



2022



Annual Report

Public Works

OVERVIEW

The Village of Morton Grove Public Works provides essential public services, in a professional and fiscally responsible manner, to the community and general public. Thirty-eight dedicated employees are responsible for the maintenance of Village infrastructure and provide a wide variety of services to Village residents, businesses and others.

In this annual report, you will find a brief description of each Division's duties and responsibilities.



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COMBINED CREW ACCOMPLISHMENTS

- LEAF COLLECTIONS
- SNOW/ICE CONTROL
- MORTON GROVE DAYS
- ARBOR DAY
- SWANCC EVENT
- NATIONAL NIGHT OUT



Mayor Di Maria and Board of Trustees:

I am pleased to present the Public Works Department 2022 Annual Report. This report will highlight our accomplishments and activities over the past year. Our mission has been to provide quality public services in an efficient and cost-effective manner, balancing limited funding with ever increasing infrastructure needs and fighting through nationwide supply chain issues.

This year brought us the retirement of four seasoned employees with a combined 131 years of Public Works experience, Director Joe Dahm (42), Andy Arkus (40), Giovanni Sparacio (36) and John McConnell (13). Their leadership, hard work and experience will surely be missed.

In 2023, we are looking forward to the following projects starting or continuing, Lead/Copper water service identification program mandated by the EPA, 50/50 tree planting, Emergency Water Connection with the Northwest Water Commission, Albert Avenue Water Main Replacement through Linne Woods, Main Street Water Main replacement through St. Paul Woods and the paving of Harlem Avenue and Shermer Road.

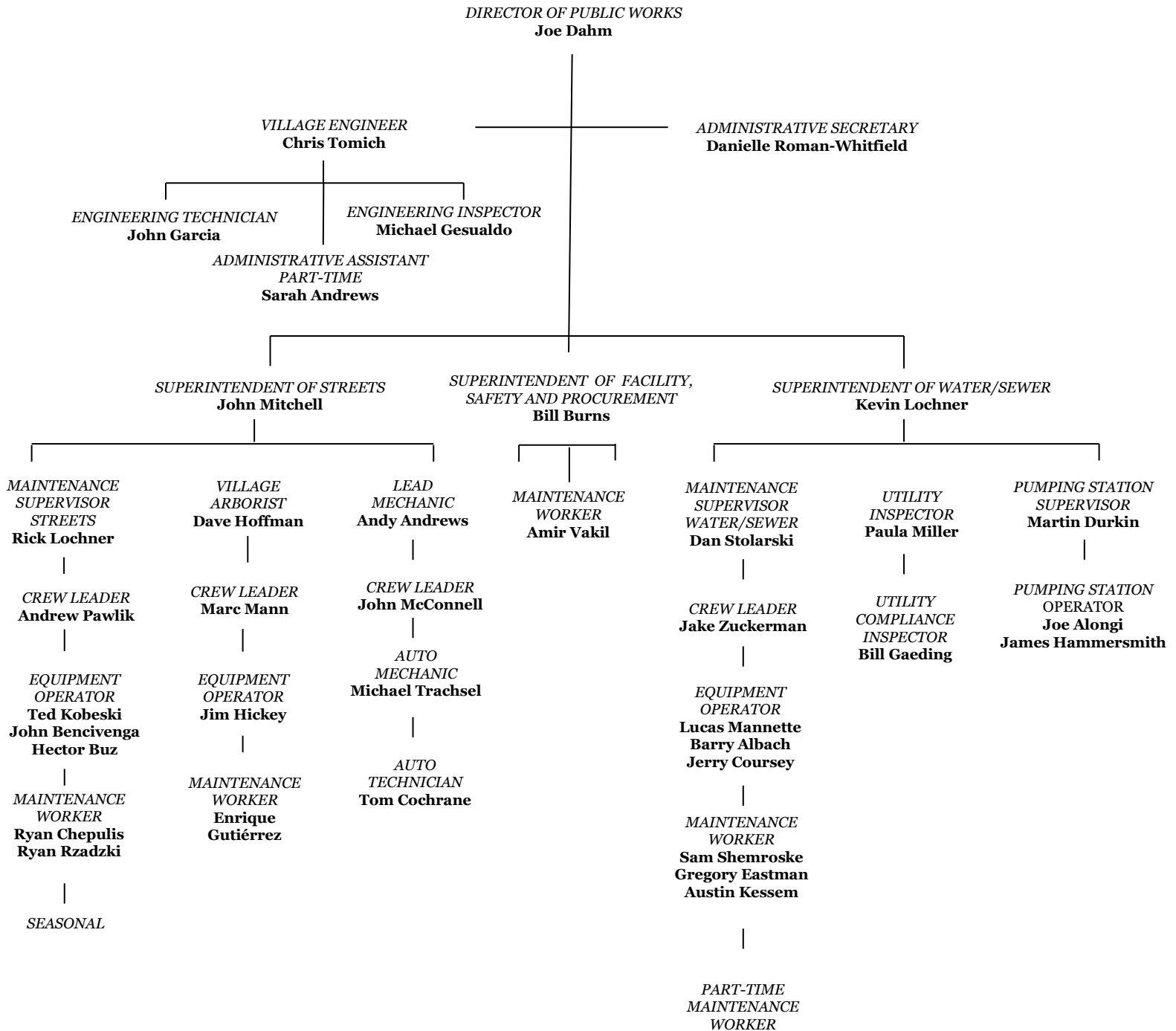
I want to thank Public Works staff for completion of this year's report and hope you find it an informative and useful tool.

Respectfully Submitted,

Kevin Lochner

Kevin Lochner,
Public Works Superintendent

2022 VILLAGE OF MORTON GROVE
PUBLIC WORKS ORGANIZATIONAL CHART



STREET DIVISION

Mission Statement

The Morton Grove Public Works Street Division's mission is maintaining the Village owned property that includes 270 lane-miles of thoroughfare and approximately 60 lane-miles of State and County roadways. The Street Division maintains and preserves the public rights-of-way that encompass those areas. This Division prides itself by operating within budget parameters while maintaining a high level of customer service to Village residents.

The Street Division is comprised of three separate Divisions:

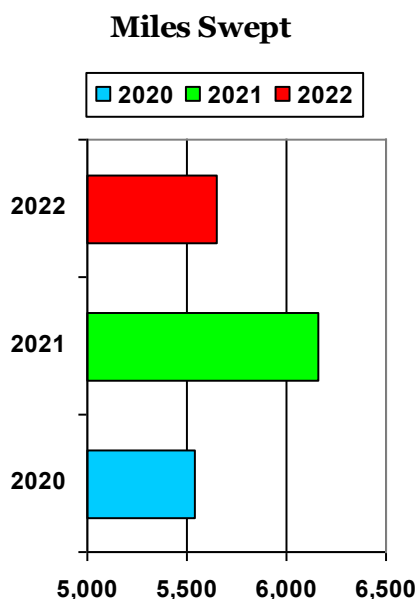
- Signs/Street Sweeping/Combined Operations
- Forestry
- Landscaping

The Division is responsible for the cleaning, repairs, and maintenance of our streets and alleyways. Other responsibilities include, general Pavement Maintenance Program, Alley Improvement Program and year round temporary cold-mix and hot-mix asphalt patching. This allows the Village the capability to mitigate risk on the roadways while extending the life of those road surfaces by providing the flexibility to quickly service road hazards and utility repairs. We effectively maintain the safety of the Village's roadways and alley systems by street sweeping and maintaining crucial pavement markings on streets, curbs, and parking lots.

Street Sweeping Operations

Street sweeping is necessary not only to keep streets clean, but also to prevent dirt and debris from entering the Village's combined sewer system. The less debris on the street, the better stormwater will drain during rain events. The Public Works operates two street sweepers during leaf season and one sweeper over the summer months bi-weekly.

Combined sweeping during the two seasons includes 5,648 miles swept and 70,180 gallons of water used.



STREET DIVISION

Sign Operations

The Sign Division is responsible for all sign development and this includes; surveying, repairs, installation, and maintenance of all Village signs.

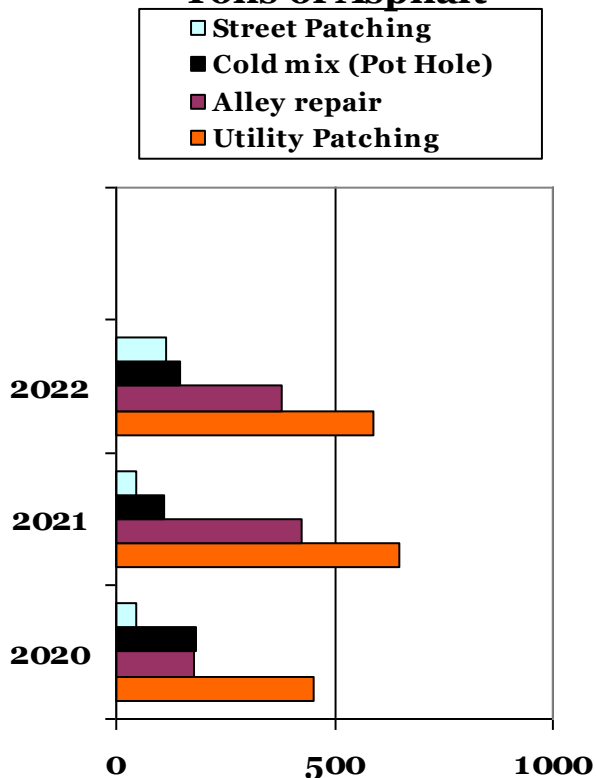
- 531 Signs were repaired and/or replaced.
- 245 Poles were repaired and/or replaced.

Street Operations

The Street Division is responsible for the maintenance of our asphalt streets, alleyways and street sweeping. Furthermore, this division is involved with annual combined crew programs such as: leaf collection, de-icing and snow removal.

- Street Repairs 18 Locations 113 Tons of hot mix asphalt used
- Utility Repairs 118 Locations 590 Tons of hot mix asphalt used
27 Cubic Yards of stone used
- Alley Repairs 20 Locations 379.5 Tons of hot mix asphalt used
44 Cubic Yards of stone used
- Stone Alley Graded 2 Locations 9 Cubic Yards of stone used
- Saw Cuts for Street/Alley 61 Locations
- Cold Mix Patching (potholes/water leaks) 145 Tons of cold-mix asphalt used
- Traffic paint used for curbs and pavement markings 20 Gallons of paint used

Tons of Asphalt



Sign Repair & Painting



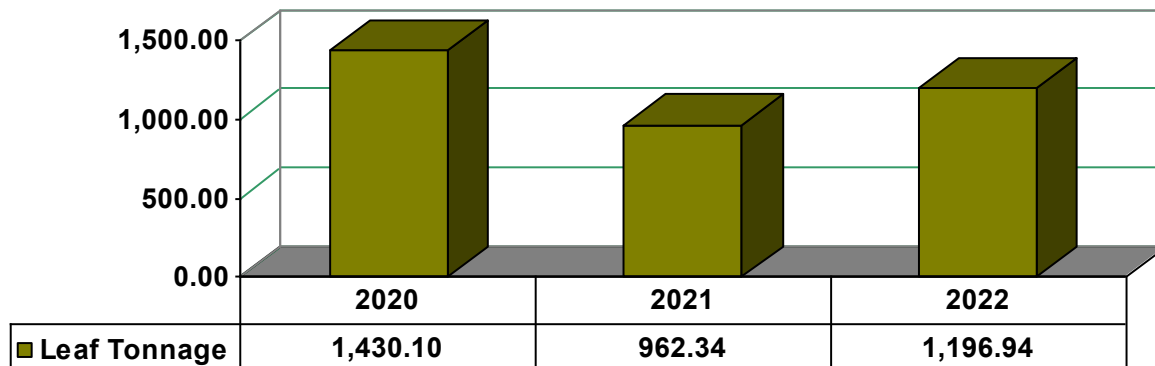
COMBINED CREW PROGRAMS

Leaf Collection Program

The Leaf Collection Program, when in full force requires the recruitment of the entire Street Division. In 2022, 1,196.94 tons of leaves were hauled to and from the Public Works yard. The season began on October 17th and ended on December 2nd.

Any remaining leaves are picked up by Groot, starting in the middle of March when yard waste pick-up resumes.

Leaf Collection Tonnage



COMBINED CREW PROGRAMS

Snow Removal Program

One of the primary objectives of the Public Works Snow Removal Program is providing safe and orderly movement of traffic throughout the Village of Morton Grove during snow events. Depending on the severity of the storm, residents are provided with quick and efficient removal of snow from all streets and alleys. This provides safe passage for residents, pedestrians and drivers. This program also includes snow removal from business areas such as: Dempster Street, Waukegan Road and Lincoln Avenue. Furthermore, it includes parking areas such as: Metra Station (including the off-street parking along Lehigh), 8550 Lehigh, 6240 Lincoln, and 5714/5828/6055 Dempster.

Snow Plowing and De-icing

Snow and ice control operations begin when hazardous road surfaces are expected. Depending on conditions, a pre-application of salt brine and road salt is applied to the pavement. Plowing begins after snow accumulates to 1” or more.

Snow Plowing:

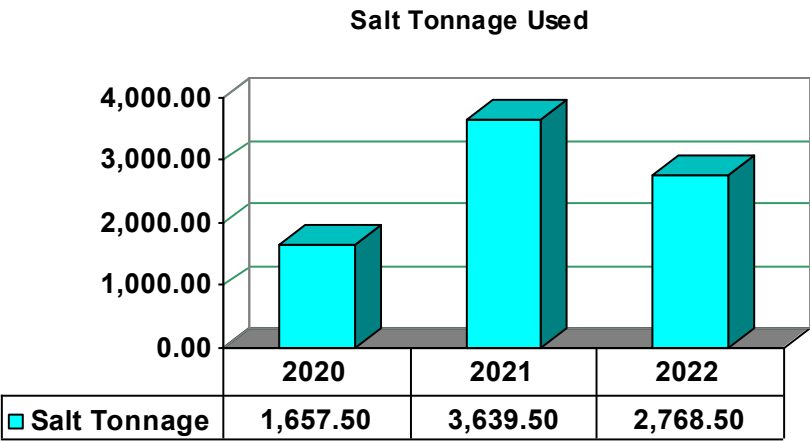
Snow plowing requires the cooperation of all Public Works staff; 2022 presented only 17 snow/ice events for the entire year.

De-icing:

De-icing requires the Street Division personnel to fully operate the Village’s salt truck fleet which remain on a 24 hour on-call status through the entire season.

- 2,768.5 Tons of Salt used.
- 5,656.3 Gallons of Diesel Fuel used.
- 1,228.9 Gallons of Gasoline used.
- 930 Gallons of Calcium used.
- 1,640 Gallons of Brine used.

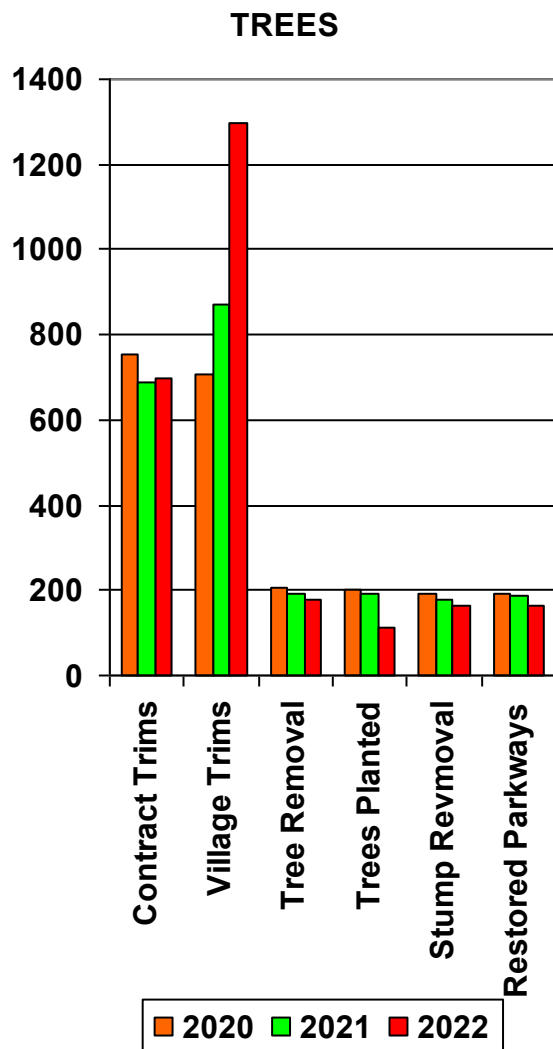
Total vehicle miles driven was 19,795, total employee hours worked during regular time was 1,790 hours, and total employee hours worked on over-time was 1,236 hours.



FORESTRY DIVISION

This Division is responsible for all trees on public property; planting, trimming, general care and maintenance, as well as the removal of dead or diseased trees, stump grinding and parkway restoration. Other Forestry responsibilities include; flags, banners, holiday decoration installation, street light maintenance, branch pick-up, storm clean-up, parkway repairs/restorations and participation in annual combined crew programs such as: leaf collection, de-icing and snow removal.

The Village has a Certified Arborist who provides assistance to residents and participates in public education. The Arborist annually visits public schools to educate children at the third grade level about the benefits of trees and our environment. The Village Arborist promotes Arbor Day activities while demonstrating proper tree planting techniques. The Village has been in the Tree City USA community and Morton Grove has been a member of this community for 22 years now.



LANDSCAPING DIVISION

This Division is responsible for landscape design, planning, and maintenance of Village owned properties and buildings. Other responsibilities include; spring, fall and roadside cleanups, as well as village parking lot maintenance, and maintenance/replacement of village gate-way signs.

When developing design ideas for landscapes, the division ensures they are cost effective, require minimum maintenance, and cope with the challenges of the ever-changing climate and soil conditions. Day-to-day care of lawns, trees and shrubs takes place as well as providing and managing irrigation solutions, weed control, and fertilizer application.

The Landscaping Division has one Maintenance Worker during the spring and summer months. Tasks include assisting in Village properties such as: Village Hall, Civic Center, Metra Station, Public Works, and other Village owned properties which are mowed once a week. Flowers are planted, watered, and weeded on a weekly basis. All other properties are mowed and weeded as needed. The division also picks up garbage and debris within the Dempster and Waukegan business districts, as well as many other locations.

Adopt a Pot Program

142 flower kits and Christmas tree's were adopted (planted by residents) for locations at: Dempster St., Waukegan Rd., Lincoln Ave. and Ferris Ave., Civic Center, and Metra Station. 7,775 gallons were used to water planters.



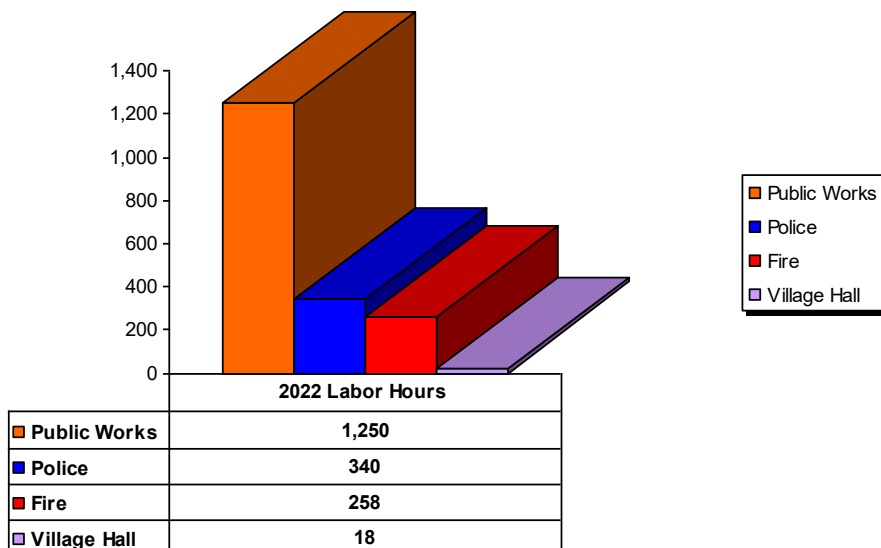
VEHICLE MAINTENANCE DIVISION

The Vehicle Maintenance Division is responsible for the scheduling and performance of routine maintenance and repairs to the entire municipal fleet. The fleet includes Fire Department, Police Department, Public Works, and all Administrative Department vehicles. This consists of approximately 138 vehicles. The Division ensures that all Village vehicles and equipment are available, reliable, and safe to operate in the most cost efficient manner. Parts inventory and all record keeping is obtained and kept on file by the vehicle maintenance supervisor. Records kept include data regarding the fuel control system. This warrants and ensures compliance with federally mandated fuel and tank regulations.

2022 Diesel & Gas Usage Village Fleet

Month	Public Works/Street		Public Works/Water		Police Department	Fire Department		Village Hall	Park District		School Dist. 70
	DIESEL:	GAS:	DIESEL:	GAS:	GAS:	DIESEL:	GAS:	GAS:	DIESEL:	GAS:	GAS:
JAN	2,009	1,030	670	506.7	2,391	826.5	183	16.8	36.5	419.8	44.7
FEB	2,100	1,100	1,188	267.5	2,218.1	742.8	133.7	15.7	18.8	282.9	48.1
MAR	1,200.4	1,806	542	800.4	2,413.7	780.6	154	24.2	0	362	22.7
APR	902	910	350	306	2,279.8	699.9	129.7	16	55.1	392.5	0
MAY	800.3	850	431	457.9	2,749.1	743.3	109.8	10.5	125.4	422.7	0
JUN	1,000.5	1,186.9	470	500	2,581.9	881.2	142.4	28	148.3	540.3	21.5
JUL	1,000.8	1,000.1	532	583	2,708.5	883.2	167.8	20.8	135	521.8	0
AUG	1,400.4	1,400.1	643	621	2,235	814.2	151.3	26.4	142.4	567.2	0
SEPT	1,200.8	1,200.7	796	773	2,542.6	864	97.3	22.3	139.2	365.1	0
OCT	1,400.2	1,200.9	848	691	2,638.3	674.9	129.6	16.5	76.9	325.7	0
NOV	1,400.1	600.6	827	414	2,432.1	736.3	113.2	26.3	47.7	421.8	0
DEC	1,400.9	1,558.6	795.3	724	2,237.2	774	140.1	22.7	56.8	329.1	42.3
TOTALS:	15,815.4	13,843.9	8,092.3	6,644.5	29,427.3	9,420.9	1,651.9	246.2	982.1	4,950.9	179.3

VEHICLES REPAIRED BY DEPARTMENT



NEW PAVER TRAILER



STREET DIVISION NEW VEHICLES & EQUIPMENT

UNIT #	MODEL YEAR	MAKE	MODEL	HOURS / MILES	DESCRIPTION	
M35	2022	Freightliner			Dump/Salter/Plow Truck	
M1	2022	Ford	F-250		Pick-up/Plow Truck	

WATER/SEWER DIVISION NEW VEHICLES & EQUIPMENT

UNIT #	MODEL YEAR	MAKE	MODEL	HOURS / MILES	DESCRIPTION	
M46	2022	Dodge	2500 Utility		Pick-up/Utility box/Plow Truck	

FIRE DEPARTMENT NEW VEHICLES

UNIT #	MODEL YEAR	MAKE	MODEL	HOURS / MILES	DESCRIPTION	
410	2020	Chevrolet	Suburban		District Chief SUV	

POLICE DEPARTMENT NEW VEHICLES

UNIT #	MODEL YEAR	MAKE	MODEL	HOURS / MILES	DESCRIPTION	
803	2021	Ford	SUV		Patrol Car	
804	2021	Ford	SUV		Patrol Car	
806	2021	Dodge	Charger		Patrol Car	
807	2021	Dodge	Charger		Patrol Car	



WATER & SEWER DIVISION

The Water & Sewer Division is committed to around-the-clock service for the Village and its residents. It continues to strive to improve its preventive maintenance programs, through cost-effective measures, as well as maintain and further enhance the current level of service provided. One of the Division's priorities is to preserve and maintain major infrastructure while protecting the system's investment.

FUNCTION OF THE WATER MAINTENANCE CREW

The Water Division crew maintains and repairs approximately 101.6 miles of water mains, 1,100 fire hydrants and 1,050 service valves located in the Village's water distribution system. The following chart represents some of the services performed during 2022.

RECORD OF WATER REPAIRS IN 2022

Month	Water Main Breaks	Water Service Leaks	Water Service Lines Replaced	Valves Repaired	Valves Replaced	Valves Exercised	Valves Installed	Water Main Replaced/ Installed LF	Hydrants Replaced/ Installed	Hydrants Flushing	Hydrants Painting	Lead/ Copper Insp.
January	23	3	0	1	2	76	0	10	2	10	0	0
February	12	1	0	0	0	43	0	0	0	7	0	0
March	4	2	3	0	3	31	2	16	8	15	0	0
April	2	0	1	0	2	4	2	60	0	1	99	0
May	1	1	0	0	0	8	0	0	0	0	0	0
June	3	1	2	0	0	7	0	6	0	5	0	0
July	7	2	2	0	0	16	0	39	7	10	0	0
August	3	4	3	0	1	11	0	0	5	3	0	0
September	10	1	3	1	2	32	0	17	7	10	0	0
October	0	0	3	0	0	2	0	0	7	1	2	0
November	7	0	2	1	3	43	0	0	6	5	0	105
December	12	1	0	0	0	39	0	0	9	0	0	102
2021 Total	84	16	19	3	13	312	4	148	51	67	101	207

SEWER DIVISION

The Sewer Division is responsible for the operation and maintenance of the Village’s 40.6 miles of sanitary sewer pipe, 44.8 miles of storm sewer pipe, and 21.13 miles of combined sewer pipe. Crews are equipped with the latest sewer rodding, drain-cleaning and video inspection equipment to effectively and quickly identify and clear problem areas in the sewer system. The Sewer Division also replaces and rebuilds aging sanitary storm sewer pipes, catch basins and manhole structures throughout the Village. The lining of aging sanitary sewer pipe continues annually providing a new structurally sufficient pipe while decreasing infiltration and inflow from ground water run-off into the Metropolitan Water Reclamation District interceptors.

The following chart represents some of the services performed during 2022.

RECORD OF SEWER REPAIRS IN 2022																
Month	Curb Drains Cleaned EACH	Curb Drains Repaired EACH	Curb Drains Replaced EACH	Storm Sewer Pipe Installed/ Replaced LF	Storm Sewer Pipe Repaired LF	Storm Sewer Pipe Televised LF	Storm Sewers Rodded LF	Sump Pump Connections LF	Combination Sewers Rodded LF	Sanitary Sewers Rodded LF	Sanitary Sewer Pipe Repaired LF Basin 7	Sanitary Sewer Pipe Televised LF	Sanitary Sewer Pipe Televised Basin 7	Sanitary Sewer Pipe Repaired LF	Sanitary Sewer Pipe Installed/ Replaced LF	Sanitary Sewer Pipe Lined LF
JAN	0	0	0	4	4	0	0	0	0	975	0	0	0	0	0	0
FEB	0	0	0	9	9	0	0	0	0	335	0	0	0	12	12	0
MAR	9	0	0	0	0	0	0	0	0	1,705	0	0	0	10	10	0
APR	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May	20	20	0	405	8	0	120	10	0	1,020	0	0	0	0	0	0
JUN	4	4	0	400	0	0	0	0	0	0	0	0	0	16	16	2,550
JUL	4	2	0	11	11	95	65	0	0	0	0	0	0	0	0	0
AUG	7	5	2	11	11	0	0	0	0	0	0	0	0	10	10	0
SEPT	0	0	0	85	5	0	0	0	0	250	0	250	0	21	21	6,200
OCT	4	3	1	6	6	0	0	0	0	0	0	0	0	8	8	0
NOV	0	0	0	0	0	240	0	0	260	0	0	0	0	6	6	0
DEC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2022 Totals	56	42	3	931	54	335	185	10	260	4,285	0	250	0	83	83	8,750

INSPECTION SERVICES

Rights-of-Way inspections are performed by the Public Works Water/Sewer Division personnel throughout the year on new residential, commercial, and multi-family water and sewer service connections. This provides control and protection for the Village’s existing utility infrastructure and the Village residents.

J.U.L.I.E. locates are performed on all requested utility locations by public and private contractors.

You'll know what's below by the different flags, stakes or paint.

- Red - Electric
- Yellow - Gas, oil or petroleum
- Orange - Communications
- Blue - Potable water
- Purple - Reclaimed water, irrigation
- Green - Sewer
- White - Proposed excavation
- Pink - Temporary survey



JULIE, Inc. neither owns nor marks underground lines, however we alert our member utility companies so they can mark your property for safe digging.

Morton Grove Water Division Historical Milestone Events

Date of Event	Type and Location of Event
2015	Installed 208 lineal feet of 8" C900 water main on Octavia Avenue from Wilson Terrace south to Lyons Street to complete the water main loop.
2015	Installed 235 lineal feet of 8" C900 water main on Ozark Avenue from Suffield Street north to Churchill Avenue to complete the water main loop.
2016	Installed 550 lineal feet of 15" Sanitary Sewer Pipe in the alley right-of-way in the 8800 Block of Meade Avenue. Abandon in place the old sanitary pipe running in the rear yards.
2017	The Morton Grove Niles Water Commission (MGNWC or Commission) was formed to design, construct, finance and operate a regional water supply system that transports and delivers clean, safe and affordable Lake Michigan water to the Villages of Morton Grove and Niles. The MGNWC is invested in long-term water supply planning and management to stabilized rates that allow for needed infrastructure improvements.
2018	Completed MGNWC water main installation from Evanston to Morton Grove.
2018	Lined 20" water main from Harlem and Dobson to South Pumping Station.
2018	Completed 8900 Meade sanitary sewer relocation .
2019	Replaced 45 Fire Hydrants to upgrade the water infrastructure .
2019	Lined 7,000' of sanitary sewer in Basin 7 area to prevent infiltration in the sanitary sewer system.
2020	Replaced 100" of 20" feeder water main under Caldwell from the South Pumping Station.
2020	Lined 9,000' of sewers in various spots through-out the Village.
2021	Replaced 50 Fire Hydrants around the Village to up-grade the water infrastructure.
2021	Installed 200' of 8" water main on Central Avenue at Main Street. Lined 2,900' of the 17" Sanitary main line on Greenwood Avenue, from Waukegan Road to Lehigh Avenue. Lined 8,630' of sanitary sewers in various locations through-out the Village. Installed 750' of 12" water main replacing the 10" and 8" on Main Street from Lehigh Avenue to the Forest Preserve.
2022	Lead Line Identification and Replacement Program started, per the IL EPA.

Oak Park Avenue Water Main Break



Lead Service Line Replacement Program



PUMPING STATIONS

The ultimate goal of the Pumping Station personnel is to preserve public health while furnishing adequate amounts of water for fire protection and consumption for residents and businesses. Additionally, using sound management practices and operating procedures which are economically strong and in the best interest of the Morton Grove residents. When delivering these services, the department will continue to comply with all State and Federal EPA mandates, striving to continually enhance consumer confidence in the Village's water system.

The Morton Grove Pumping Stations have three full-time certified water operators. These employees take care of the daily, weekly, monthly, and yearly tasks of record keeping, water sampling, building maintenance, meter repair, and numerous other jobs. This includes holidays and weekends as well. It is up to the operators to protect the health and welfare of our community ensuring that all of the strict EPA regulations are followed.

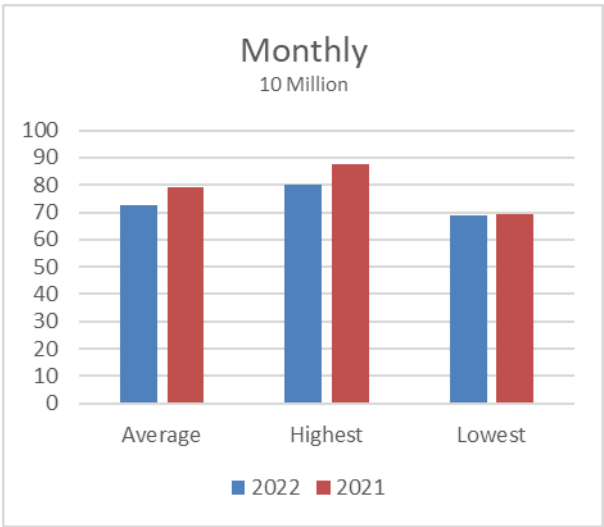
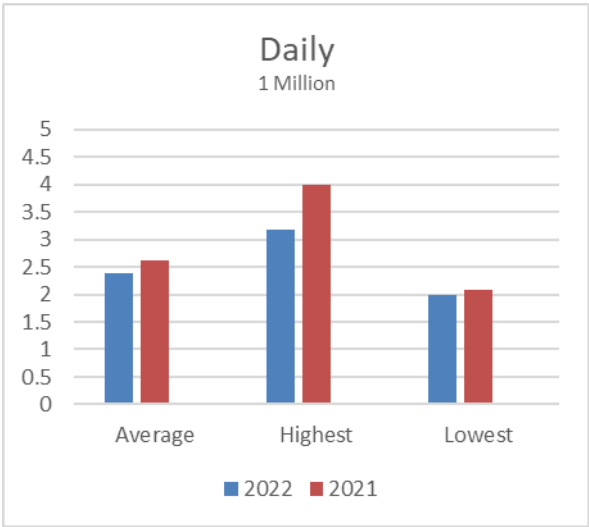
Water supply operators must follow the EPA regulations for continuing education. This ensures all water operators stay informed of new regulations as well as new ideas in the water industry. A Class "C" Water Operator must earn a minimum of 15 classroom hours to maintain his certification with the state. Last year our water operators earned over 40 hours of continuing education. Due to Covid-19 restrictions, water operators watched webinars to stay updated on current EPA regulations.



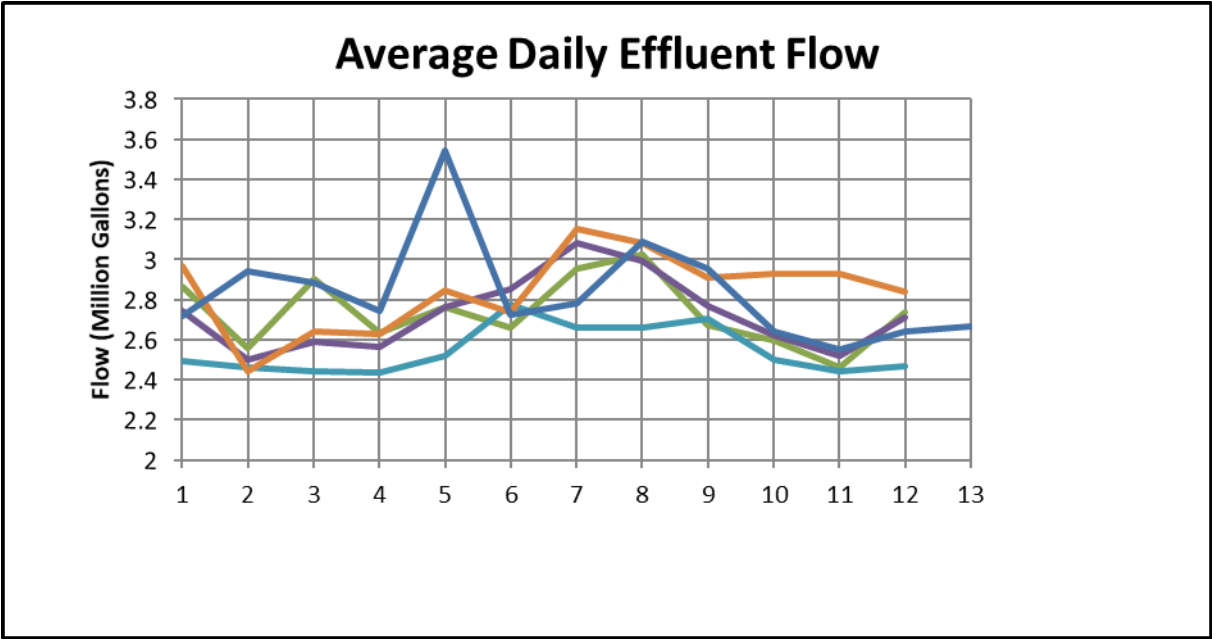
North Pumping Station

ANNUAL PUMPAGE 2022

Water tower levels are slightly lowered in colder months. This minimal pressure change reduces water main breaks that result in water loss. Water main breaks are inevitable due to aging pipes and weather conditions. Pumping Station personnel strive to keep water loss as low as possible. All leaks, whether big or small, result in unaccounted for water.



Pumpage:	Gallons:	Facts and Statistics:
Total water pumped	873,235,000	Down 108,765,000 Gallons from 2021
Average month	72,769,000	Down 6,599,000 Gallons from 2021
Highest month	79,938,000	July 2022 79,938,000 Gallons
Lowest month	68,829,000	November 2022 68,829,000 Gallons
Average day	2,392,000	The total average from two pumping stations
Highest day	3,182,000	June 29 th 3,182,000 Gallons
Lowest day	1,981,000	November 8 th 1,981,000 Gallons



METER DEPARTMENT / WATER METER TESTING

Most water meters in residential settings are located where the water service comes into the house (i.e. basement, crawl space, or utility room). The remote reader is usually located on the exterior of the house. Some meters are located in a meter pit outside the house. Residents of the Village of Morton Grove can request a service call if they have any water related concerns. Services requests range from high usage, noisy meters, frozen meters, remote readers malfunction or water termination. Water consumption is monitored thru a 24-hour remote reading system which detects unusual or no water usage. Residents are notified by phone call or door hanger. The Meter Division receives service requests from the water billing department. In 2022, we completed 240 service requests and delivered 38 new meters.

Like all measurement devices, water meters are subject to wear and tear. To ensure meter accuracy and improve efficiency, Morton Grove requires water meters to be tested. Village personnel will test residential water meters as they are replaced or upon request. An appointment is required with staff to access the water meter. Testing generally takes one (1) hour.

Testing of Industrial, Commercial, and Institutional properties will be done by mail or telephone by Village personnel. Property owners will be fully informed of the program, and testing procedures. Any questions or concerns are addressed before the test takes place and results become available. Meters that fail will be repaired or replaced as well.

This program is an annual project under the Waterworks Infrastructure Rehabilitation and Preventive Maintenance Program. A water meter is a mechanical device that is subject to wear and tear. Through normal usage, it can stop working, leak, or provide an inaccurate consumption reading. Testing allows us to improve the meter reading and billing process, resulting in improved customer service and reduced operating costs.

The Village of Morton Grove contracted HBK Contractors, to test large meters on site. Test results are sent to the Pumping Station for review.

SENSUS WATER METERS AND SMARTPOINT METERING SYSTEM



CROSS CONNECTION

The Village of Morton Grove is required by the EPA to provide safe and potable water to its customers at all times. In order to ensure that contamination does not enter the distribution system due to backflow or back siphonage through cross-connections, it is necessary that the premises of each water customer be inspected for cross-connection (in accordance with Ordinance #95-7). Inspections must be performed by a plumber, licensed by the State of Illinois for cross-connection control device inspections. Where a cross-connection exists, a fixed proper air gap or an approved backflow prevention device must be installed to protect the safety of potable water supply.

There are currently 825 total cross connection prevention devices in Morton Grove with many more being installed on new and existing buildings and homes each year.



Protects your drinking
water and city water from contaminants.

Cross Connection

ALARMS

The Morton Grove Pumping Stations are equipped with dozens of early warning alarms as well as emergency alarms. Those early and emergency alarms help water operators keep the water system safe, clean, and running properly. The alarms can range from power failure, burglar alarm, and low vault temperature. An outside alarm company as well as an internal alarm system notifies the operator "on call" so the alarm can be assessed for its danger level. The required operator will act as soon as possible.

There was a total of 435 alarms in 2022 with 75 occurring after working hours.

SECURITY

Pumping Station security has always been an important part of the pumping station operators. Water towers, vaults, hatches, fences, etc. are regularly checked by personnel. In addition, new alarm systems were installed in 2022. Cameras were installed at the North Pumping Station and can be viewed at any time by personnel. Cell phone company employees and sub-contractors are required to submit to a background check, before entering village properties and water tower.

CHLORINE (CL₂)

Chlorine is an important chemical for water purification. Using chlorine in the water system kills bacteria and other microbes that can be harmful to humans. Chlorine is a toxic gas that irritates the respiratory system and can lead to death. It is also a strong oxidizer that can react with flammable materials. Great care must be taken when dealing with chlorine gas.

Each station has a number of chlorine tanks used to inject chlorine into the water system as it comes into the station to ensure safe drinking water. This injection is monitored, and just the right amount flows into the system. These tanks must be located in a secure, ventilated place. Because chlorine gas is heavier than air, it tends to accumulate at the bottom of poorly ventilated areas. The tanks have to be replaced every few weeks. This involves the Pumping Station personnel to physically remove the tanks and hook up new ones. Precautions must be taken because chlorine gas is so harmful. All proper safety regulations must be followed to ensure the safety of the pumping station personnel, i.e. two employees to change one tank, ventilation fans turned on while in the chlorine room, inspection of all connections after the tank is hooked up.

In 2022, 3,755 lbs. of chlorine were used.



Chlorine Storage



Chlorine Scale

WATER SAMPLES

In order for the Morton Grove Pumping Station to supply a safe clean supply of water to its customers, it must be properly operated and maintained. However, this alone can't document the safety or quality of the water. To develop and maintain a record of water quality it is necessary to collect representative samples of water and have them analyzed by a certified EPA laboratory on a routine basis. The minimum number of samples required to adequately monitor a water supply is determined by considering the water source, the type of treatment employed, the population served, and the history of the water quality in the system.

A total of 96 disinfection by-product samples are taken throughout the village water system. Based on population, the Village of Morton Grove is required to take 300 bacteria samples yearly.

In 2022, personnel collected 336 samples that were analyzed by a certified IEPA lab. All samples came back as satisfactory.



The water sample bottle must be sealed before sample collection, and filled up to the 100ml mark. In 2022, the Village was required by the IEPA to collect 30 Lead and Copper samples to be analyzed by an approved State lab. All of those taken were within the standards set by the IEPA.

RAINFALL TOTALS 2020

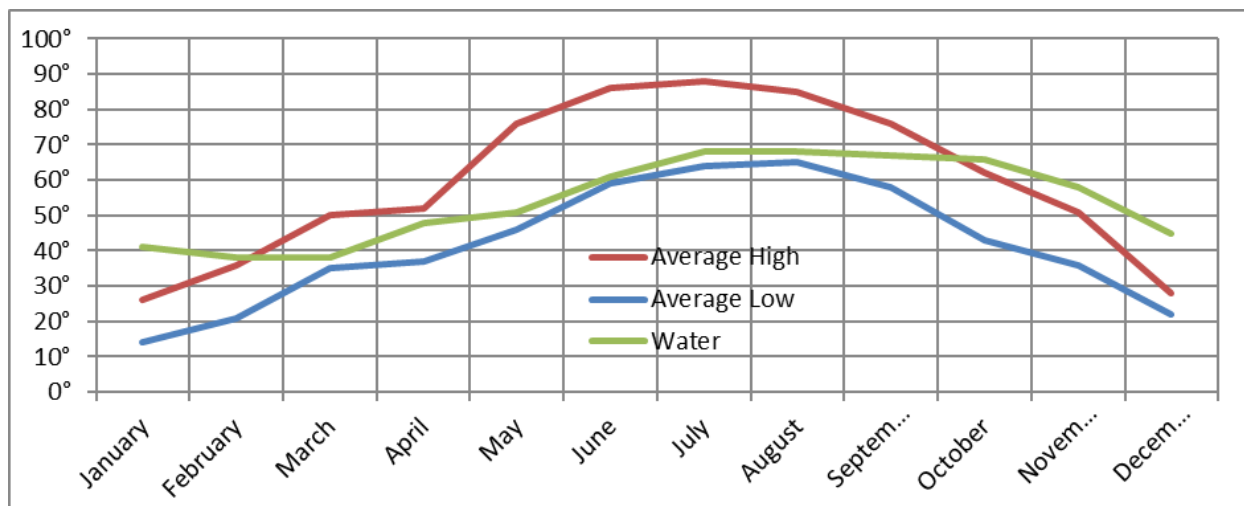
The total rainfall from March 2022 to November 2022 was 26.82 inches. The average rainfall per month was 2.23 inches.

January	out of service
February	out of service
March	2.79 inches
April	5.30 inches
May	4.30 inches
June	2.70 inches
July	5.29 inches
August	2.62 inches
September	1.46 inches
October	1.87 inches
November	.49 inches
December	out of service
Total:	26.82 inches



AIR & WATER TEMPERATURE

Month	Low (°F)	High (°F)	Avg. Low (°F)	Avg. High (°F)	Water Temp. (°F)
January	-7	27	12	26	37
February	-1	52	16	35	37
March	30	76	30	48	39
April	29	84	39	56	46
May	39	96	53	74	54
June	54	106	63	88	62
July	58	100	65	89	67
August	57	98	65	81	70
September	41	90	56	77	70
October	31	79	41	63	64
November	12	74	32	50	55
December	2	58	21	34	42



BUILDING MAINTENANCE DIVISION

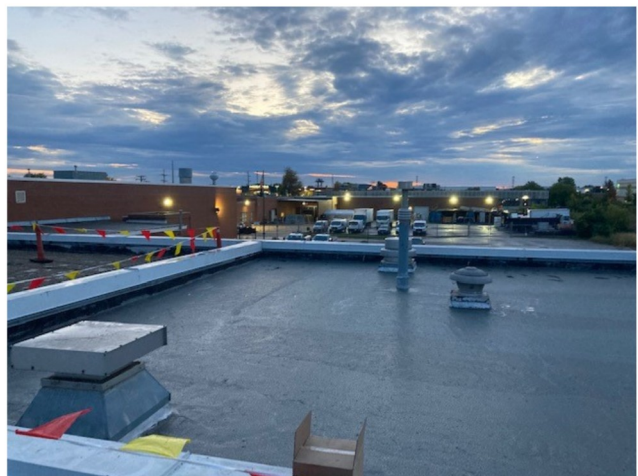
This Division's priority is to monitor, maintain and verify the condition of municipal buildings and properties on a continual basis. This Division participates in setting design specifications, bidding and overseeing the preventive maintenance programs which decrease the overall cost of maintaining buildings and properties.

The Building Maintenance Division plans future maintenance expenditures and helps to create and develop a comprehensive plan to address the nature, amount and timing of future capital expenditures. The division is also responsible for developing and overseeing the Public Works wellness, safety and training programs. Special events, specifically, the Morton Grove Days, held over the fourth of July is managed by this division as well. All operations, before, during, and after the event are administered by Building Maintenance. Tasks include; obtaining vendors, scheduling services, coordinating entertainment, and proper clean up.

Capital projects completed in 2022:

Restoring the roof over the Public Works office area, resurfacing the Public Works parking lot, overseeing the remodeling of the kitchen at Fire Station 4, installing a door access control system at Fire Station 4 and the preparation of specifications to replace the generator at Fire Station 5. Noteworthy repairs in addition to the Capital projects included replacing a failed transformer in the Public Works garage, providing temporary generator service to Fire Station 4 when the turbo assembly failed on the 180-kw generator and replacing the ejector pumps on the Administration side of Fire Station 4.

Public Works Roofing Project



SAFETY TRAINING

The Public Works Safety and Training Committee continues their dedication in achieving their goals and commitments towards a safe working environment and employee wellness. It continues to provide training opportunities for staff development and the development of safe practices, procedures, policies, and continuing the trend of reducing incidents and accidents in the work place. The Department is responsible for maintaining and investigating employee injury documentation. This includes filing the initial injury report, investigating the injury, reviewing the injury and what lead to the injury. Public Works, than develops procedures to prevent similar injuries and provide follow-up training to educate employees.

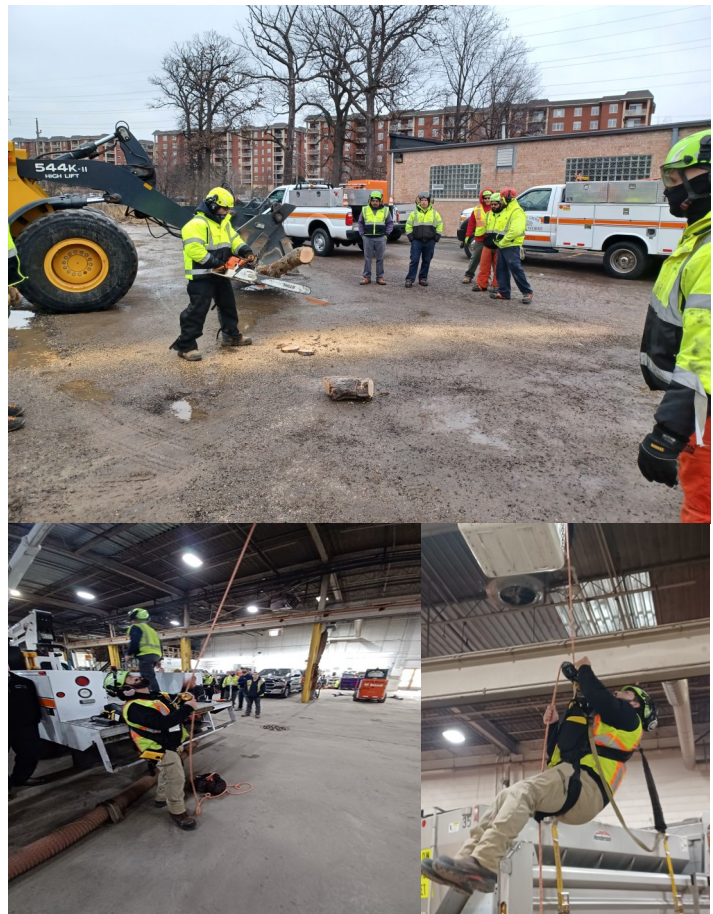
The program also includes meeting the OSHA regulatory compliance training, overseeing the Public Works management program, the Public Works Safety Committee, assigning tailgate training talks, and reporting to the Executive Safety Committee. Responds to safety hazard reports, near miss reports and preparing an annual safety quiz. Points of emphasis in 2022 include trenching and shoring, behavior analysis, confined space entry, promoting the stretching program, back safety and safe lifting techniques, updating the sidewalk inspection policy and the ongoing creation of job procedures and job safety analysis.

On-site training included classes presented by Start Group regarding trenching and shoring safety and confined space entry. Additionally, Audiometric Associates performed annual hearing conservation training and testing.

Public Works Trenching & Shoring Training



Public Works Chain Saw and Self Rescue Training



ENGINEERING DIVISION

The Engineering Division is responsible for the design, inspection and administration of construction projects involving private and public infrastructure improvements. The management of the Village's GIS (Geographical Information System) is another responsibility of the Engineering Division. The Engineering Division strives to proactively evaluate the Village's infrastructure systems and identify long-term maintenance needs as well as develop annual programs and projects to maintain or expand infrastructure systems. Most of these programs and projects are developed and administered by the Engineering Division. Construction standards controlling construction of improvements in the rights-of-way or on village property are established, followed and revised by the Engineering Division.

The Engineering Division is directly involved in procuring funding and/or administering contracts for projects performed within the Village using State or Federal money. To complete its work, the Engineering Division staff regularly coordinates with residents, businesses, developers, utility companies, elected officials, county, state and federal regulators, and staff members from other municipalities.

Concrete replacement Program

The purpose of this program is to repair concrete features to a serviceable condition and improve sidewalks and curb ramps to meet accessibility standards. This program focuses on the condition of concrete sidewalks, curb/gutter, pavement, and driveways that naturally deteriorate over time and can be damaged by snow plowing operations, public utility repairs, tree root growth, and excessive loading. Schroeder & Schroeder, Inc. was paid \$187,163.35 to complete their work.

Totals for 2022 Concrete Replacement Program

Sidewalk Repairs

125 Locations 13,092 square feet

Curb Repairs:

79 Locations 1,525 lineal feet

Driveway Apron Repairs (required due to utility repairs)

22 Locations 356 square yards

Pavement Patches

4 Locations 280 square yards

Concrete Saw Cutting Program

This pilot program is intended to be a cost effective way to restore accessibility and eliminate tripping hazards on pedestrian routes. Differential settlement of sidewalk panels creates an environmental barrier at the joint between panels for sidewalk users. All aspects of the program remains under evaluation and annual adjustments to determine a good fit for the Village particular needs and resources.

The contract included highly favorable prices from Murphy Construction Services LLC. The funding in 2022 was increased from \$60,000 to \$90,000. The final contract amount was \$89,969.49. As part of the work, the contractor surveyed over 60 miles of sidewalk and repaired more than 2,400 joints.

Traffic Safety Commission

Engineering staff reviewed nine Plan Commission applications or Request for Review for five Traffic Safety Commission meetings in 2022.

ENGINEERING DIVISION

Emergency Water Supply Project

A project began in 2019 to reduce the risk and improve the resilience of the Village's water supply system. This project would connect a new pipeline to an existing water supply pipeline owned by Northwest Water Commission. Northwest Water Commission supplies water to several northwest suburban municipalities and their line passes through the Village approximately 1200 feet from the Village's North Pumping Station. The Village's engineering consultant, Ciorba Group Inc., was hired to provide the preliminary and design engineering services for this project in the amount of \$87,621. Design engineering was completed and the project was bid. The bids exceeded the available funds for this work and were rejected. Village staff began developing other funding options and design alternates for the remainder of the year.

Annual Contract Procurement

The Engineering Division prepared 11 contracts for the Public Works Department annual maintenance programs. Generally, these contracts include preparing contract documents, bidding, contract award, and contract execution before transferring control of the contract to another Division. Some include contract administration by the Engineering Division.

Street Patching Program

The 2022 Street Patching Program included approximately 79 isolated locations throughout the Village. Schroeder Asphalt Services, Inc. was hired to remove and replace 3,498 square yards of the top 1.5 inches of asphalt pavement. The total cost of the project was \$66,989.

Pavement Marking Program

Faded pavement markings on Village streets were remarked. The Village participated in a cooperative purchasing pavement marking program with 10 other communities. The Engineering Division staff managed the program. The contract cost was \$29,726 and improved the visibility of pavement markings at 87 locations. One of the locations included in the program was traffic calming along Lincoln Avenue from Menard Avenue to Long Avenue. Lincoln Avenue was modified from four lanes to two lanes in order improve safety for side street vehicular and pedestrian traffic entering or crossing Lincoln Avenue.



Albert-Davis Water Main Replacement Project

Continued design engineering for a project to replace a water main within the forest preserve that crosses under the river. This project will require permitting from Forest Preserve District of Cook County, Illinois Department of Natural Resources, and United States Army Corps of Engineers. Construction access into the forest preserve will require extraordinary coordination for a project for this type to minimize social and environmental impacts. Public Works staff used its unmanned aircraft (drone) in an innovative way to review design alternates and supplement survey information in the wooded area. Construction may start in 2023 if permitting goes smoothly, but more likely will be completed in 2024.

Main Street Phase 2 Water Main Replacement Project

The Village replaced a deteriorated water main along Main Street west of Lehigh Avenue in 2021. The second phase of this project includes replacing the deteriorated water main within the forest preserve. Preliminary engineering began for this replacement in 2021. Design engineering began in 2022. This project will require permitting from Forest Preserve District of Cook County. Construction is planned for 2023 or 2024.

COMBINED CREW EVENTS

PUMPKIN SMASH—DON'T TRASH IT, SMASH IT!

The Pumpkin Smash is an annual effort by communities to divert pumpkins from landfills by providing locations for residents to drop-off jack-o-lanterns to be composted. It is held each year the Saturday after Halloween.

Morton Grove, smashed 425 pumpkins.



SWANCC RECYCLING EVENT

As a courtesy to SWANCC (Solid Waste Agency of Northern Cook County) community residents, this agency provides an opportunity to Morton Grove and all member communities to destroy sensitive documents and recycle electronic devices such as; medical records, tax forms, bank statements, T.V.'s, and printers. Seasonal document destruction and electronic recycling events can be scheduled annually between May and October.

Morton Grove schedules this event on the 3rd Saturday of May, each year. In 2022, Morton Grove had 465 vehicles participate in this event.



COMBINED CREW EVENTS

WHAT IS ARBOR DAY?

Arbor Day is an annual observance that celebrates the role of trees in our lives and promotes tree planting and care. The first ever Arbor Day was held on April 10, 1872, and it was a wild success. J. Sterling Morton led the charge in the planting of approximately one million trees. The tradition quickly began to spread and schools across the country started to participate in Arbor Day every year. Throughout the world, people of all ages are planting trees, caring for them, and learning their value.

Morton Grove Public Works participates in speaking with schools about the importance of Arbor Day and the benefits of trees.



NATIONAL NIGHT OUT

National Night Out is an annual community event hosted by the Police Department with the assistance of Public Works. This partnership and neighborhood camaraderie makes our neighborhoods a safer place to live. National Night Out enhances the relationship between neighbors and law enforcement/public works while bringing back a true sense of community. Furthermore, it provides a great opportunity to bring police/public works service and neighbors together under positive circumstances.

