

Benefit Distribution Evaluation

To: James Landenberger, Chairman BCWRD
Dennis Reep, Manager

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

Subject: Special Assessment District Recommendations

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Project: HEI No. 6025-0028

The Sibley Island Benefit Distribution Evaluation and resulting assessment district required an extensive review of direct and indirect benefits to individual properties and determining what is defined as a “*base cost*” or those benefits provided to every parcel. Most properties within the assessment district are rural residential lots, most have structures at risk while others do not. Agricultural property and other unique parcels within the district boundaries are described later.

The *base cost* is a function of community-neighborhood impacts and resulting benefits from flood protection including, but not limited to, flood relocation, flood fighting, social benefits, and non-consumptive uses. Using the Economic Assessment (EA) process, created by the ND Department of Water Resources (DWR), this value was projected to range from \$2,663 to \$6,379. These are considered indirect benefits to each parcel and these values do not consider a cost share contribution. After considering the context of these benefits it was deemed reasonable to create a two-tier distribution. Subsequently, it is recommended undeveloped lots not containing an existing residential structure be assessed a lower rate of \$2,600, while those properties with residential structures would be assigned the full \$6,379 toward their total benefit. Those properties with structures, but not having identified damages via the economic assessment would also be assessed \$2,600. The *base costs* were computed by dividing the benefits defined in EA analysis by the number of parcels within the assessment district that are to be assessed (95).

The remaining project funding would be secured using tiered special assessments based on the net present value of damages (benefits) to the subject properties, using the EA process as a reference. The EA net present values are composite damage projections using the various factors based included in the underlying FEMA assessment criteria. Then applying a risk rating associated with flood frequency. As an example, a property flooded on a 0.2% chance (50-year) event is at greater risk for damages than one that is first impacted on a 0.1% chance (100-year) event. The protection level to the top of levee using the current effective DFIRM, is equivalent to a 0.06% event (170-year). The 2011 flood event was used in the EA to capture the benefits provided by project implementation.

The following table illustrates the range of recommended DRAFT assessments related to the property type and risk rating. The purposed assessments were established to raise the necessary funds to complete the project assuming State Water Commission cost share is secured at 60% and Lincoln Township’s participation in the Washington Street grade raise. The proposed assessments include a nominal inflationary value, and the ND Century Code allowable 25% cost increase limitation would apply and considered when the construction bids are received.

Another recommendation is to create an Operation and Maintenance (O&M) fund. This approach, utilized on the Fox Island Project, reduces the need for additional maintenance assessments during the early years after project implementation. The proposed O&M assessment as structured, \$1,000 on each parcel with a residential structure, would raise approximately \$77,000. These funds would be included in the assessments but are not used to cover project cost overruns.

As a reference the annual amount that could be raised, using the statutory criteria and current market valuations is \$3,811.49. The projected annual O&M costs are anticipated at around \$7,700 so the initial assessed funds should provide around an 11-year balance. The earlier years could have higher costs due to monitoring following construction.

Sibley Island Assessment Distribution Preliminary Projection 1-25-2023						
Category	Base Assessment^[1]	Number of Parcels	Average Damages	Recommended Assessment^{[1][2]}	Funds Generated^[3]	% of Assessment
<i>Rural Residential Lot No Structure</i>	\$2,600	18	\$2,663	\$2,600	\$46,800	6.4%
<i>Rural Residential Structure No Damages</i>	\$2,600	28	\$2,663	\$3,600 ^[3]	\$100,800	13.8%
<i>RR (2% chance)</i>	\$6,379	21	\$38,154	\$17,000 ^[3]	\$357,000	48.8%
<i>RR (1% chance)</i>	\$6,379	9	\$11,199	\$10,500 ^[3]	\$94,500	12.9%
<i>RR (0.6% chance)</i>	\$6,379	19	\$1,589	\$7,000 ^[3]	\$133,000	18.2%
<i>Non-Assessed Parcels^[4]</i>	NA	2	NA	NA	NA	NA
<i>Burleigh County (ROW)</i>	NA	4	NA	NA	NA	NA
<i>USACE (General Sibley Park)</i>	NA	NA	NA	NA	NA	NA
		Total 101 (95 Assessed)		Total	\$732,100	100%
<p>[1] All assessment values remain under review are subject to revision based on final cost projections. [2] These values consider SWC/Lincoln Twp cost share contributions, except for the "base cost". [3] Value includes the \$1,000 contribution to the project O&M fund, and a 4.5% inflationary factor for construction in 2024. [4] These parcels are either small and non-conforming or isolated through another parcel will no defined access.</p>						

The table notes categories where there will be no assessment or O&M assessments. The first are properties owned by Burleigh County, which include right of way (ROW) or small parcels that appear to have been set aside for roadways. The second are properties that either are small nonconforming rural residential lots or are isolated with no access. The third are properties owned by the United States Army Corps of Engineers (USACE), which as a federal entity is not assessed. Note there are no designated agricultural properties within the proposed assessment district.

The table identifies the funds anticipated to be raised using the recommended assessments. This is the total required, based on the current Opinion of Probable Cost (OPC), and considers SWC cost share, and Lincoln Township's commitment to the Washington Street grade raise. The latter is a portion of the 48th Avenue grade raise project postponed due to USACE timing and permitting issues. The following is a projection of those costs based on the OPC:

▪ <i>OPC (2023 Construction Estimate, and EA Value)</i>	\$ 1,853,613
▪ <i>Lincoln Township (40%) Cost Share (Washington Street)</i>	\$ 236,082
▪ <i>SWC Cost Share (60% of eligible items)</i>	\$ 1,044,718
▪ <u><i>Remaining Costs needing to be secured</i></u>	<u>\$ 572,813</u>
▪ <i>Assessment Recommendation</i>	\$ 655,100
▪ <u><i>Special O&M Assessment</i></u>	<u>\$ 77,000</u>
<i>Total Assessments</i>	\$ 732,100

These values remain subject to revision with final design, related to economic and construction costs, inflation, and funding availability. We still need to evaluate the engineering and regulatory permitting costs and update as part of the Preliminary Engineering Report. The December 22, 2022 residents letter noted a range in assessments, however until the public notice for the assessment vote is sent these are not final. The notice to the residents for the public informational meeting will include a draft special assessment by parcel.