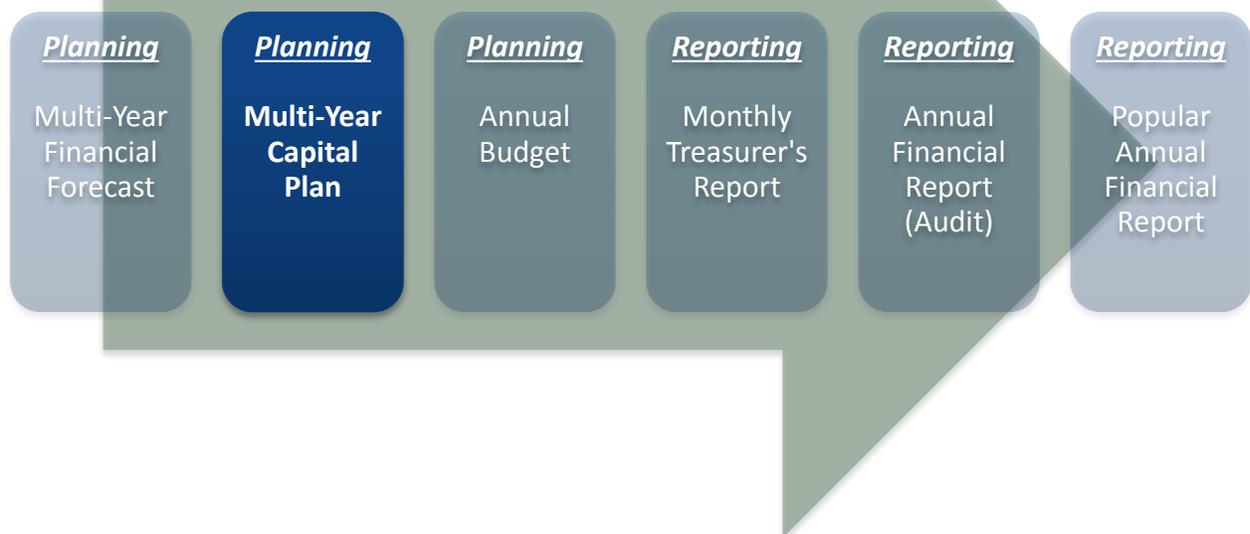




VILLAGE OF ROUND LAKE BEACH Illinois

Financial Planning & Reporting Process



Multi-Year Capital Plan

Fiscal Years 2015 - 2024

(May 1, 2014 – April 30, 2024)

Prepared By: Finance Department

Presented: January 20, 2014

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Table of Contents

TABLE OF CONTENTS	3
PLAN OVERVIEW	4
Purpose	4
Definitions.....	4
Accounting.....	5
Overall Funding Strategy	5
TRANSPORTATION SYSTEM	6
Overview	6
Ratings & Benchmarks.....	6
Assumptions & Approach	6
Funding Plan	7
System Rating Map.....	8
Maintenance & Replacement Plan	9
WATER SYSTEM	19
Overview	19
Ratings & Benchmarks.....	19
Assumptions Approach.....	19
Funding Plan	20
System Map.....	21
Maintenance & Replacement Plan	22
SANITARY SEWER SYSTEM	28
Overview	28
Ratings & Benchmarks.....	28
Assumptions Approach.....	28
Funding Plan	29
System Map.....	30
Maintenance & Replacement Plan	31
STORM SEWER SYSTEM	35
Overview	35
Ratings & Benchmarks.....	35
Assumptions Approach.....	35
Funding Plan	36
System Map.....	37

Plan Overview

Purpose

The Village's Multi-Year Capital Improvement Plan (CIP) is part of the Village's long term strategic planning and is presented annually as part of the financial planning and reporting process. Each year, Village staff meets with the Village's Engineering consultants to update the CIP. The updated Plan is then presented to the Village Board in the fall in conjunction with the Multi-Year Financial Forecast which outlines available capital funding.

The process for preparing the plan includes identifying the inventory of assets requiring maintenance, repair or replacement, with particular attention to those assets that are essential to the Village's mission and long-term vision for the community. The plan focuses on the 4 main systems of infrastructure; Transportation, Water, Storm Sewer and Sanitary Sewer.

Definitions

Capital Assets - Tangible and intangible assets that are used in operations and that have initial useful lives that extend beyond a single reporting period. They include land, land improvements, easements, buildings and improvements, machinery and equipment, infrastructure and works of art and historical treasures.

Infrastructure - Capital assets include infrastructure assets which are long-lived capital assets that normally are stationary in nature and can be preserved for a significantly greater number of years than most capital assets. Infrastructure assets include roads, bridges, tunnels, drainage systems, water and sewer systems, dams and lighting systems. A government with the primary responsibility for managing infrastructure assets reports that asset, even if a third party maintains it under contract.

Estimated Useful Life – The period during which an asset is expected to be useful to the Village, usually stated in years. The standards or parameters for estimating the useful lives of capital assets are based on professional judgments and industry averages, therefore determined to be objectively reasonable.

Maintenance Activities – For the purposes of this plan maintenance activities are routine maintenance on an asset with a cost greater than \$5,000.

Accounting

As a local government organization the Village utilizes Fund Accounting to account for various resources and activities. The Village accounts for the replacement and major maintenance of its infrastructure assets in various funds to segregate the resources available. The various funds and a description of each follows;

Water Capital Fund (12) – This fund accounts for all capital needs related to the Village’s water system. Funds are transferred from the Village’s water & sewer operating fund to cover the cost of capital.

Sewer Capital Fund (13) – This fund accounts for all capital needs related to the Village’s sanitary sewer capital assets.

Bond Funded Capital (72) – This fund accounts for the proceeds and expenditures from bond issuance to fund capital projects.

Motor Fuel Tax Fund (21) – This fund accounts for proceeds from Motor Fuel Taxes, which by statute, are to be utilized for transportation related projects. Traditionally the Village utilizes MFT funds for debt service and maintenance and replacement of Transportation System assets.

General Capital Projects Fund (85) – This fund accounts for all other Village assets unrelated to the water & sanitary sewer systems including, roadways and storm sewer systems, buildings and building improvements, and land.

TIF #4 Capital Fund (44) - This fund accounts for proceeds from TIF district #4 used to fund capital improvements within the boundaries of the TIF.

Overall Funding Strategy

The funding strategy for the CIP includes utilizing expiring debt service, incremental rate adjustments, revenues from new growth and grant funding. The approach to developing a funding strategy included the following parameters;

- Funding must come from existing revenue streams and charges
- Target a 50/50 balance between pay-as-you-go and debt funding
- Term of debt will not exceed useful life of the asset
- No increase in the amount of outstanding debt over time

Recognizing the immediate need for infrastructure improvements and the lack of immediate funding for the total costs on a pay as you go basis, the Village has established a funding strategy that allows for large infusions of funding through General Obligation bond issues or low-interest loans in addition to the pay as you go portion for the Transportation and Water systems.

Transportation System

Overview

The Village's Transportation System is comprised of 80 center lane miles of roadway with much of it having curb & gutter. The system also includes concrete sidewalks for pedestrian traffic.

Roadways require routine maintenance such as crack sealing, striping and patching to achieve the maximum useful life of the surface. Resurfacing occurs approximately every 15-20 years to replace the surface given a sound structural road base underneath. Without the structural base, a full reconstruction of the roadway is required at a much higher cost. Sidewalks require maintenance periodically throughout their life consisting of lifting and concrete repair.

Ratings & Benchmarks

In 2013, the Village rated all roadways to determine the most cost effective use of funds. The system rates the pavement condition and assigns a Pavement Condition Index (PCI) factor on a scale of 1-100, with 100 being new. Ratings are updated every 5 years.

Assumptions & Approach

The Transportation System plan is based on a few broad assumptions;

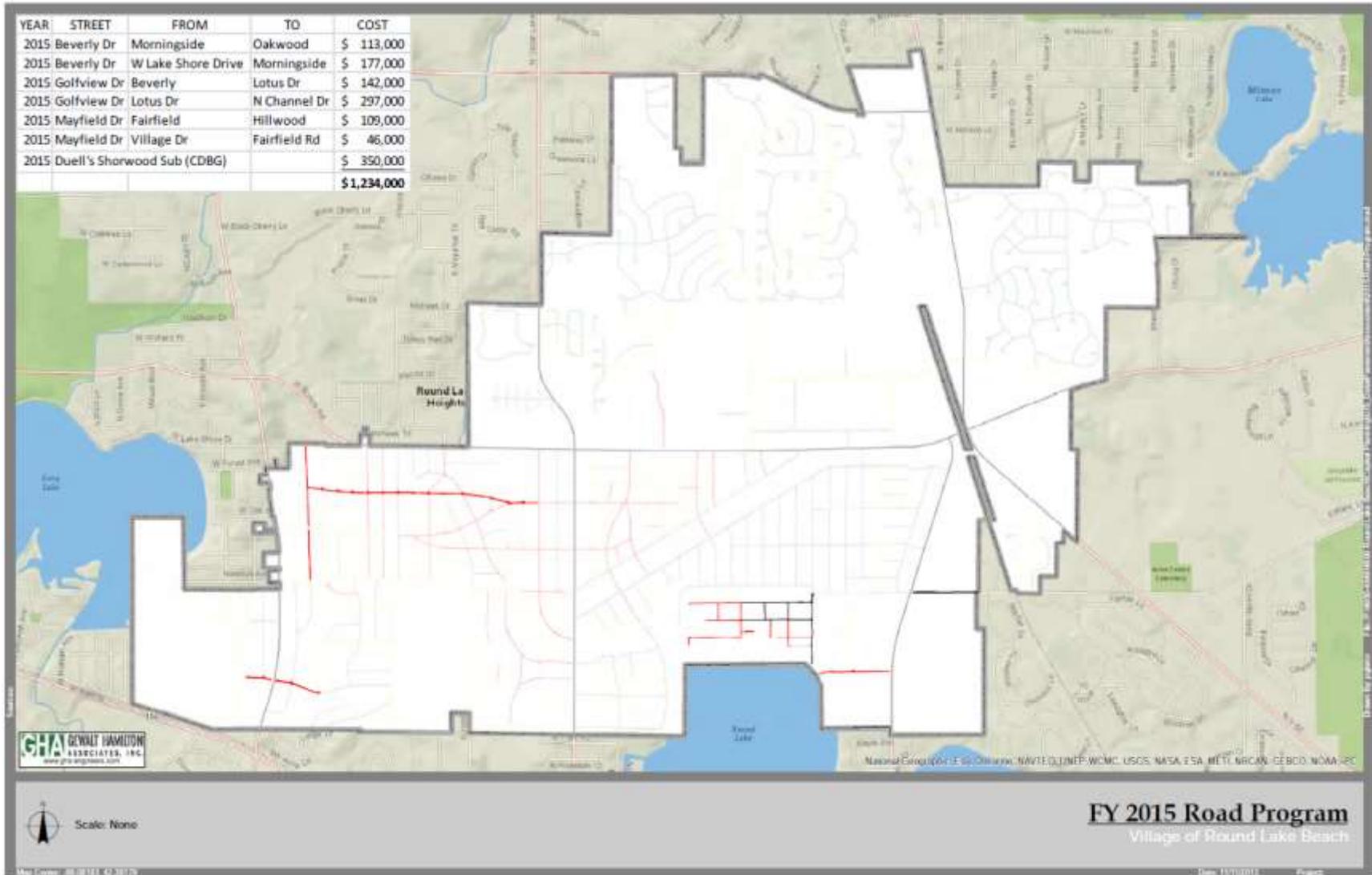
- All replacements are in-kind, no enhancements or new infrastructure is assumed without a dedicated funding source
- Replacement is timed in conjunction with utility and maintenance program work
- Compliance with State and Federal regulations
- Divide streets into 3 categories based on a PCI of <40, 40-80, >80
 - Resurface the roads with a PCI rating <40 within the next 5 years
 - Resurface the roads with a PCI rating 40-80 in the next 5-10 years
 - Resurface the roads with a PCI rating >80 in the next 10-15 years
- Routine maintenance programs stay at least 3-years ahead of road resurfacing program

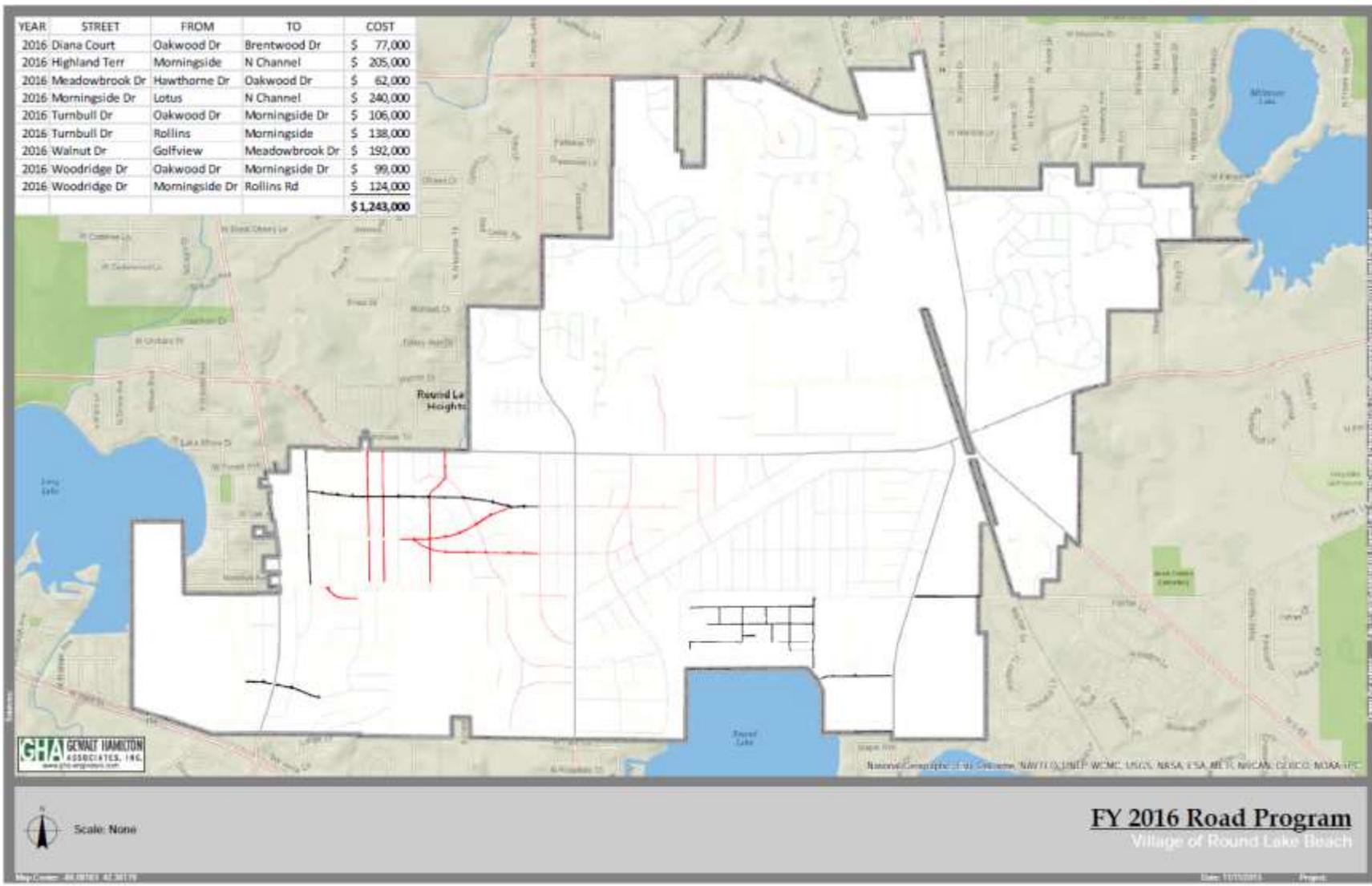
Funding Plan

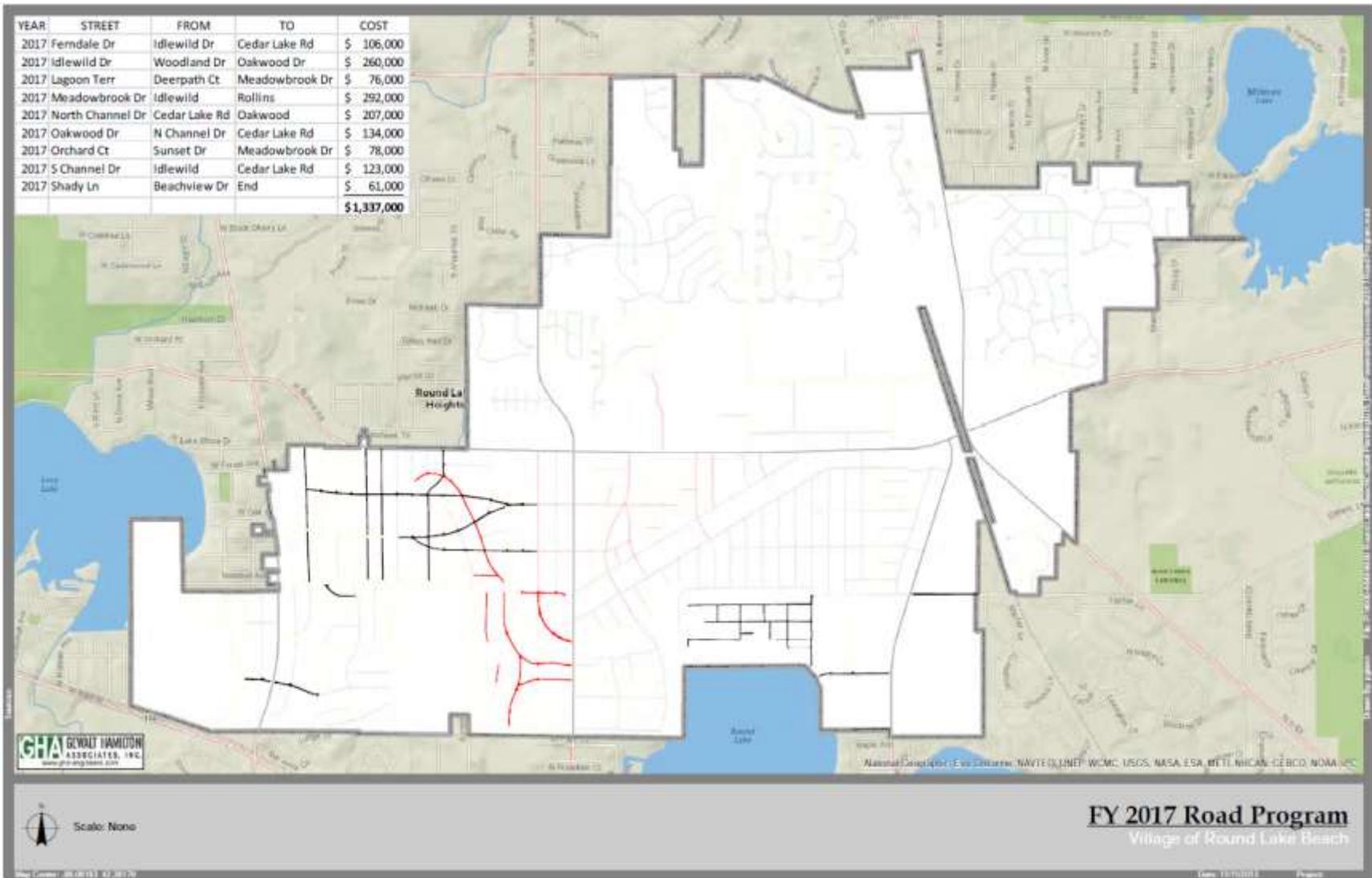
The funding plan for the transportation system utilizes existing reserves, expiring debt, savings from operating efficiencies and revenue from new growth. The debt portion of the funding model consists of a 15 year \$5 million bond issue every 5 years. The pay-as-you-go portion of the program consists of Motor Fuel Tax funds and savings from efficiencies and growth directed to the General Capital Fund. The following graphic depicts the funding model for the 10-year period.

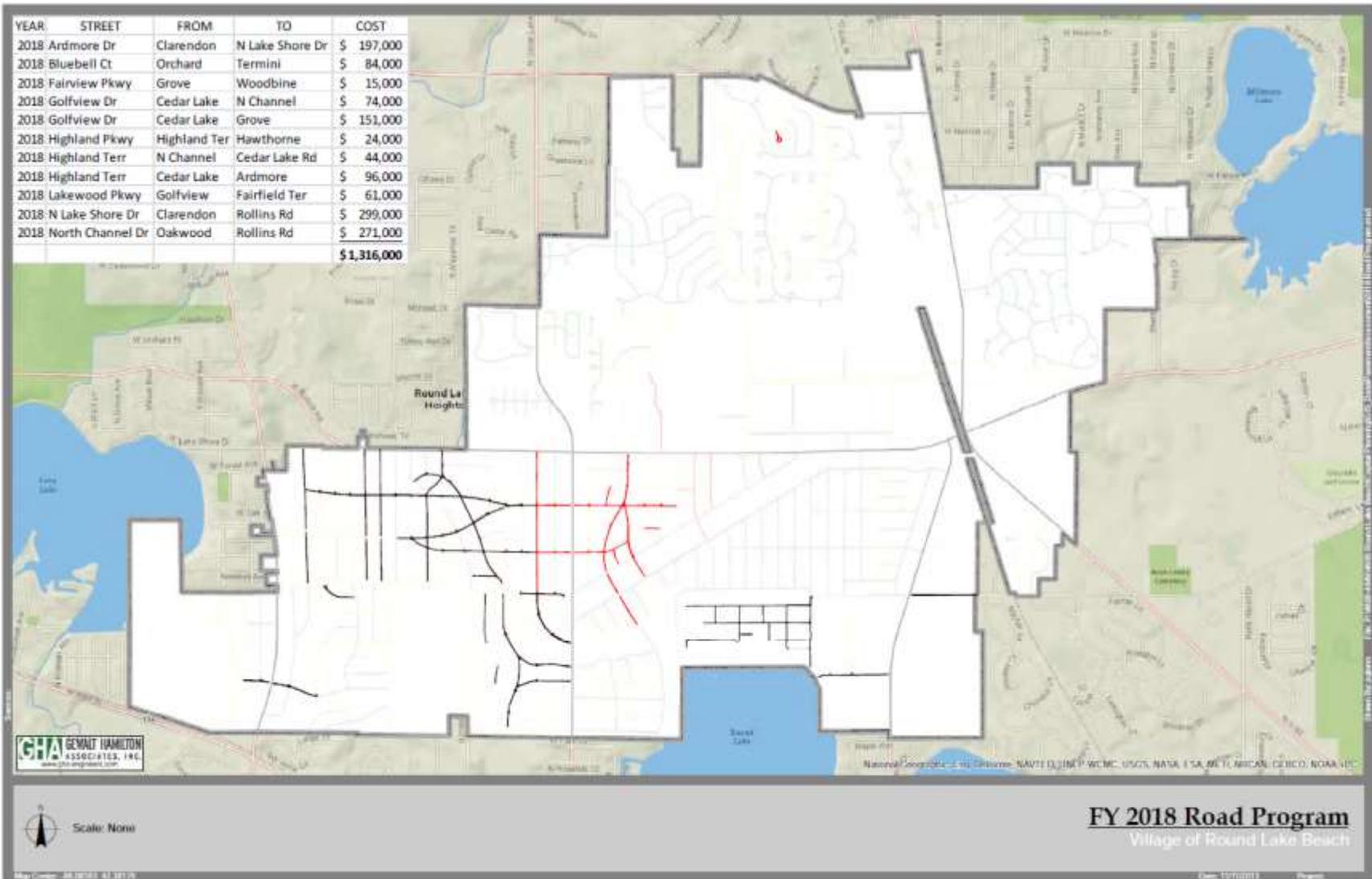
Description	Fund	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
		Preliminary	Projected								
Transportation System											
Funding											
General Capital Fund (85)	85	\$745,000	\$970,375	\$994,634	\$1,019,500	\$6,044,988	\$1,071,112	\$1,097,890	\$1,125,338	\$1,153,471	\$6,182,308
Motor Fuel Tax Fund (21)	21	\$823,026	\$667,030	\$680,371	\$693,978	\$707,858	\$722,015	\$736,455	\$751,185	\$766,208	\$781,532
Total Transportation System Funding		\$1,568,026	\$1,637,405	\$1,675,005	\$1,713,479	\$6,752,846	\$1,793,128	\$1,834,346	\$1,876,522	\$1,919,679	\$6,963,840
Expenditures											
Sealcoating (PW Lot)	85	\$15,000	\$15,375	\$15,759	\$16,153	\$16,557	\$16,971	\$17,395	\$17,830	\$18,276	\$18,733
Sidewalk & Curb Repair	85	\$25,000	\$25,625	\$26,266	\$26,922	\$27,595	\$28,285	\$28,992	\$29,717	\$30,460	\$31,222
Crack Sealing	85	\$40,000	\$41,000	\$42,025	\$43,076	\$44,153	\$45,256	\$46,388	\$47,547	\$48,736	\$49,955
Patching	85	\$110,000	\$112,750	\$115,569	\$118,458	\$121,419	\$124,455	\$127,566	\$130,755	\$134,024	\$137,375
Pavement Marking	85	\$25,000	\$25,625	\$26,266	\$26,922	\$27,595	\$28,285	\$28,992	\$29,717	\$30,460	\$31,222
Resurfacing/Replacement	Paygo 85	\$530,000	\$750,000	\$768,750	\$787,969	\$807,668	\$827,860	\$848,556	\$869,770	\$891,514	\$913,802
Resurfacing/Replacement	Debt 85	\$0	\$0	\$0	\$0	\$5,000,000	\$0	\$0	\$0	\$0	\$5,000,000
Resurfacing/Replacement	Paygo 21	\$823,026	\$667,030	\$680,371	\$693,978	\$707,858	\$722,015	\$736,455	\$751,185	\$766,208	\$781,532
Total Transportation System Expenditures		\$1,568,026	\$1,637,405	\$1,675,005	\$1,713,479	\$6,752,846	\$1,793,128	\$1,834,346	\$1,876,522	\$1,919,679	\$6,963,840

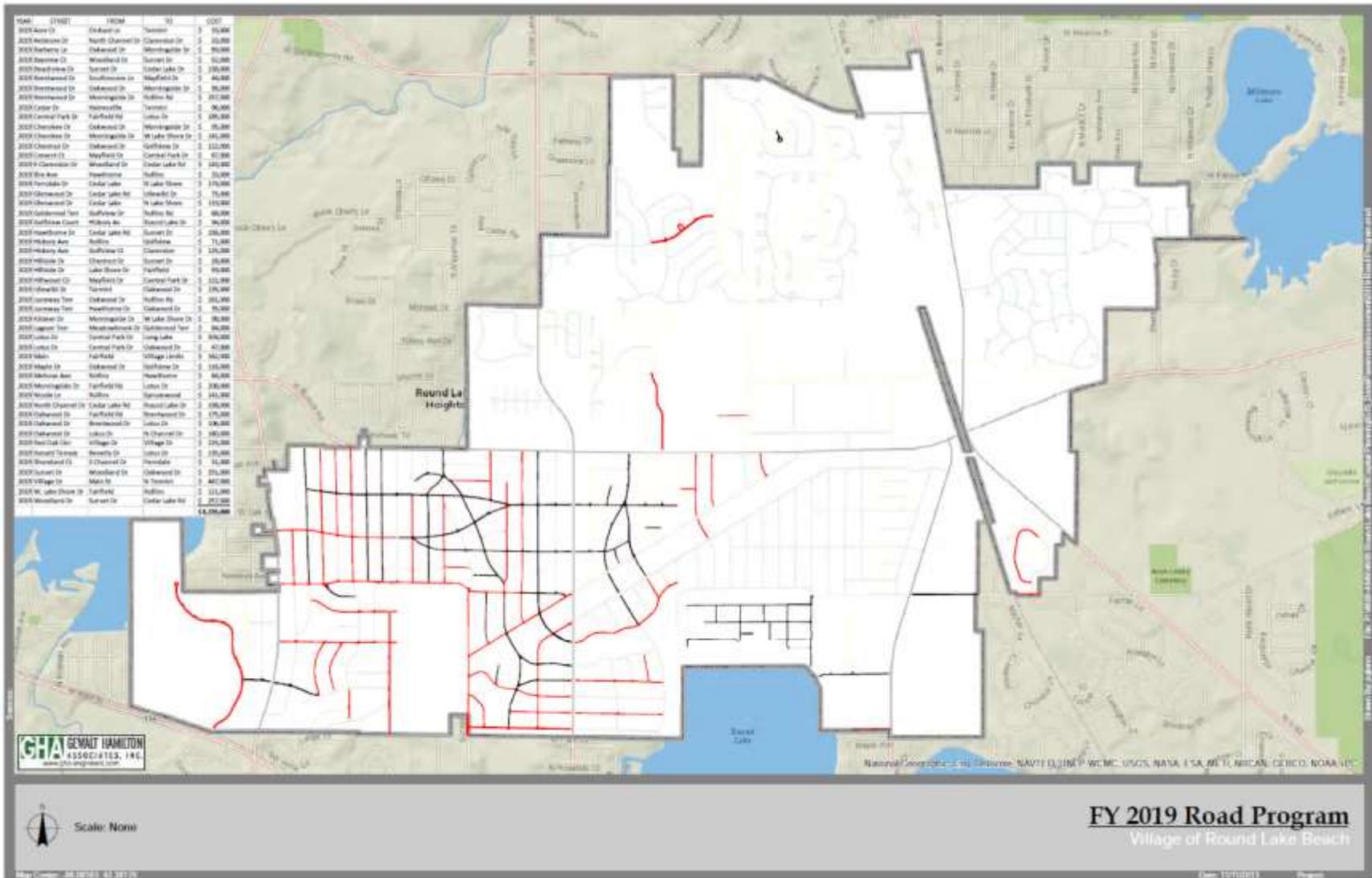
Maintenance & Replacement Plan

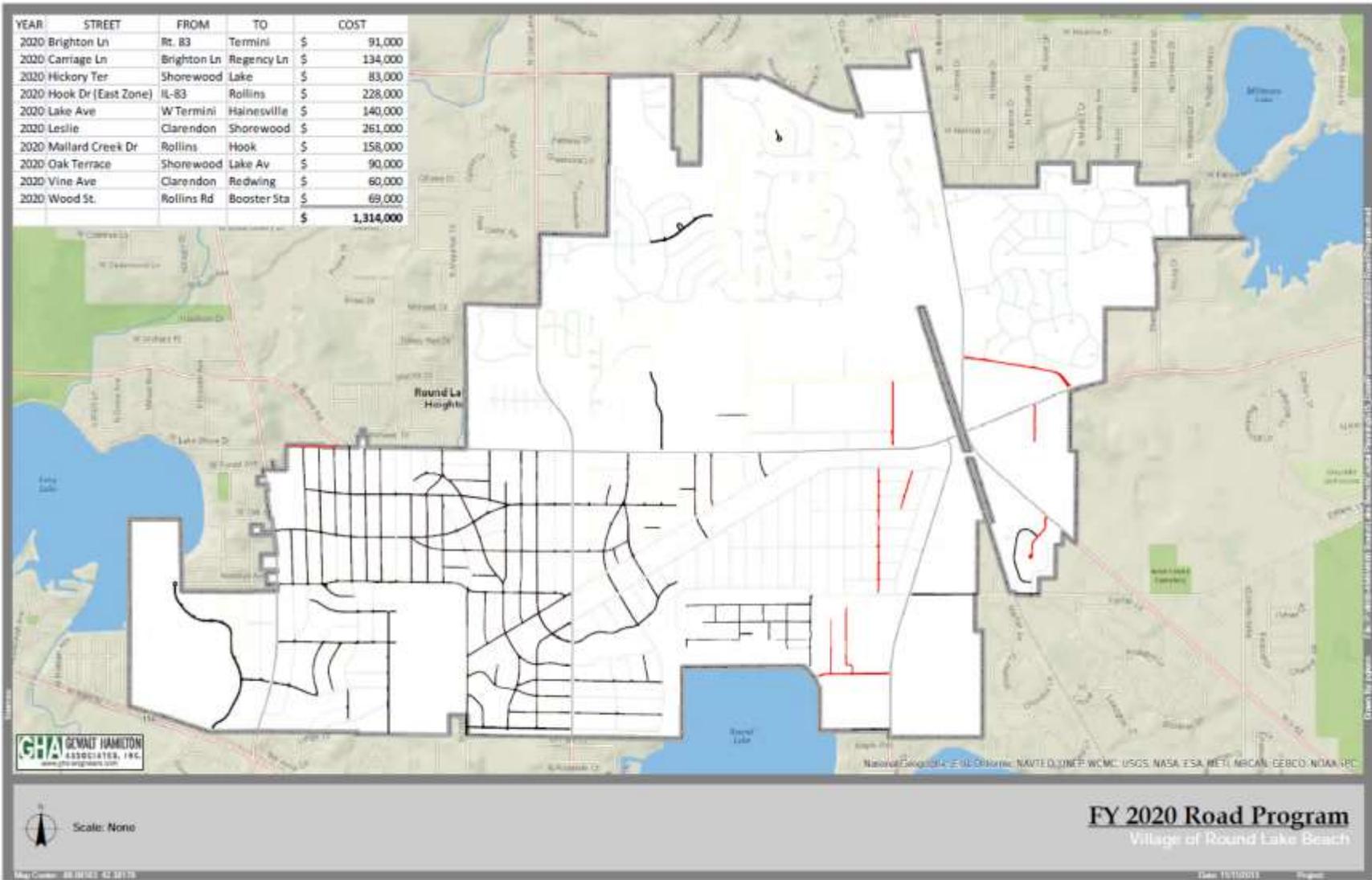


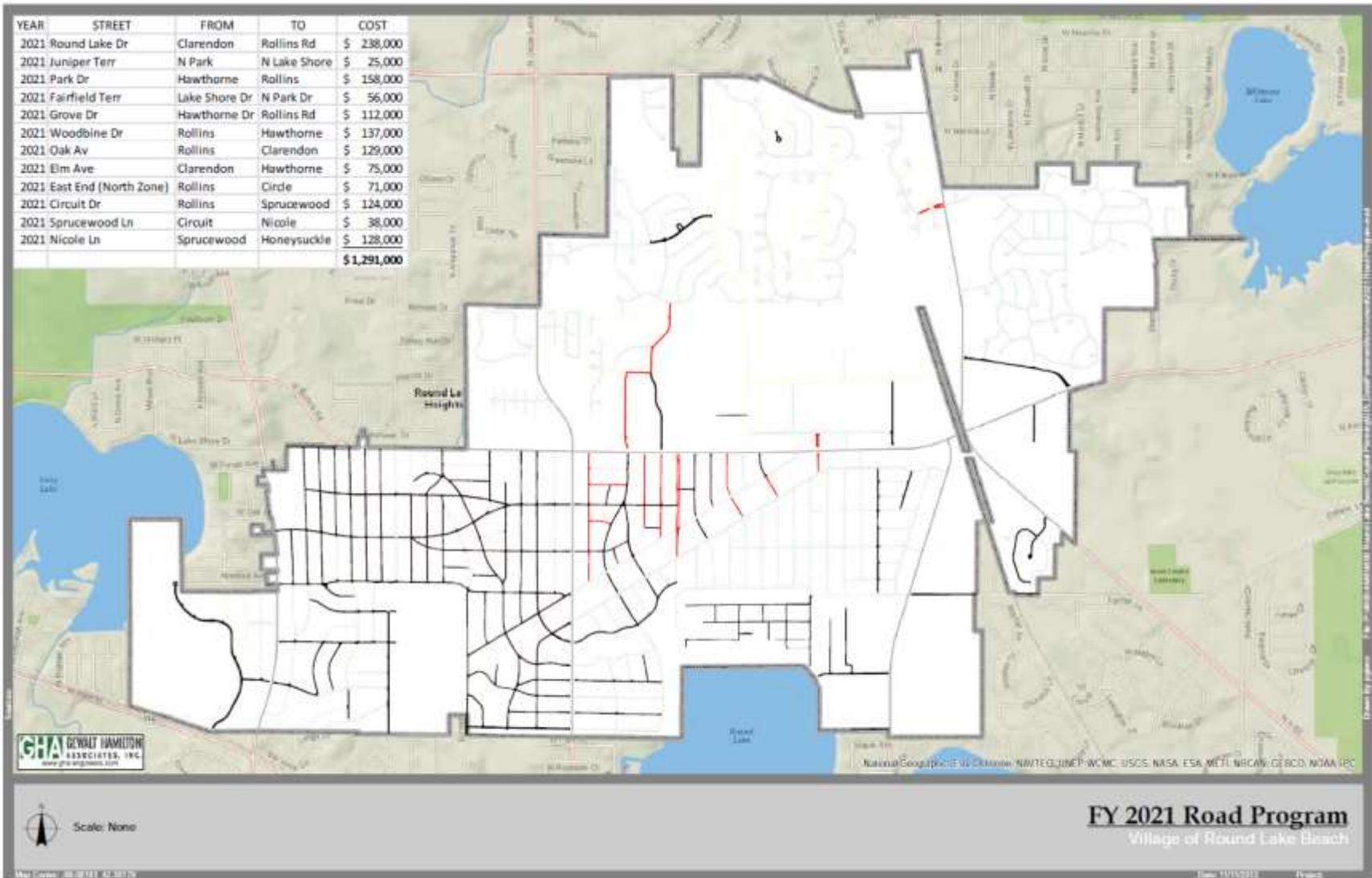


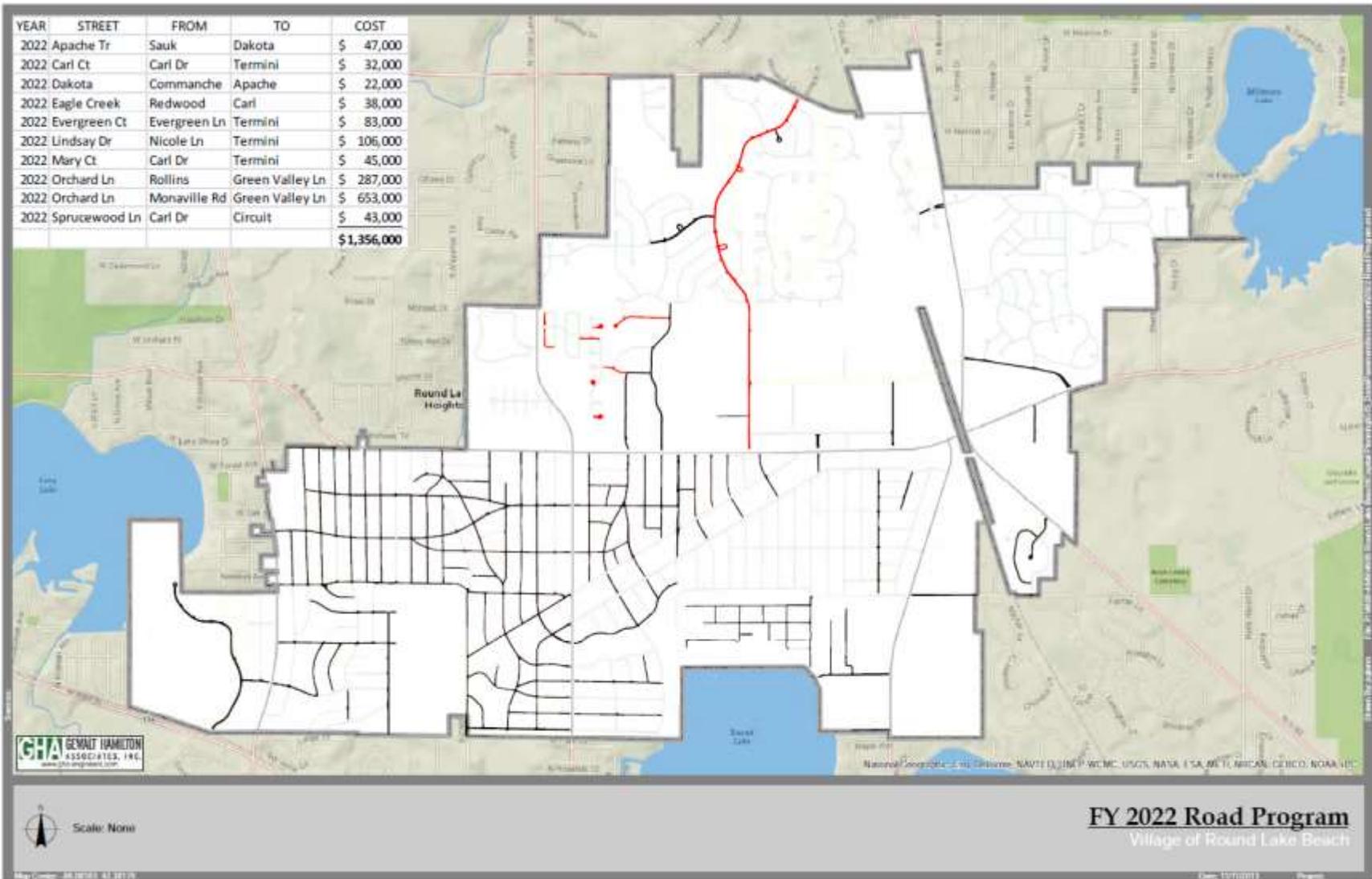


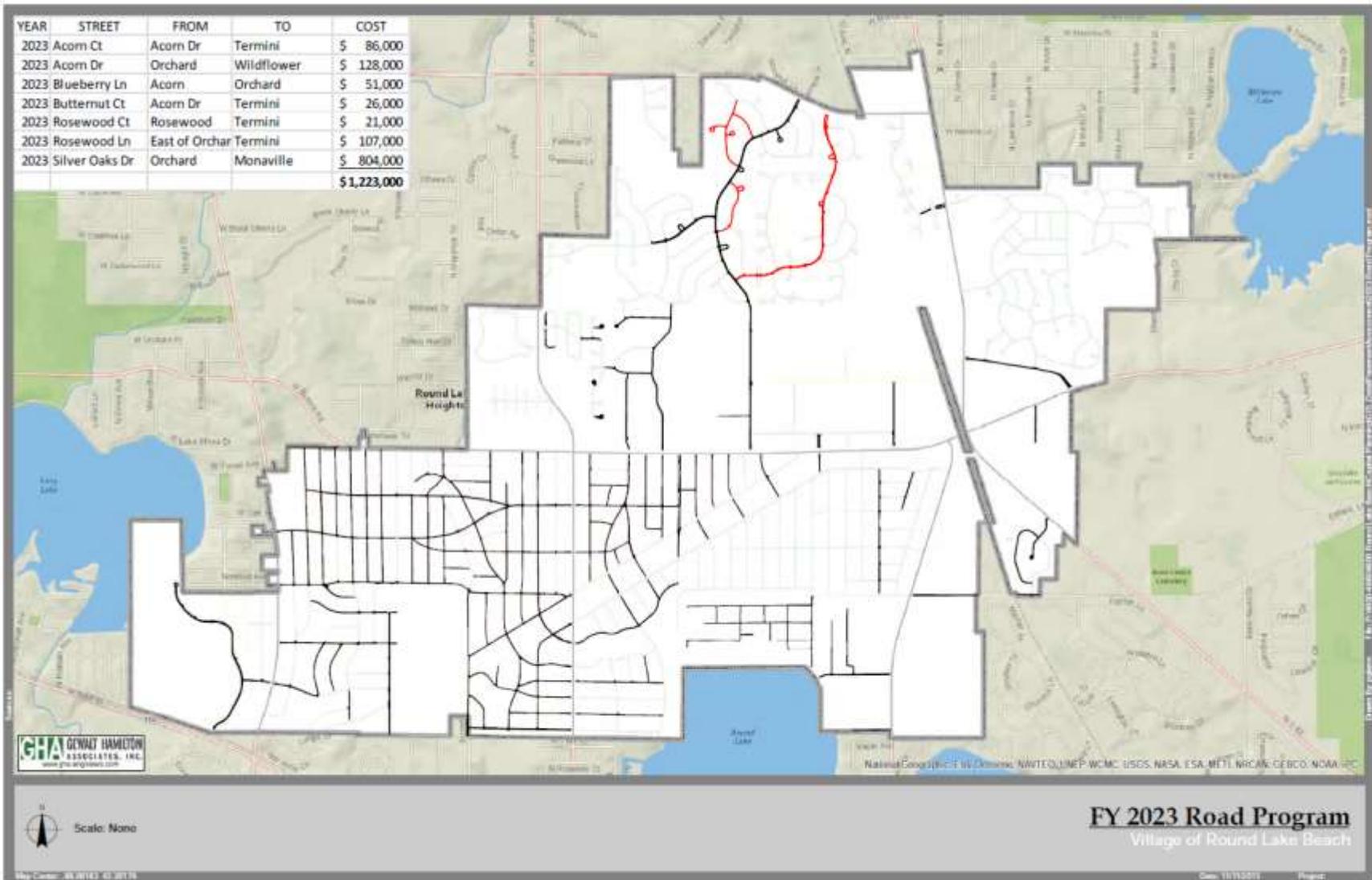


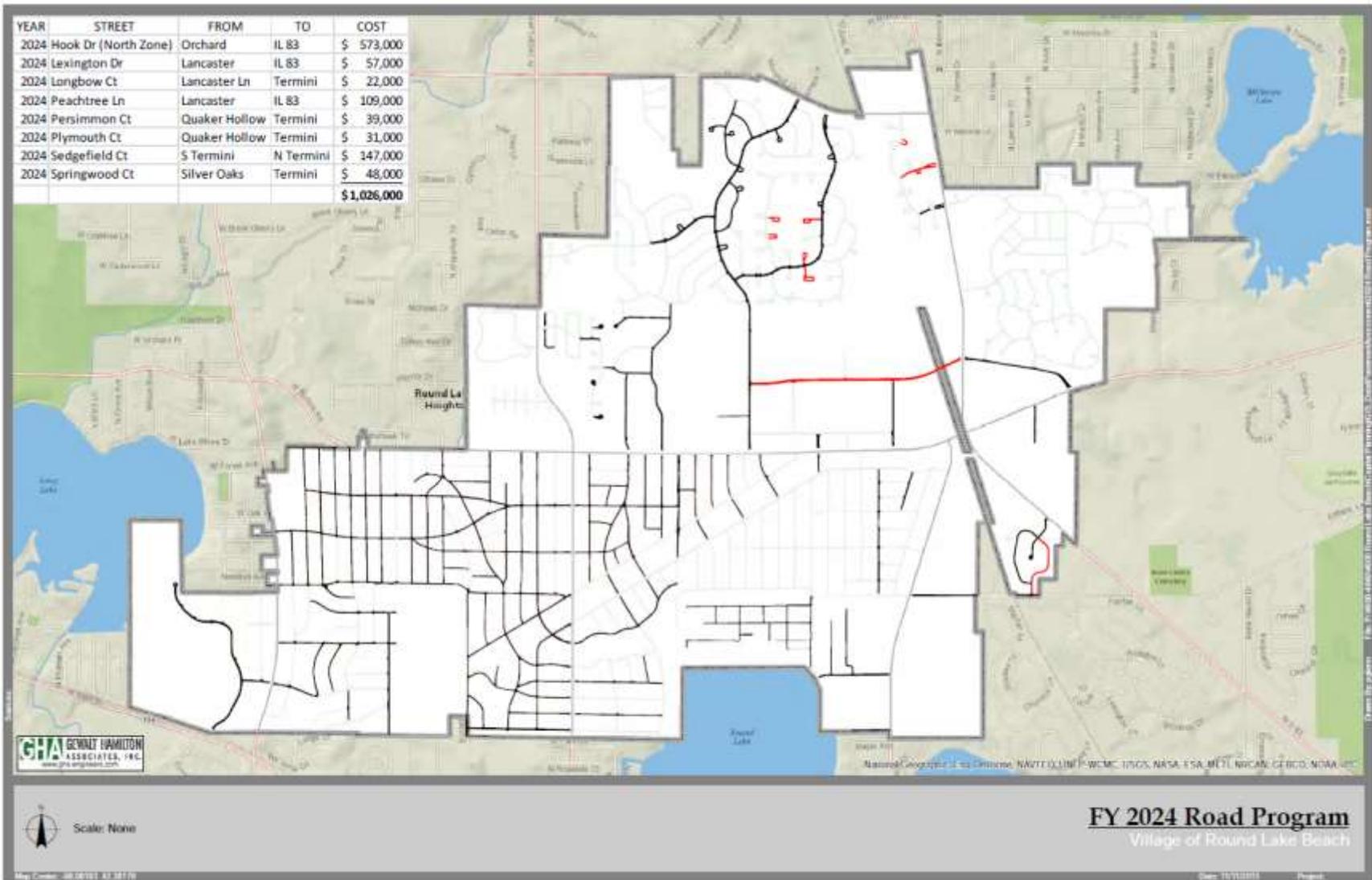












Water System

Overview

Since 1992, the Village's potable water supply has been provided by the Central Lake County Joint Action Water Agency (JAWA) and the source is Lake Michigan. The Village's water distribution system consists of six back up wells, two elevated tanks and one above ground storage facility with a storage capacity of 4 million gallons.

In addition, the water system consists of 80 miles of various sized water distribution mains, and appurtenances intrinsic of 650 control valves, 700 fire hydrants, 8,000 water services and metered accounts. The Village pumps an average of 2.3 million gallons per day (GPD) during the summer months and 2 million per day during the winter months with an annual pumping volume of approximately 730 million gallons.

Maintenance activities of water system assets include; hydrant flushing and painting, valve exercising, well testing and pump maintenance and repair.

Ratings & Benchmarks

Due to the nature of the majority of the water system being underground, the primary indicators of ratings and benchmarks for water mains are age and main break history. The Public works department maintains a main break map that is utilized to determine the order of replacement. Above ground assets such as water towers, hydrants, back-up wells and the pump station undergo routine inspections and maintenance by the Public Works department.

Assumptions Approach

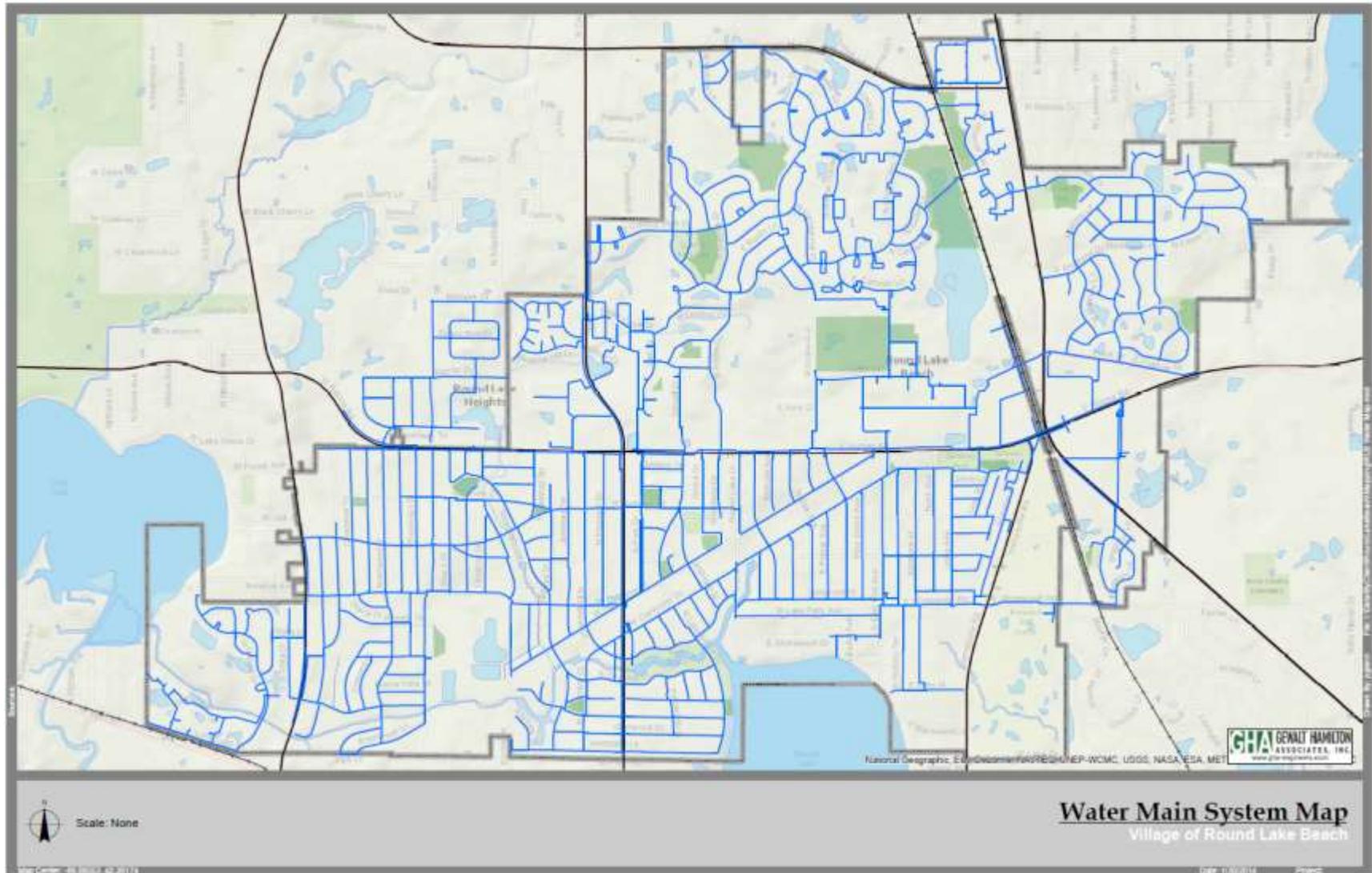
- Time underground work with road work
- Replace 4" main with 8" main
- Utilize main break history and age to determine maintenance and replacement

Funding Plan

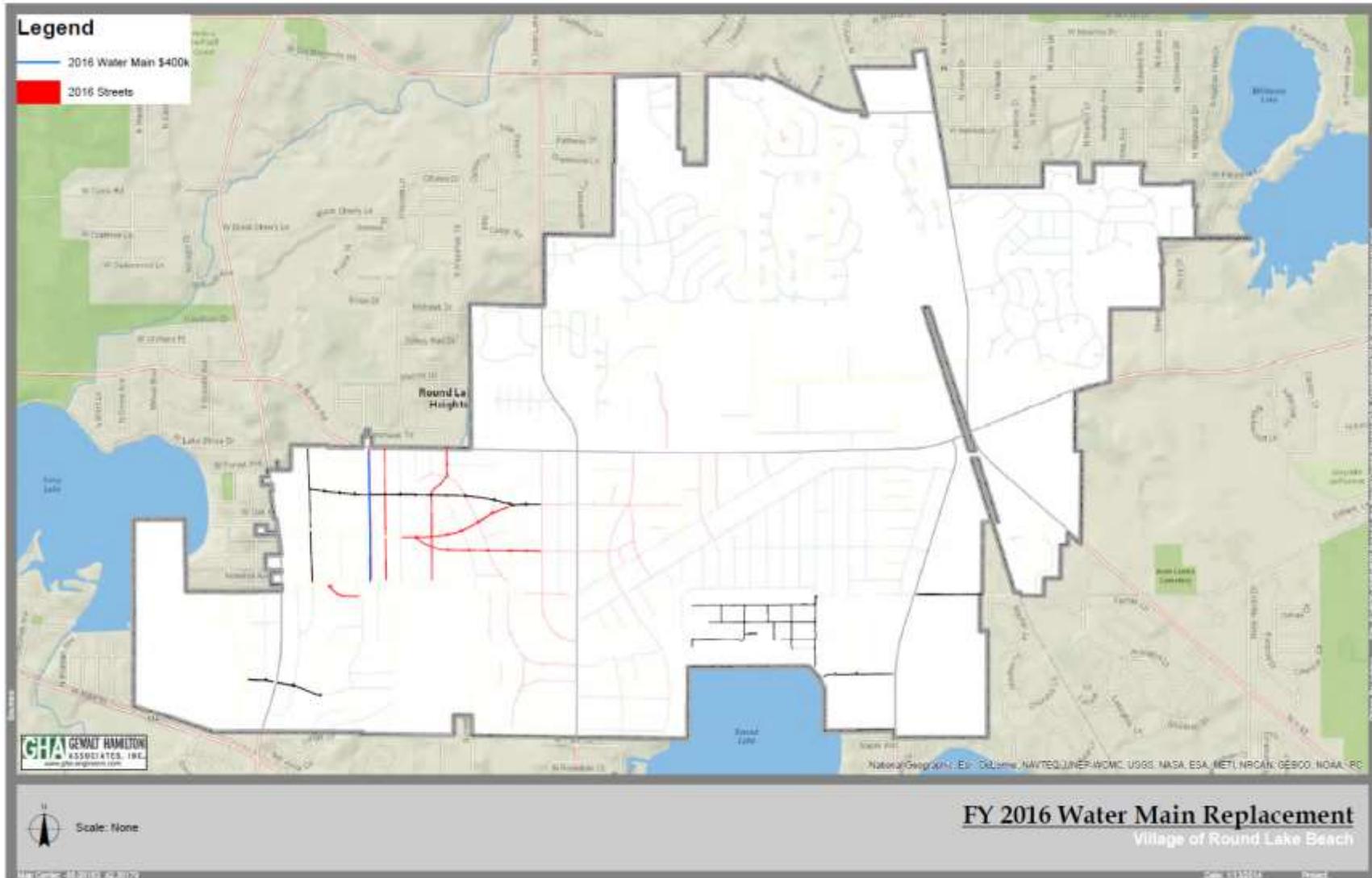
Maintenance of the water system is funded through user charges which increase incrementally based on inflation. Included in the water rate is the cost to obtain water from JAWA. JAWA projects the cost to obtain water for 20 years as part of their annual planning process. As the JAWA portion of the water rate falls, more funding becomes available for system maintenance without having to add additional fees or a large increase in the rate. Currently the JAWA rate is expected to drop around 2021. The Village is exploring the option of a \$2m low-interest IEPA loan for water main replacement in conjunction with the 2019 road program. Below is the available funding for water system projects over the planning period.

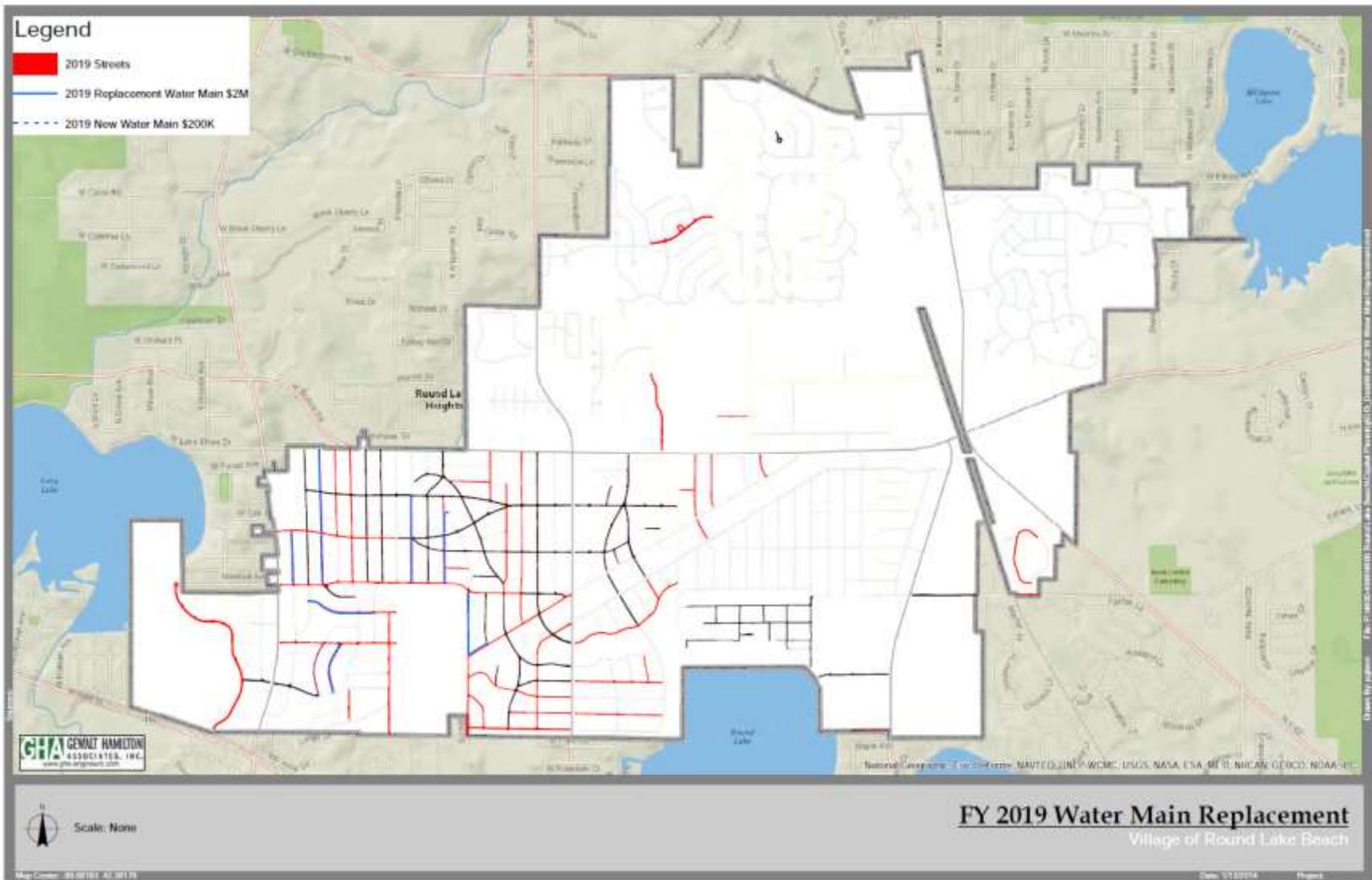
Description			FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Fund			Preliminary	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected
Water System												
Funding												
Water Capital Fund (12)	Paygo	12	\$832,790	\$425,000	\$225,000	\$225,000	\$225,000	\$225,000	\$825,000	\$825,000	\$825,000	\$825,000
IEPA Loan (Watermains)	Debt	12				\$2,000,000						
Total Water System Funding			\$832,790	\$425,000	\$225,000	\$2,225,000	\$225,000	\$225,000	\$825,000	\$825,000	\$825,000	\$825,000
Expenditures												
Meter Replacement	Paygo	12	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Rollins Gateway Relocation (reserve)	Paygo	12	\$701,450									
Wood St. Booster Station	Paygo	12	\$4,800									
Well Improvements	Paygo	12	\$37,000									
IEPA Loan (Watermains)	Debt	12					\$2,000,000					
Watermains	Paygo	12	\$64,540	\$400,000			\$200,000		\$1,000,000	\$800,000	\$800,000	\$800,000
Total Funding Water System			\$832,790	\$425,000	\$25,000	\$25,000	\$2,225,000	\$25,000	\$1,025,000	\$825,000	\$825,000	\$825,000

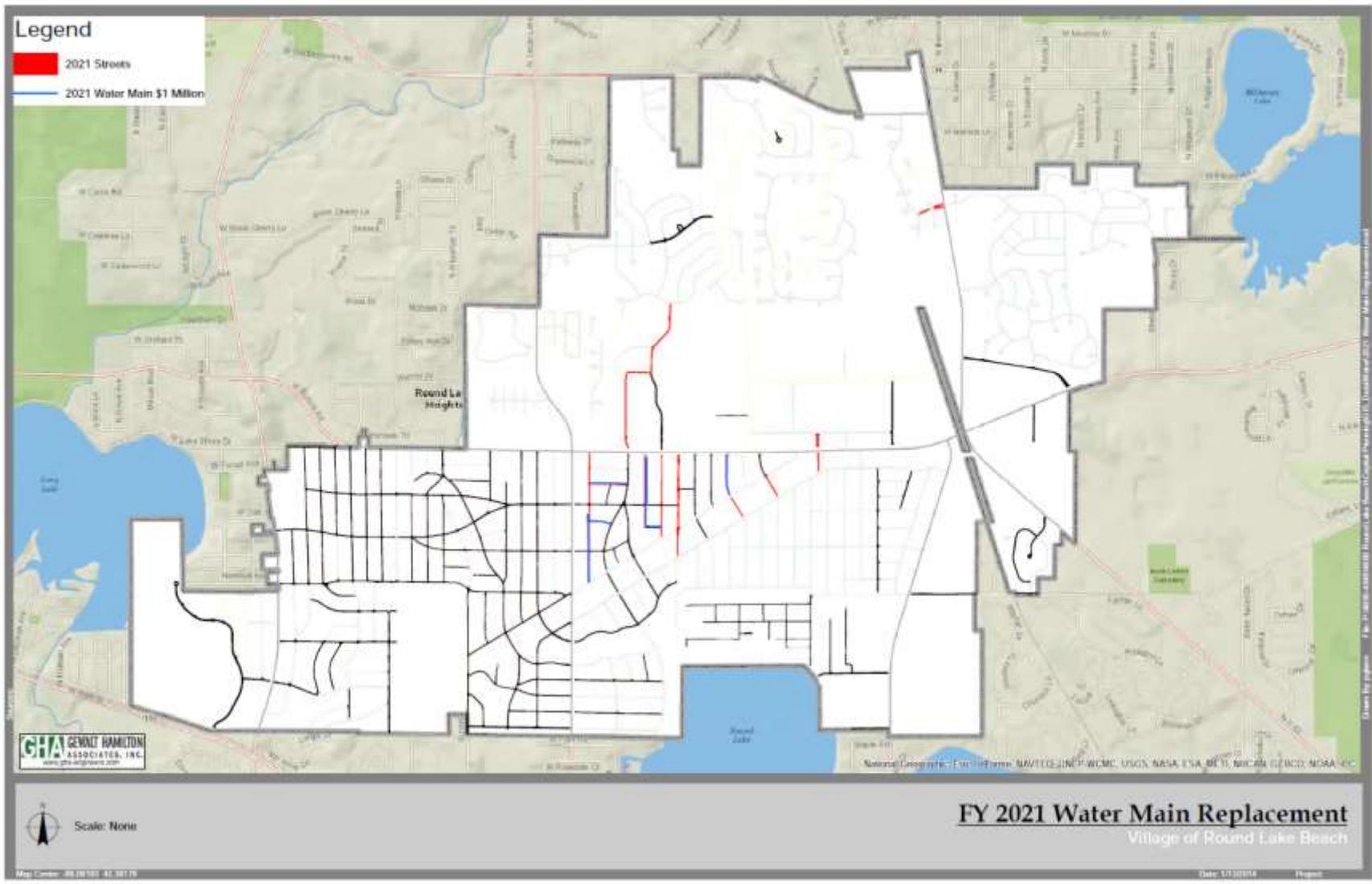
System Map

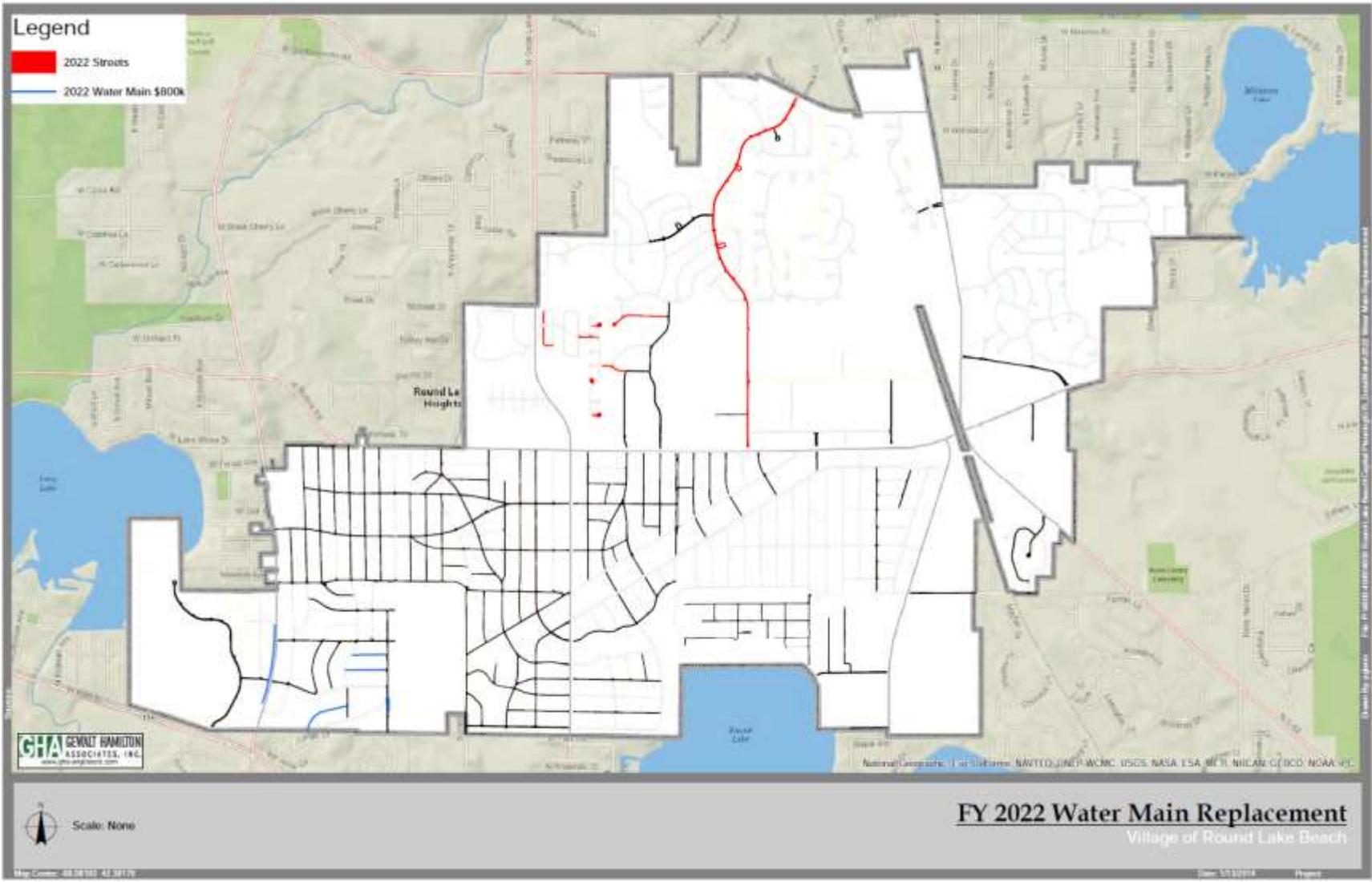


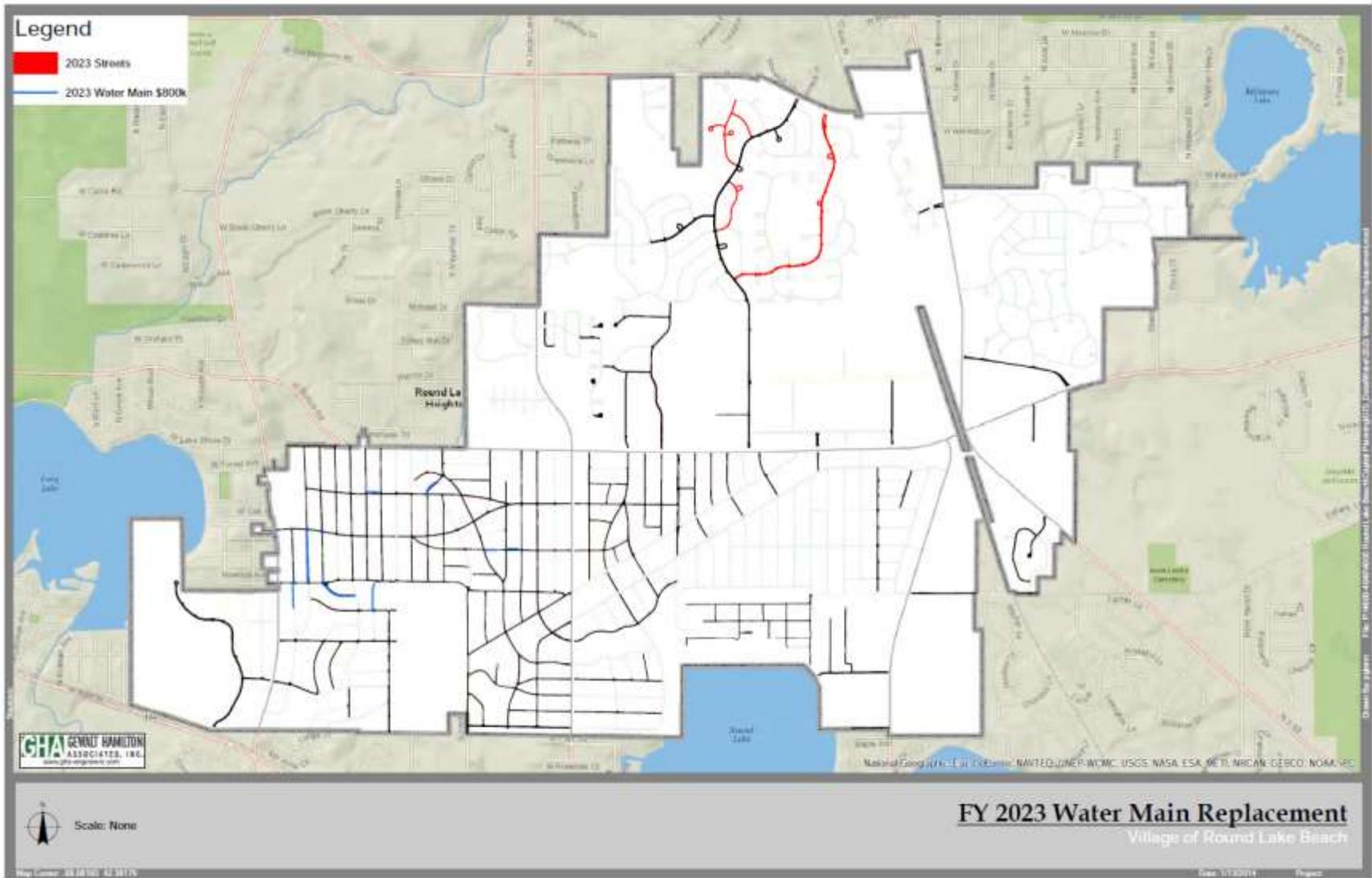
Maintenance & Replacement Plan

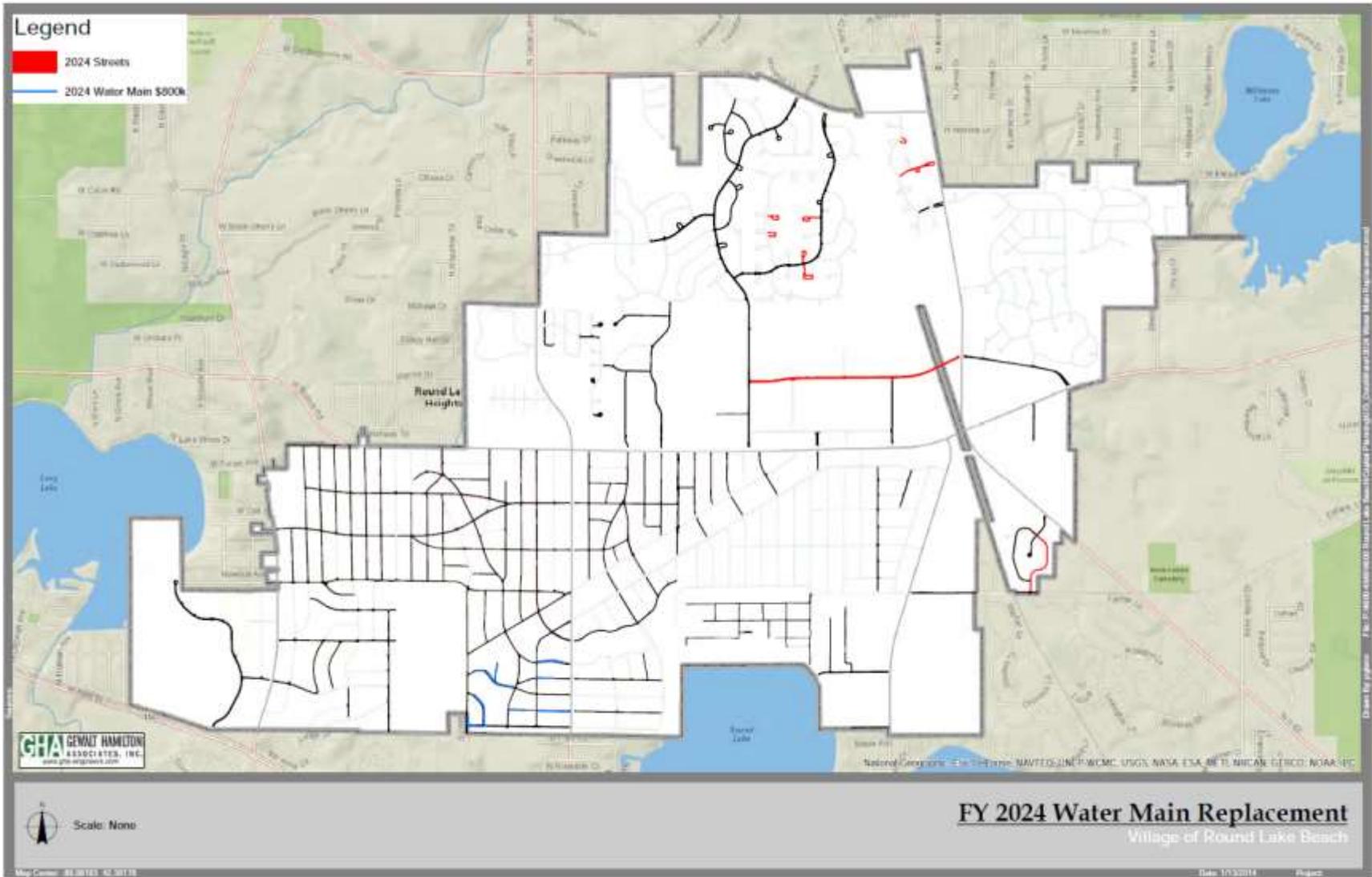












Sanitary Sewer System

Overview

The Village's sanitary sewer collection system consists of 70 miles of various sized sanitary mains including 6 sanitary wastewater-pumping stations. Sanitary sewage is conveyed to the Northwest Fox Lake Water Reclamation District where it is treated and released. The Water and Sanitary Division maintenance programs include regular jetting, flushing, and cleaning of sanitary sewer mains and emergency response to sewer line blockages.

Maintenance activities related to the sanitary sewer system include; jetting, lining, manhole inspections and repair list station maintenance.

Ratings & Benchmarks

As part of the requirements of the CMOM program the Village is undertaking the task of televising the entire sanitary sewer main network systematically over the next 10-years. As a result of this televising, certain repairs and lining will be recommended and plugged into the capital plan.

Assumptions Approach

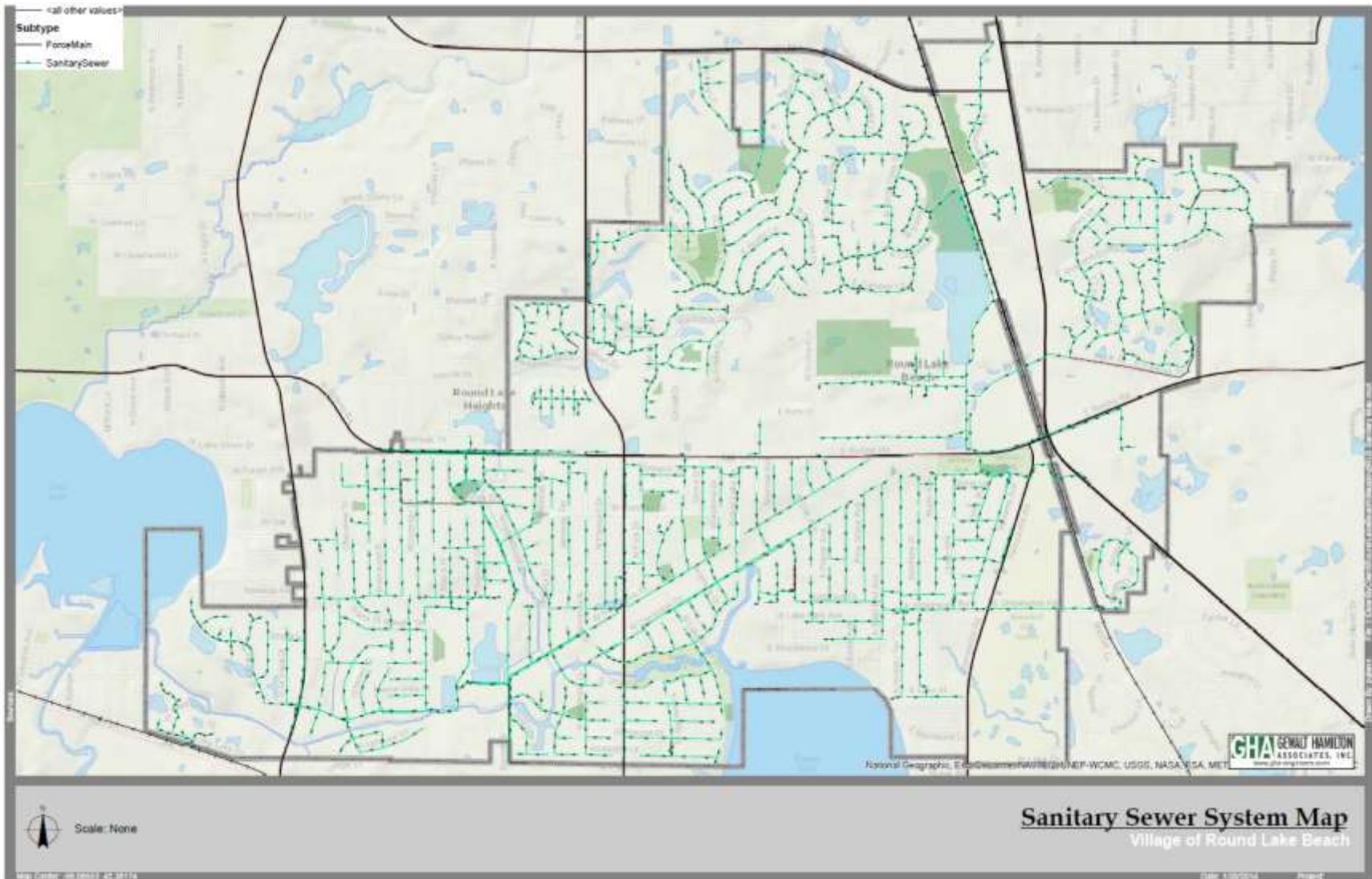
- Comply with the CMOM program to televise entire system in 10-years
- As a result of the televising, identify spot repairs and lining

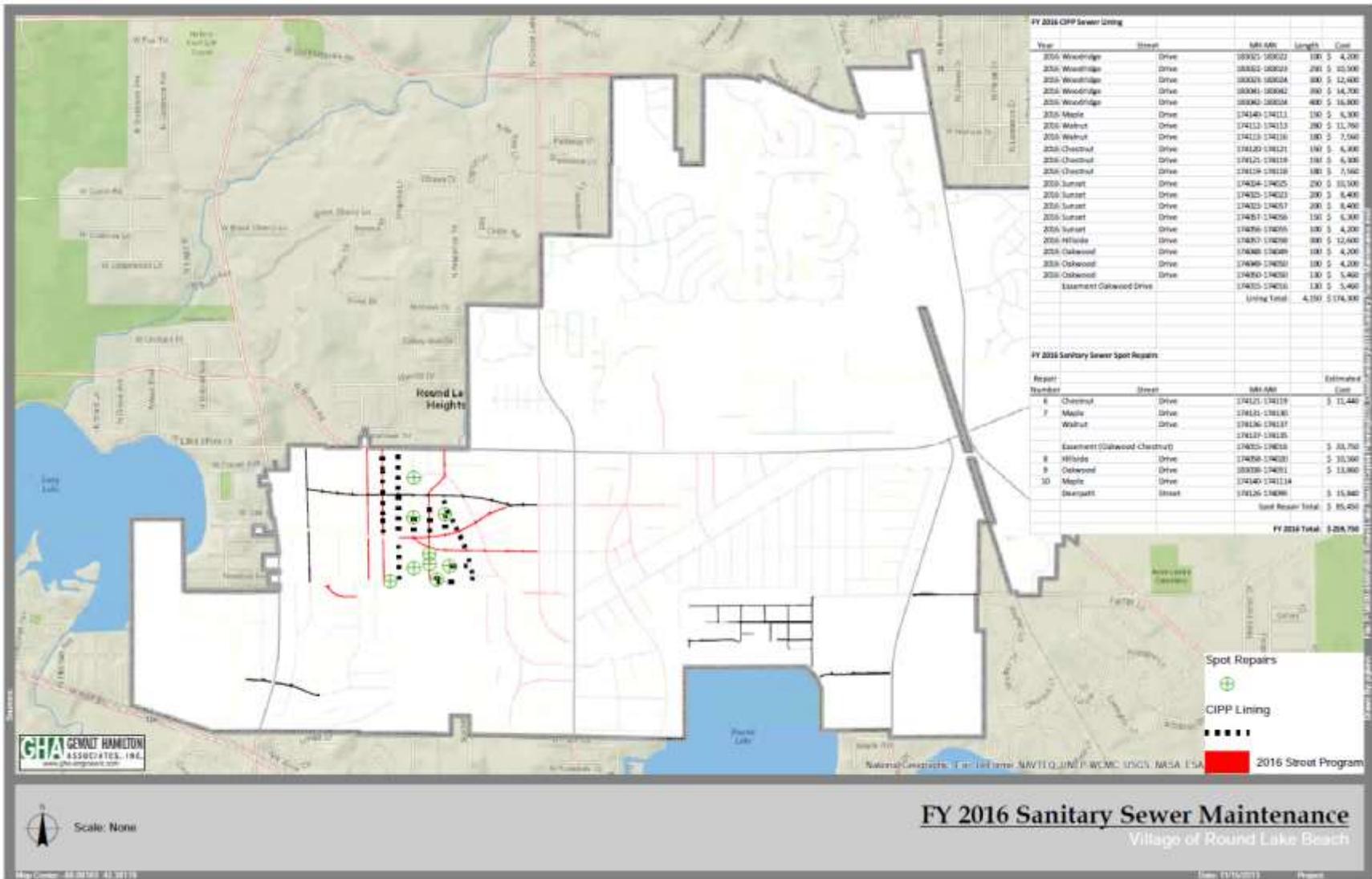
Funding Plan

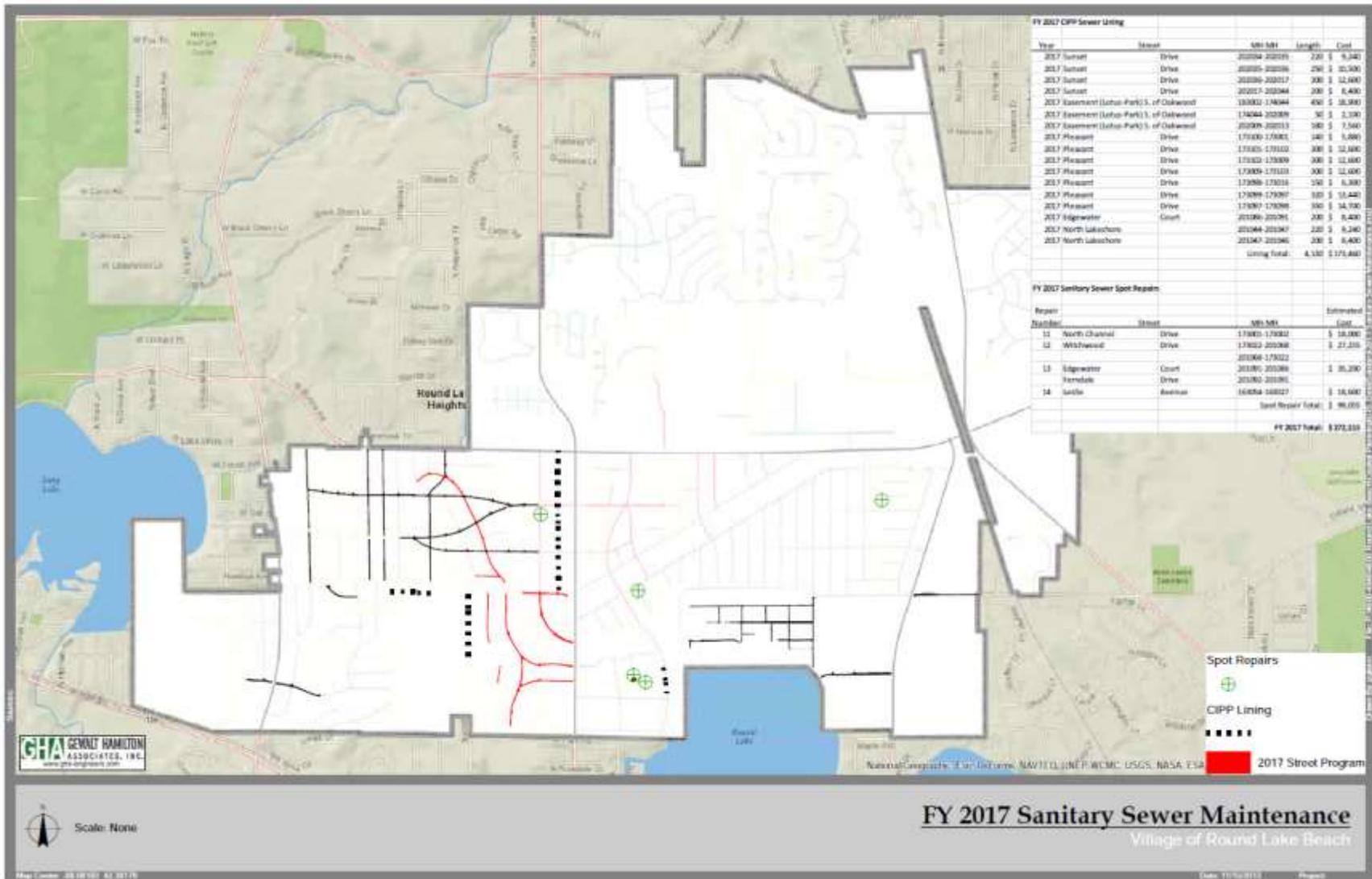
The Village instituted a separate fee to maintain the sanitary sewer system in 2010 of \$4 per month for each water account. The fee was in response to the requirements of the CMOM program. The fee generates approximately \$375,000 annually to maintain the system. Following is the financial funding available over the planning period. To complete the CMOM televising approximately \$100,000 annually will be required. The remaining funding will be utilized for repairs identified by the televising. Currently repairs and lining are only programmed based on the findings of the first phase of televising.

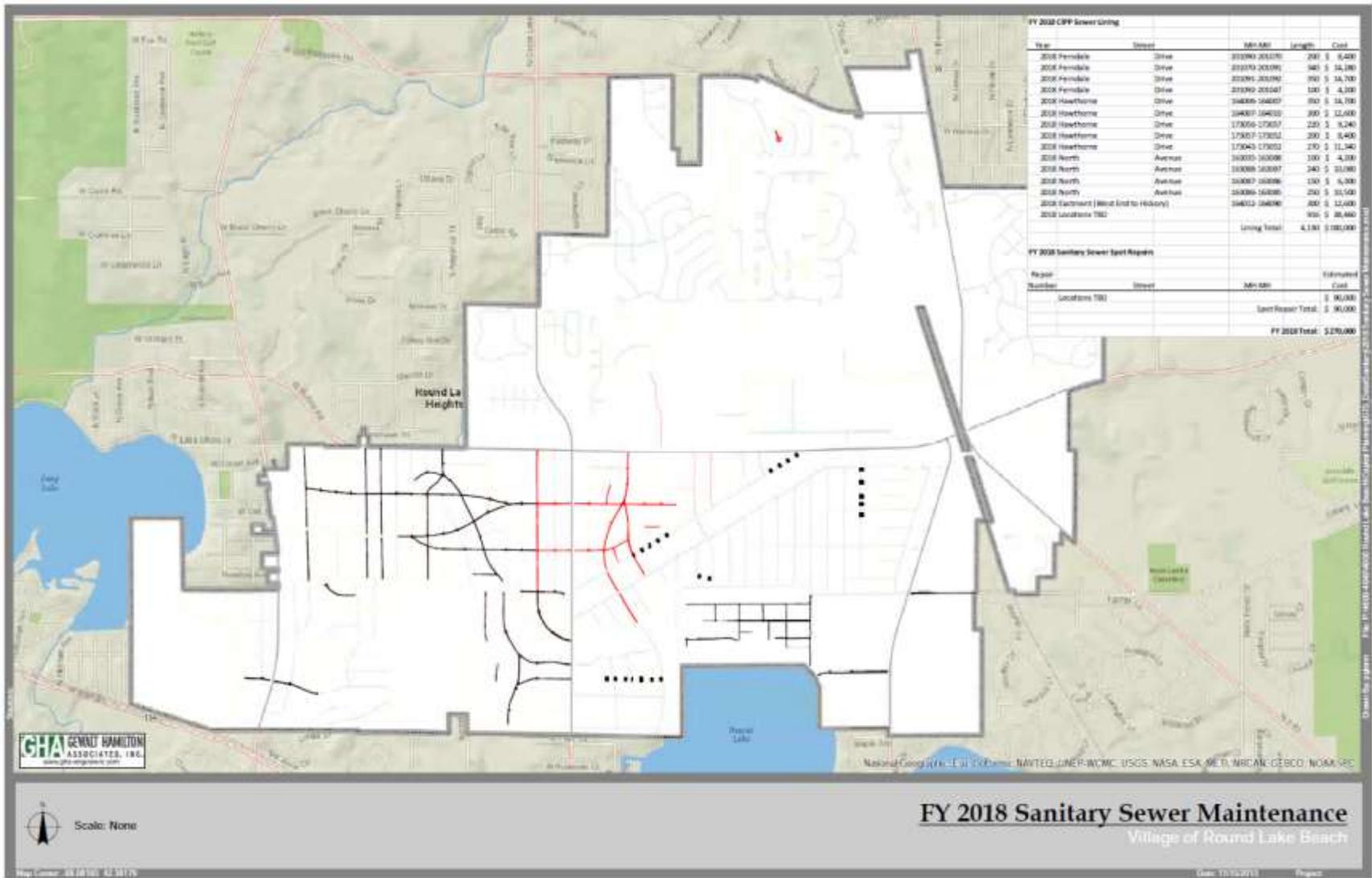
Description	Fund	FY2015 Preliminary	FY2016 Projected	FY2017 Projected	FY2018 Projected	FY2019 Projected	FY2020 Projected	FY2021 Projected	FY2022 Projected	FY2023 Projected	FY2024 Projected
Sanitary Sewer System											
Funding											
Sewer Capital Fund (13)		\$377,450	\$373,400	\$373,400	\$373,400	\$373,400	\$373,400	\$373,400	\$373,400	\$373,400	\$373,400
Total Funding Sanitary Sewer System		\$377,450	\$373,400								
Expenditures											
Sewer Televising	Paygo 13	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	
Lining	Paygo 13	\$144,000	\$174,300	\$173,460	\$180,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000
Spot Repair	Paygo 13	\$133,450	\$85,450	\$99,055	\$90,000	\$90,000	\$90,000	\$90,000	\$90,000	\$190,000	\$190,000
Total Expenditures Sanitary Sewer System		\$377,450	\$359,750	\$372,515	\$370,000	\$365,000	\$365,000	\$365,000	\$365,000	\$365,000	\$365,000

System Map









Storm Sewer System

Overview

The Village's storm sewer collection system consists of ditches, swales, various storm sewer mains, 4,500 storm drainage structures (inlets, catch basins) and the hook lake retention area. The purpose of the system is to handle storm water runoff during rain events to prevent flooding in low lying areas.

Maintenance activities related the storm sewer system include; ditch and culvert inspection and repair, hook lake maintenance, and inlet inspection and repair.

Ratings & Benchmarks

The storm sewer system is benchmarked using the age of the system and data from heavy rain or water flow events.

Assumptions Approach

- Maintain a system to mitigate flooding

Funding Plan

A dedicated funding source for the storm sewer system does not exist. Repairs and maintenance are paid for from general revenues typically as part of the road work projects. Minor maintenance items are included in either the Public Works operating budgets or the general capital fund.

Description	Fund	<u>FY2015</u> Preliminary	<u>FY2016</u> Projected	<u>FY2017</u> Projected	<u>FY2018</u> Projected	<u>FY2019</u> Projected	<u>FY2020</u> Projected	<u>FY2021</u> Projected	<u>FY2022</u> Projected	<u>FY2023</u> Projected	<u>FY2024</u> Projected
Storm Sewer System											
Funding											
General Capital Fund (85)	85	\$118,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Storm Sewer System Funding		\$118,000	\$0								
Expenditures											
Culverts	Paygo 85	\$118,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Storm Main	85	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Curb & Gutter	85	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ditches	85	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Retention/Detention	85	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Funding Water System		\$118,000	\$0								

System Map

