
23-140-81-50-10-100	Island Park Estates	9	Laura Beyer	\$33,081.09	100%
			Total Assessment	\$441,072.79	

Hogue Island Bank Stabilization Project MR 1321.89 to MR 1322.22 Official Ballot

As the owner of Burleigh County Parcel ID No we (I) have been informed regarding the need to construct a bank stabilization project to protect our rural residential properties located along the east bank of the Missouri River. This requires the need to generate sufficient funds to complete its construction. After having considered the project's benefit to our (my) properties and projected monetary assessment against our (my) properties, 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.
$\underline{\hspace{0.5cm}}$ I (we) cast our (my) votes for the creation of a special assessment district to construct this project.
$\underline{\hspace{0.5cm}}$ $I(we)$ cast our (my) votes against the creation of a special assessment district to construct this project.
The assessment will be applied over a twenty-year repayment period starting as early as the 2024 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. September 26, 2023 your vote will not be counted. Early voting is strongly encouraged given the limited period available for construction in the fall of 2023.
Burleigh County Water Resource District c/o Wendy Egli, Secretary Hogue Island Bank Stabilization Project Ballot PO Box 1255 Bismarck, ND 58502-1255
If for some reason you are unable to deliver or mail this ballot in the time allotted, you are encouraged to contact Wendy Egli at 701-354-1501. Should you lose this ballot, a written letter either in favor or opposed to the project shall be considered adequate if it is received within the allotted time. In addition, should you wish to rescind your vote you may do so, in writing only, at any time within the allotted period. The Burleigh County Water Resource Board will review the vote totals as soon as all votes have been submitted, but no earlier than September 26, 2023, and if favorable will proceed toward project design with the intent to construct in 2023.
If you have questions, please contact Manager Randy Binegar, at 701-595-4947.
Signature of Owner Date

Date

Signature of Owner