



Houston
Engineering Inc.

LAKE SHAMINEAU LAKE IMPROVEMENT DISTRICT

**Lake Shamineau High Water Outlet Project
Project Improvement Hearing
June 27, 2023**



Introduction

- Mike Opat, PE – Project Manager- Houston Engineering, Inc. (HEI)
 - 20+ years of experience
 - Managed numerous high water outlet projects
 - Role: Assist the Lake Shamineau Lake Improvement District with the development of a permanent outlet that will mitigate the ongoing high water problems around the lake.
- The HEI team has successfully completed many similar high water outlet projects in the region.
- We design projects, we don't build them.



Presentation Outline

- **Chapter 429 Overview**
 - **Purpose**
 - **Background**
 - **Project Description**
 - **Funding**
 - **Overview of Special Assessments**
 - **Findings**
 - **Next Steps & Schedule**
 - **Comments & Questions**
-
- Please hold all questions and comments until the end of the presentation.





Minnesota Statutes Chapter 429 Overview

- **Minnesota Statutes Chapter 429: Local Improvements, Special Assessments**
 - Engineering Feasibility Report → Must show project is necessary, cost-effective, and feasible & include the estimated cost of the project as recommended (429.031)
 - Project Improvement Hearing (429.031) → [Today's Hearing](#)
 - Adoption of a resolution ordering the improvement (429.031)
 - Approve final plans and specifications & advertise the project for bids (429.041)
 - Award construction contract to the lowest responsible bidder (429.041)
 - Levy special assessments (429.061)
 - Approve final assessments and submit to County Auditor for collection (429.061)



Project Improvement Hearing

- **Process and Requirements Per Minnesota Statutes Chapter 429.031**
 - Published Hearing notice:
 - Date, time and location
 - General nature of the improvement
 - Estimated cost
 - Area to be assessed
 - Two publications in newspaper
 - Hearing notice sent to potentially assessed property owners:
 - Property owner information per County Auditor's Office
 - Include the above information from published notice
 - Per statute, include statement that a reasonable estimate of the impact of the assessment will be available at the Hearing
 - LSLID chose to provide estimated assessments ahead of time in notice mailings



Project Improvement Hearing

- Hearing Proceedings:
 - Open Hearing
 - Engineer's presentation of the Engineering Feasibility Report & findings
 - Overview of proposed special assessments:
 - "A reasonable estimate of the total amount to be assessed, and a description of the methodology used to calculate individual assessments for affected parcels, must be available at the Hearing." (429.031)
 - Refer to mailings for more details on preliminary assessments for each property
 - LSLID Board will hear comments and take questions from potentially assessed property owners regarding the proposed improvement
 - **Comments should pertain to the Board's decision to order the improvement (i.e., need, cost-effectiveness, feasibility)**
 - **Formal objections to assessments are heard at a future meeting***
 - Close Hearing
 - Board can reconvene regular meeting and consider resolutions



Project Improvement Hearing

- The Project Improvement Hearing is not an assessment hearing
 - Approximate assessments (maximum amounts) may be shared, but assessments will not be finalized until after project costs and funding components are known
 - An assessment meeting will be held at a future date (Chapter 429.061)
 - Board will hear formal objections and consider adjustments at that time
 - Meeting will likely be held in 2024
 - Methodology, data, project costs and funding could potentially change in the meantime, thus impacting the final assessments
 - Lot splits/combinations
 - New construction
 - Updated topographic data
 - Final (or near final) project costs
 - Funding/Financing costs
 - If adjustments are made to one property, every other property is impacted.
 - **Final assessments cannot exceed the values presented at the time of the Project Improvement Hearing (i.e., they can only be lowered)**



Project Purpose

The project is necessary to lower and maintain water levels in Lake Shamineau in order to address the following objectives:

- Significantly reduce the frequency of high lake stages exceeding the Ordinary High Water (OHW) elevation of Lake Shamineau causing damages to adjacent property owners.
 - Construct an artificial outlet for Lake Shamineau capable of being operated year around.
 - Reduce lake bounce duration and magnitude.
 - Return water levels in Lake Shamineau to the OHW within three years.
- Improve lake shore land management.
- Reduce lake shore erosion and improve water quality.
- Improve public access to Lake Shamineau.
- Improve access to public and private property around Lake Shamineau by reducing flooding of roads and driveways.
- Restore property values for riparian properties around the lake.



Background

Recorded Water Levels
2013-6-16 to 2023-6-16



1276.79 on
6/9/2023
1.69' above
OHWL

Historic Lake Shamineau Water Levels- Per MnDNR



Background

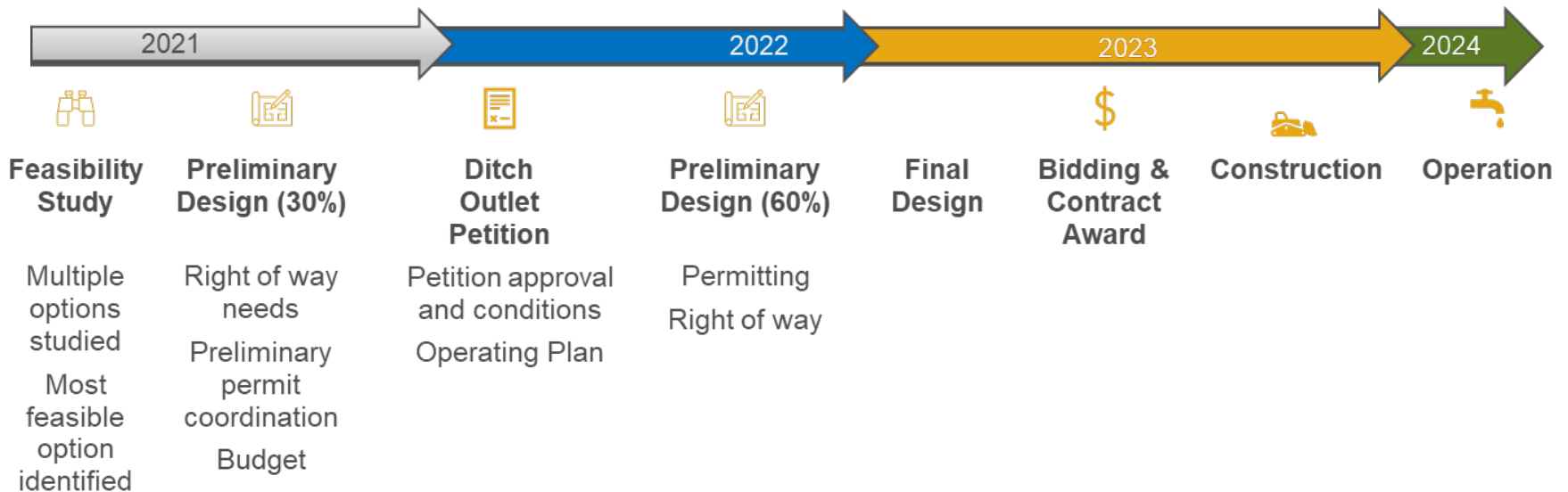
- Lake Shamineau High Water Outlet Feasibility Studies:
 - 2018 (HEI):
 - Do Nothing
 - Northeast Bound Outlet
 - Southwest Bound Outlet
 - Property Buyout
 - 2019 (Widseth):
 - Northeast Infiltration
 - 2020 (HEI):
 - West Bound Outlet
 - North route also reviewed
 - 2023 (HEI):
 - West Bound Outlet- Updated

- Copies of these studies are available on the LSLID website.



Background

LSLID Project Overview- Approach & Timeline



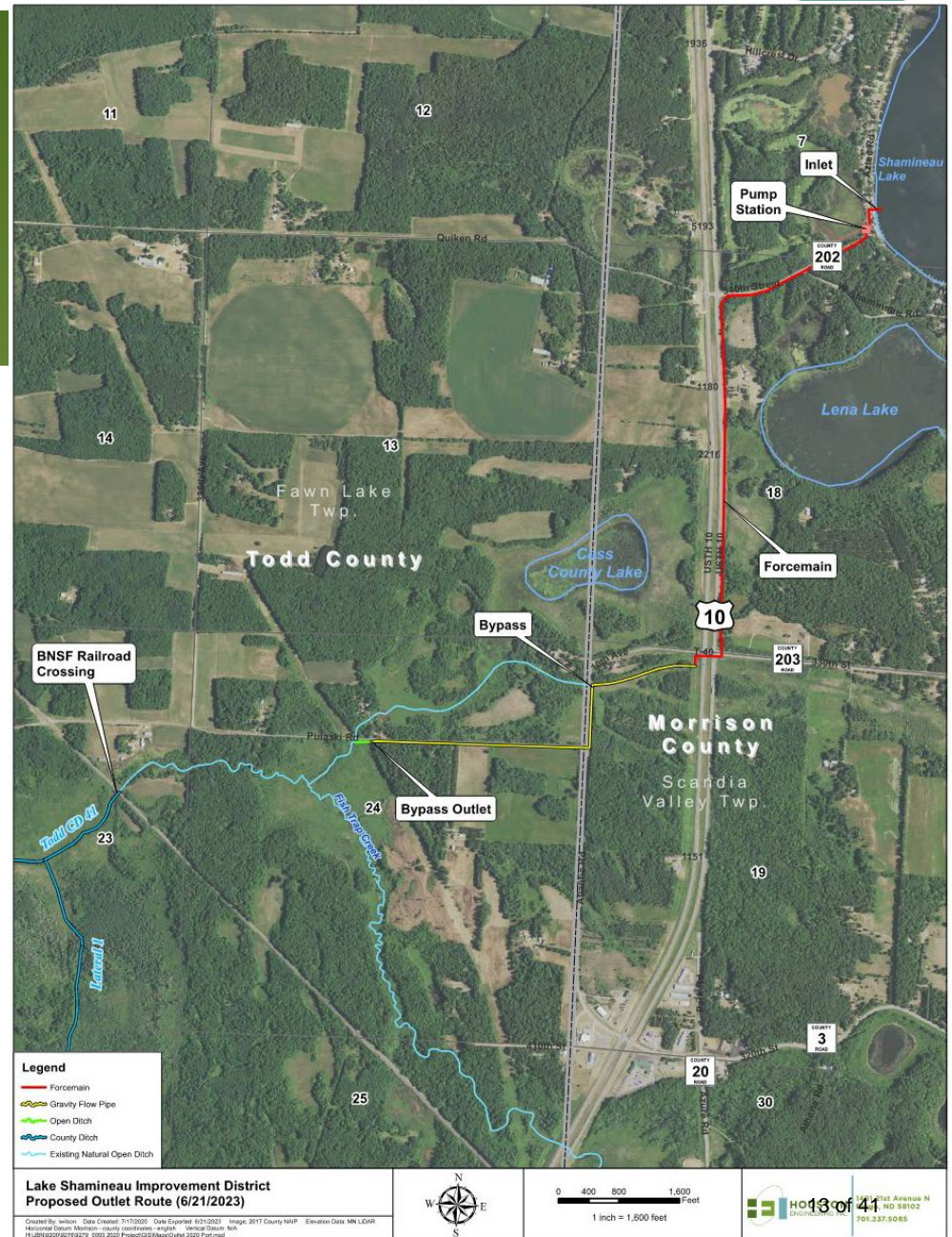


Background

- In August of 2022, the membership of the LSLID authorized the LSLID Board to proceed with a project with a maximum local cost of \$5.55 million
- Fall 2022/Winter 2023:
 - LSLID completed negotiations with landowners for easements
 - LSLID worked to secure funding from the State of Minnesota
 - HEI proceeded with final design efforts and permitting
- On June 1, 2023, Gov. Walz signed a bill that included \$3 million in grant funding to the LSLID for construction of the project

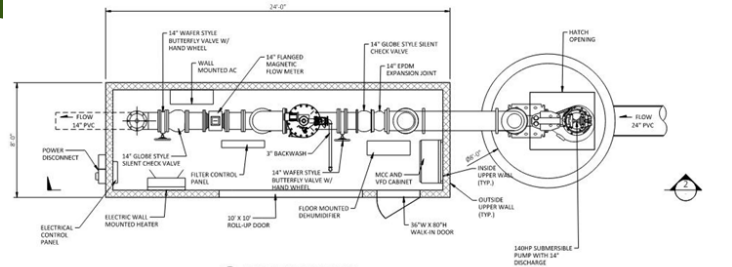
Project Description

- Lake Intake
- Pump Station
 - Pump- 10 cfs
 - AIS Filter
 - Building
- Forcemain (Pipe)
- Gravity Bypass Pipe
- Downstream
 - Fish Trap Creek/TCD 41

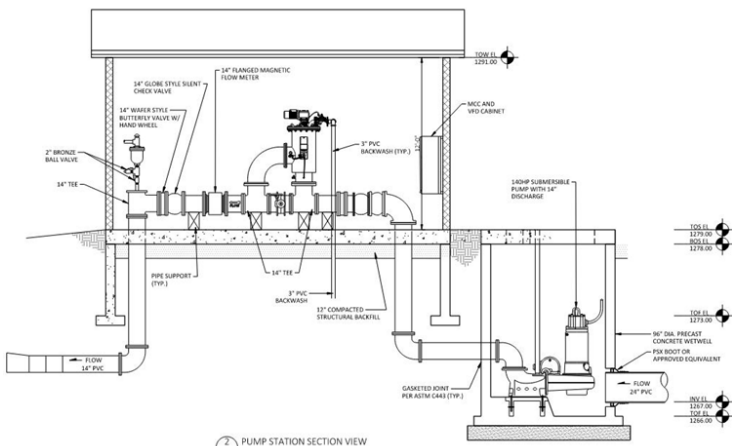




Pump Station



1 PUMP STATION PLAN VIEW



2 PUMP STATION SECTION VIEW



PRELIMINARY



Drawn by TRK
 Date 5-13-21
 Checked by MMO
 Scale AS SHOWN

LAKE SHAMINEAU OUTLET PROJECT
 LAKE SHAMINEAU LAKE IMPROVEMENT DISTRICT
 MORRISON COUNTY

PRELIMINARY



Drawn by TRK
 Date 5-13-21
 Checked by MMO
 Scale AS SHOWN

LAKE SHAMINEAU OUTLET
 LAKE SHAMINEAU LAKE IMPROVEMENT DISTRICT
 MORRISON COUNTY



Operating Plan

- The Operating Plan is a formal document that governs the operation of the LSLID High-Water Outlet project
 - States when pump can be turned on, including specific criteria for downstream properties
 - States when it must be turned off, including specific criteria for downstream properties
 - Specifies when and where downstream water flow conditions must be monitored, including specific locations along TCD 41
- The Operating Plan is a condition attached to the DNR permit for the project
- Operation is dependent upon downstream conditions, even if properties around the lake are flooding



Permitting

- **MnDOT:** Permit approved.
- **DNR:** Permit approved.
- **Morrison County:**
 - Zoning-
 - Pump station design conforms with zoning requirements
 - Permit approved.
 - Highway Department-
 - Will allow use of road of way, including road crossings
 - Permit approved.
- **Wetlands:**
 - Wetlands have been delineated and approved by Technical Evaluation Panel (TEP)
 - Wetland impacts and mitigation plan have been approved; wetland credits lined up
- **EAW:** Approved.
- **Townships:** All permits approved.
- **Todd County Drainage Authority-** Permit to utilize TCD No. 41 approved.



Right of Way/Land Rights

- **Purchase Agreements have been signed by all impacted property owners**
 - Many transactions have already been closed and recorded
 - Remaining transactions will be closed this summer; project can proceed concurrently



Estimated Project Costs

- The estimated construction costs are based on recent bids submitted by contractors on similar projects, and information from contractors and suppliers
- **A more accurate estimate of the actual cost of the LSLID project will not be known until bids are opened**
 - Actual costs could vary from estimates as market conditions, weather conditions, construction schedules, and other factors all impact the bids submitted by contractors
- Costs can also change after bids are opened due to Change Orders approved by the Board (could increase or decrease)



Estimated Project Costs

- Estimated project cost includes all anticipated costs; including:
 - Construction
 - Engineering
 - Right-of-way
 - Permitting
 - Utilities
 - Legal
 - Administration
 - Financing
 - Contingency



Estimated Project Costs

- **Contingencies:**
 - Estimates include a contingency in the budget to account for unanticipated costs that might come up, and other considerations
 - Any funds not spent would translate to a lower final project cost
 - Including a contingency is good practice and mitigates delays and financial challenges
 - Recent state grant funding will provide additional contingency support, if needed



Estimated Project Costs

- Estimated Total Construction Phase Costs: \$5,550,000
 - Construction, right-of-way, legal, engineering, permitting, contingency, etc.
 - Includes the cost of additional bypass pipe to avoid use of the existing ditch → simplifies operations, reduces risk, and reduces ongoing electrical and telecommunications costs
 - Value engineering has been ongoing and will be considered during final design, bidding and construction



Other Considerations

- Lead Times for Materials:
 - PVC pipe → +/- 4 weeks
 - Pump → +/- 14 weeks
 - Filter → +/- 15 weeks
- Staging areas have been secured by LSLID to provide contractors with locations to store materials/equipment
- Construction timeline selected by LSLID includes frozen conditions that may allow contractors to work through ice for lake intake and trench through frozen wetlands → hopefully lower bids



Funding

- **Grants:**
 - LSLID received a \$3 million grant from the Minnesota Legislature
 - Requires 50% local match & not all costs are eligible for reimbursement
- **Financing:**
 - LSLID will secure interim financing to cover expenses during construction
 - Long-term financing (i.e., 5-20 years) will then be secured through public bond sales
 - Bonds require at least 20% of the project to be funded through special assessments, per Minnesota Statutes.
- **Charges:**
 - LSLID will fund a portion of the project through the LID's current charge process (estimated to be 60%-80% of remaining local share)
- **Special Assessments:**
 - LSLID will fund a portion of the project through the Chapter 429 special assessments (estimated to be 20%-40% of remaining local share)



Charges

- Total LSLID Charge Amount for Project = \$3.33 million (60%)
 - Standard Charge = \$9,364.46 (Estimated per property charge rate)
 - Information on charges related to the Lake Shamineau High Water Outlet Project is included on page 2 of the letter that was mailed to each property owner.
- Charges are entirely separate from the Chapter 429 statutes and process



Special Assessment Overview

- The LSLIDA established a committee to develop an assessment methodology and prepare a preliminary assessment list
 - The committee developed a methodology that is similar to other lake outlet projects, but tailored to Lake Shamineau
 - Utilized best available data
 - County Auditor/County GIS parcel information (current as of May 1, 2023)
 - LIDAR topography (2011)
 - Aerial photography (2021)
 - Property review & verifications (Winter/Spring 2023)
 - Sought to identify a methodology that is:
 - Reasonable
 - Equitable
 - Not arbitrary
 - Appropriately addressing 90+% of the properties, with the remainder addressed individually as needed



Special Assessment Overview

- **Three-tiered calculation for each property:**
 - **Tier 1: Direct benefits to each property (35%)**
 - 20% based on building elevation (per LIDAR topography)
 - 15% based on lot frontage (lake frontage per county parcel data) w/400' cap
 - **Tier 2: Indirect drainage benefits to each property (30%)**
 - Based on average lot elevation of OWHL (per LIDAR topography)
 - **Tier 3: Overall benefit to each property (35%)**
 - Each assessed property shares equally



Special Assessment Overview

Committee analyzed and addressed the following:

- Considerations for commercial and association properties
- Exclusion of properties owned by public entities (e.g., state, township)
 - The LSLID cannot force those entities to pay assessments
- Cap on lot/lake frontage
- Identifying building structures
- Categories within Tier 1 for building elevation
- Categories within Tier 2 for average lot elevation
- Allocation of benefit percentages amongst each tier and component
- Ownership of multiple and/or adjacent lots



Special Assessment Overview

LAKE SHAMINEAU HIGH WATER OUTLET PROJECT

SPECIAL ASSESSMENTS

Version: 9	Date: 5/12/2023	Data & Results Used for Engineering Feasibility Report/Project Improvement Hearing					
Project Details:							
Total Project Cost:	\$5,550,000						
Total LSLID Charge Amount:	\$3,330,000	60.0%					
Total LSLID Assessment Amount:	\$2,220,000	40.0%					
Riparian properties:	317	(Not commercial or assoc.)					
Association properties:	14	(Riparian & Non-riparian)					
Commercial properties:	7	(Riparian)					
Minimum total assessment:	\$2,525.87						
Maximum total assessment:	\$10,992.13						
Average total assessment:	\$6,587.54						
Median total assessment:	\$6,354.79						
LSLID Assessment Summary:							
Tier 1: Direct Benefit		Tier 2: Indirect Drainage Benefit			Tier 3: Overall LID Benefit		
Tier 1 percentage of total:	35%	Tier 2 percentage of total:	30%	Tier 3 percentage of total:	35%		
Tier 1 total assessment (target):	\$777,000	Tier 2 total assessment (target):	\$666,000	Tier 3 total assessment (target):	\$777,000		
Tier 1 total assessment (actual):	\$777,000	Tier 2 total assessment (actual):	\$666,000	Tier 3 total assessment (actual):	\$777,000		
Tier 1 minimum:	\$1,059.00	Tier 2 minimum:	\$1,583.83	Tier 3 minimum:	\$2,305.64		
Tier 1 maximum:	\$5,518.84	Tier 2 maximum:	\$3,167.66	Tier 3 maximum:	\$2,305.64		
Tier 1 components:		Drainage Benefit			Total parcels:	337	
Building elevation benefit %:	20%	Category	Avg. Parcel Elev. Above OHWL	Benefit Share	Benefit %	Benefit \$	# Parcels
Building elevation benefit \$:	\$444,000	I	0-2.99'	1	100.00%	\$3,167.66	62
Lake front footage benefit %:	15%	II	3.00'-6.0'	3/4	75.00%	\$2,375.74	61
Lake front footage benefit \$:	\$333,000	III	>6'*	1/2	50.00%	\$1,583.83	205
Lake Shamineau OHWL:	1275.1	*elevations greater than this are higher than the run-out elevation of 1280.1					328
Building Elevation Benefit					Common benefit %:	100.00%	
Category	Building Elev. Above OHWL	Benefit Share	Benefit %	Benefit \$	# Parcels	Assessment/parcel	\$2,305.64
I	0-2.99'	1	100.00%	\$2,002.25	84		
II	3.00'-6.0'	3/4	75.00%	\$1,501.69	65		
III	>6'*	1/2	50.00%	\$1,001.13	178		
*elevations greater than this are higher than the run-out elevation of 1280.1							327



Special Assessment Overview

- Current calculations reflect:
 - Total construction phase cost= \$5.55 million (state grant funds not included)
 - Special assessments= \$2.22 million (40%)
 - Charges= \$3.33 million (60%)
- LSLID still determining how \$3 million in state funding will impact assessments
 - Eligible vs. Ineligible items
- LSLID Board will determine how the remaining local share will be split between charges and assessments



Special Assessment Overview

- These are maximum assessment amounts; assessments can only go down per Chapter 429
- If adjustments are made to one property, assessments on all other properties are impacted
- LSLID will refine methodology and calculations ahead of future assessment meeting
 - Notices for that meeting will reflect revised assessment values
 - Final assessments will be determined after Board hears input from property owners at the assessment meeting



Special Assessment Overview

Version: 9	Date: 5/12/2023	Data & Results Used for Engineering			
Project Details:					
Total Project Cost:	\$5,550,000				
Total LSLID Charge Amount:	\$3,330,000	60.0%			
Total LSLID Assessment Amount:	\$2,220,000	40.0%			
Riparian properties:	317	(Not commerical or assoc.)			
Association properties:	14	(Riparian & Non-riparian)			
Commercial properties:	7	(Riparian)			
Minimum total assessment:	\$2,525.87				
Maximum total assessment:	\$10,992.13				
Average total assessment:	\$6,587.54				
Median total assessment:	\$6,354.79				



Special Assessment Overview

Tier 1: Direct Benefit					
Tier 1 percentage of total:	35%				
Tier 1 total assessment (target):	\$777,000				
Tier 1 total assessment (actual):	\$777,000				
Tier 1 minimum:	\$1,059.00				
Tier 1 maximum:	\$5,518.84				
Tier 1 components:					
Building elevation benefit%:	20%				
Building elevation benefit \$:	\$444,000				
Lake frontfootage benefit%:	15%				
Lake frontfootage benefit \$:	\$333,000				
Lake Sharnineau OHWL:	1275.1	NGVD 29			
Building Elevation Benefit					
Category	Building Elev. Above OHWL	Benefit Share	Benefit %	Benefit \$	# Parcels
I	0-2.99'	1	100.00%	\$2,002.25	84
II	3.00'-6.0'	3/4	75.00%	\$1,501.69	65
III	>6'	1/2	50.00%	\$1,001.13	178
*elevations greater than this are higher than the run-out elevation of 1280.1					327
Building Elevation Benefit					
Category	Min. Building Elev. Above OHWL	Max. Building Elev. Above OHWL	Benefit %		
I	0	2.99	100.00%		
II	3	6	75.00%		
III	6.01	10000	50.00%		
Lake Front Footage Benefit					
Lake Front Footage Cap	400	feet			
Minimum Width	15.42	feet			
Maximum Width (uncapped)	3,108.13	feet			
Total Width (uncapped)	53,570.06	feet			
Total Width (capped)	37,877.69	feet			
\$/ft (capped)	\$8.79	/ft			
Minimum Frontage Assessment:	\$135.54				
Maximum Frontage Assessment:	\$3,516.58				



Special Assessment Overview

Tier 2: Indirect Drainage Benefit

Tier 2 percentage of total:	30%
Tier 2 total assessment (target):	\$666,000
Tier 2 total assessment (actual):	\$666,000
Tier 2 minimum:	\$1,583.83
Tier 2 maximum:	\$3,167.66

Drainage Benefit

Category	Avg. Parcel Elev. Above OHWL	Benefit Share	Benefit %	Benefit \$	# Parcels
I	0-2.99'	1	100.00%	\$3,167.66	62
II	3.00'-6.0'	3/4	75.00%	\$2,375.74	61
III	>6'*	1/2	50.00%	\$1,583.83	205
*elevations greater than this are higher than the run-out elevation of 1280.1					328



Special Assessment Overview

- **Reminders:**

- The current assessments are preliminary
- Final assessment values will be the same or lower (likely lower)
- Assessments will not be finalized until some time in 2024
- Questions and comments specific to assessments are not considered as part of the Project Improvement Hearing



Special Assessment Overview

- If you have questions or comments on your preliminary assessment...
 - Submit in writing to the LSLID Board via email at LSLIDBD@gmail.com
 - Include name, address, parcel number, and state question/comment
 - This is an informal step that is not intended to take the place of the formal Chapter 429 process for filing objections to assessments
- Final assessments will be calculated and distributed prior to the formal final assessment hearing (likely 2024), per statutes



Findings

- As documented in the Engineering Feasibility Report dated May 12, 2023, the proposed improvement project was determined to be:
 - ✓▪ Necessary
 - ✓▪ Cost-effective
 - ✓▪ Feasible



Next Steps

- After the Project Improvement Hearing:
 - Board will consider resolution ordering the improvement
 - If approved, the next steps will include:
 - Final design
 - Bidding
 - Interim Financing
 - Construction
 - Project Operation
 - Assessment Hearing
 - Long-term Financing
- } Order could change



Schedule

- Board considers resolution ordering improvement: June 27, 2023
- Final design: June/July 2023
- Bidding
 - Advertisement: July 2023
 - Bid Opening: Late July 2023
- Contract Administration: August 2023
- Construction:
 - Start: +/- September 2023
 - Completion:
 - Substantial (i.e., pumps operable)= July 31, 2024
 - Final (i.e., seeding, calibration, site restoration)= September 30, 2024
- Assessment Hearing: 2024



Comments and Questions

- The LSLID Board will hear comments and take questions from LID members and property owners that are proposed to be assessed regarding the proposed improvement
 - The Board will not respond to questions at this time from persons that do not own property involved in the assessments
 - **Comments must pertain to the Board's decision to order the improvement (i.e., need, cost-effectiveness, feasibility)**
 - Formal objections to assessments will be heard at a future meeting, which will likely occur in 2024 (depending upon project completion)



Comments and Questions

- The LSLID Board has designated a moderator to call upon speakers in an orderly fashion
 - Comments and questions must be offered at the designated speaking location in the meeting room, or when called upon via Zoom
 - Speakers must state their name and the address of the potentially assessed property they own
 - Speakers will be limited to 3 minutes until everyone wishing to speak has an opportunity to speak
 - Additional opportunities to speak may be granted at the Board's discretion if time allows (additional 2 minutes per speaker)
- The LSLID Board is not required to respond to comments or questions
 - Comments will be noted, but not addressed
 - Members of the Board may answer questions or direct consultants to answer questions at the Board's discretion