

# ENGINEER'S ESTIMATE

PROJECT: **Wastewater System Improvements Project**  
CLIENT: **Village of Three Oaks**  
DATE: **October, 2022**

## Planning Costs

Planning Work Completed to Date	\$	106,000
Work Plan for Sludge Removal	\$	4,500
Round 3 of High Strength Users Investigation and Final Report	\$	5,000
Workplan and Report for Lagoon Soils Investigation	\$	5,000
Collection System Assessment	\$	50,000
Collection System CCTV	\$	175,000
Update to lagoon Inspections	\$	3,500
Legal Fees for Sewer Ordinance and ACO Negotiations	\$	15,000
Create Sewer System Asset Management Plan	\$	40,000
Project Plan and EGLE CWSRF Application	\$	45,000

## Design Engineering Costs

Assumed at 9%	\$	263,000
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## Legal/Financial Services Fees

Assumed at 2%	\$	59,000
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## Administrative Costs

Assumed amount	\$	1,500
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## Bond Counsel Fees

Assumed at 1%	\$	30,000
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## Bond Advertising Costs

Assumed amount	\$	3,000
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## Bid Advertising Costs

Assumed amount	\$	1,000
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## Construction Engineering Costs

Assumed at 11%	\$	321,000
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## Construction Costs

Miscellaneous Lagoon Improvements	\$	47,500
Lagoon Bank Erosion Repair	\$	587,520
Lagoon Aeration System - Per Nexom Quotation	\$	560,000
Blower Building & Internal Air Supply Header	\$	154,280
Air Supply Piping & Associated Site Work	\$	113,290
Screening	\$	348,060
Electrical	\$	172,960
Permanent Bypass Pump	\$	93,440
Lift Station Improvements	\$	130,000
Collection System Pipe Lining:	\$	285,000
Lift Station Rehabilitation	\$	300,000
Manhole Improvements	\$	125,000

## Project Contingency

10% of All Costs	\$	323,450
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**TOTAL ESTIMATED CWSRF BOND AMOUNT: \$ 4,368,000**