

AGENDA 8a3
DATE 9.1.15

DEPARTMENT OF PUBLIC WORKS

CITY OF NORTON SHORES



FISCAL YEAR END REPORT – 2015
July 2014 – June 2015

The Department of Public Works respectfully submits this report to the City Council as an overall review of various activities handled by the Department during FY-2015 under the direction of Gerald A. Bartoszek. Clerk Typist III, Tara Smith, serves as the department secretary, responsible for initial customer assistance and all department clerical duties.

The report will highlight activities deemed significant to the function of the Department and its role within the City organization. The report also recognizes the superintendents and supervisors within the Department and includes Supplemental Reports for each Division within the Department.

During FY-2015 the Public Works Department responded to 136 after hour calls, primarily consisting of 62 sewer lift station calls, followed by 41 water main and water service calls, and five sewer calls. Other calls included 18 in the street system, two equipment service calls, six Emergency Miss Dig requests, and two miscellaneous calls.

The Public Works Department is comprised of the following Divisions:

WATER & SEWER

Personnel - Derek Gajdos, Superintendent
Scott Houghtaling, Supervisor
Kathy Lager, Account Clerk II
Nine Utility Workers

The Water & Sewer Division of the Department of Public Works has been in existence prior to the founding of the City. The Division is responsible for the operation and maintenance of the water distribution system and the sewage collection system, as well as utility billing. This report will relate to activities conducted by the Water & Sewer Division, including field operations and office functions. Derek Gajdos serves as Water & Sewer Superintendent for the Division; Scott Houghtaling is the Water & Sewer Supervisor. Account Clerk II, Kathy Lager, is responsible for water and sewer billing, scheduling appointments, and all other clerical activities in the Division.

STREETS AND DRAINAGE

Personnel - Terry Sladick, Superintendent
Brian Nummerdor, Supervisor
Donna Holmberg, Account Clerk II
Stacy Stehouwer, Part Time Clerical
Nine Streets and Drainage Maintenance Workers

Activities handled by this Division provide for the maintenance of streets and drains within the jurisdiction of the City. Specific areas of responsibility include street surfaces, roadside areas, bridges, traffic signs, and traffic signal maintenance. In addition, the drainage system involves storm sewer, sub-drain and off-road outlet maintenance.

EQUIPMENT SERVICES

Personnel - Terry Sladick, Superintendent
Charles Borgman, Chief Mechanic
Two Mechanics

This activity provides for the maintenance of all equipment in the Equipment Fund. City personnel are responsible for preventive maintenance, as well as routine maintenance. Major repair work at times is contracted to specialists. Equipment Services recommends the specifications to be used to purchase new and replacement vehicles and other equipment, as well as preparation of the new equipment for use in the operations. This Division also decommissions the equipment being replaced and conducts the sale of the used equipment.

BUILDINGS AND GROUNDS

Personnel - Ted Jeske, Crew Leader
Two Maintenance Workers

Maintenance and custodial responsibilities in City Hall and at the Library are the primary activity of this Division. Custodial duties of the DPW facility office area is also performed. Building and Grounds personnel also take care of various duties in support of the City Clerk's Office during elections. They maintain the heating and air conditioning systems in City Hall, the Library, and the Public Works facility on Mt. Garfield Road.

Another duty of Building and Grounds personnel is the care and grooming of the cemetery on Airport Road. Grass cutting, leaf removal, and general overall clean up and care to keep the property presentable at all times are primary activities. Additional duties dealing with the cemetery include the sale of gravesites as well as the preparation of graves for burial and the closure and restoration afterwards.

ENGINEERING SERVICES

Personnel - James R. Murphy, Project Engineer

The Project Engineer coordinates and oversees the development and construction of all of the City's major infrastructure improvements. Engineering Services provides the capability to respond to capital improvement requirements in our City, covering all aspects of growth in the public streets, drainage, water, and sewer systems. In addition, the division aids in the oversight of traffic signal and traffic control. Engineering Services also works towards the procurement of outside funding resources through grant application submission for public infrastructure projects. The Engineering Division also provides support to the site plan review process required by the Zoning Ordinance for all non-residential projects, subdivisions, and site condominiums.

PLANNING

Personnel - Robert W. Bilkie, City Planner

The City Planner acts as the City's Zoning Administrator and is responsible for ordinance enforcement and site plan approval, as well as communications with the Michigan Department of Environmental Quality related to critical dune issues. He also is staff representative to the Planning Commission and Zoning Board of Appeals.

**WATER & SEWER DIVISION
FY-2015 REVIEW**

The following are activities conducted by the Water & Sewer Division, both in field operations and office functions:

Water Supply

After many years of purchasing water from Muskegon Heights, the City's water supplier has changed to the City of Muskegon. Three new pumps, several miles of water main, the relocation of a booster station, and the construction of a new water tower were needed to facilitate the change. There was no resultant cost increase to our customers.

Water Services

During FY-2015, Water & Sewer crews installed 53 water services ranging in size from ¾" to 2". Service installations require the water main in the road right-of-way to be tapped under pressure and a copper service placed to the homeowner's property line, in addition to setting a water meter. Please see Attachment A for installation statistics since 2003. Repairs to 145 existing water services were also completed.

Sewer Connections

The Water & Sewer Supervisor approved the connections of 43 sewer services to the sanitary collection system. Inspections detail approved types of pipe, pipe size, connection fittings, grade, depth and pressure testing.

Water Meter Program

During FY-2015, Water & Sewer personnel also conducted the meter change-out program with new meters being set. Throughout the city, a total of 623 residential and/or commercial meters were pulled and replaced or set. The City has 9,681 meters in the replacement program and 324 in the testing and repairing program. The program consists of 15-year replacements for total accuracy of the water meters. It has been proven that when interior parts of the register chambers in older meters become worn, 100% metering accuracy is lost.

Additional meters for irrigation have been set for homeowners and businesses to eliminate sewer charges on irrigation water. A total of 40 additional meters were set in FY-2015.

Water Main Breaks

During FY-2015, crews responded to a total of 11 water main breaks throughout the Norton Shores distribution system. Repairs were made during regular hours and as after-hours emergencies. The total cost to repair all 11 breaks was \$50,854.07 including all labor and materials.

Valve Maintenance

Once each year, all 1,502 mainline distribution valves are operated, recorded as being operable or inoperable, and repaired if necessary. The program has eliminated time consuming efforts to isolate portions of the distribution system during water main breaks, thus minimizing disruption of service to residents and businesses. Two valves were replaced in FY-2015. During the FY-2015, all of the mainline water main valves were exercised, and repairs to 24 main line valves were completed.

Large Meter Testing and Replacement

All large (1½” to 6”) meters are periodically tested in place for accuracy depending on gallonage used per year, and size and age of the meter. One new large meter was set in FY-2015, and crews completed three large meter tests of the 44 that were scheduled due to staff shortages. There are a total of 324 large meters in the system.

Meter Reading

The City of Norton Shores’ metering structure consists of 10,005 water meters. Meters are read on a quarterly basis, within three billing districts, or reading one district each month, for a total of 39,880 readings per year. In addition, a total of 2,863 work orders for final readings, meter leaks, etc., were processed in FY-2015.

Senior Citizen Discount

This program offers a 25% discount off quarterly water usage to eligible senior residents. Eligibility requires the senior resident to own and occupy the residence, be at least 62 years old, and have a total annual household income of less than \$22,909.

Breakdown of senior discounts per billing district:

McCracken	29	Total gallonage 1,074,000
East Broadway	27	Total gallonage 892,000
Henry	40	Total gallonage 1,598,000

Lift Station Maintenance

Daily operations include scheduled preventative maintenance on a weekly rotational basis of all 43 sanitary sewer lift stations and one dewatering station. Each station is checked for normal operations weekly which include weekly electrical readings, pump hour readings, and complete assessment for any abnormalities. Semi-annually, all lift station wet wells are cleaned, and sludge is removed by the sewer vector truck. Pumps are then pulled and washed, oil is changed, and tolerances are checked for impeller clearance.

All lift station electrical usage is monitored for performance evaluation and weekly energy usage. See Attachment B.

City of Norton Shores Sewer Lift Stations by Address:

4316 Armstrong Road	2217 Lincoln Park Drive
874 Bradley Avenue	5395 Martin Road
3798 Brentwood Street	2117 Maryland Boulevard
1204 E. Broadway Avenue	3112 McCracken Street
1978 Channel Road	4049 Nob Hill Drive
1130 Edinborough Drive	2218 Norcrest Drive
351 Eric Avenue	2203 Norman Street
1070 Forest Park Road	3746 Norton Hills Drive
1310 Forest Park Road	3571 Peninsula Drive
1616 Forest Park Road	2369 Pleasant Hill
6239 Grand Haven Road	89 Pontaluna Road
6239-1/2 Grand Haven Road**	2195 Reneer Avenue
4341 Hackley Point Lane	4781 Rood Road
4162 Harbor Point Drive	1175 Seminole Road
3180 Henry Street	1797 Seminole Road
4210 Henry Street	2939 Sheffield Street
4993 Henry Street	1411 Sunbury Avenue
701 Lake Forest Drive	3797 Taylor Street
4461 Lake Harbor Road	4171 Treeline Drive
6260 Lake Harbor Road	3006 Valk Street
396 Lakshore Boulevard	418 Wellesley Drive
2830 Lincoln Street	861 Winslow Court

(**dewatering)

Consumer Confidence Reports

The annual drinking water Consumer Confidence Report was prepared and made available to all system customers. Recent law changes allowed the City to make this report available online instead of mailing a copy to each individual consumer. This resulted in a savings of approximately \$3,500 annually. The Department of Environmental Quality and the Environmental Protection Agency require this report be made available to all water customers to provide information as to the quality of water they drink. A copy of this report is attached as Exhibit G.

Infrastructure Locating

One of the responsibilities the City has in owning and operating utilities is that of locating water and sewer lines for contractors or homeowners that intend to dig within the city. The City is required to be a member of the Miss Dig System for organizing locating requests. Water & Sewer Division personnel needed 1,179.5 man hours to complete approximately 2,090 such requests during the 2015 fiscal year.

Sewer Discharge Accountability

This program occurs monthly to monitor all billings from the Muskegon County Wastewater facility. The program is analyzed for extraordinary usages due to ground water infiltration or storm water discharge by City sewer customers. There have been incidents of users illegally discharging storm water to the sanitary sewer, thus raising monthly monitoring gallonage. These illegal connections are promptly removed. Please see Attachment D.

Water System Accountability

This program is done on a monthly basis to determine annual purchases and sales of water from Norton Shores customers. It also gives an indication of reliability for the water loss survey along with annual usages indicating growth in the community. Please see Attachments E and F.

Lift Station Telemetry

All existing lift stations are monitored through a telemetry Supervisory Control and Data Acquisition (SCADA) system. The unit is located at 1174 E. Mt. Garfield Road (Norton Shores garage), and after hours monitoring is located at 3228 Glade Street. The system checks all 44 stations within 90 seconds to determine the status of alarm conditions that may exist. The system is evaluated twice a year by simulating alarm conditions at the lift stations to test for reliability.

Office Billings

The following billing functions have been accomplished from July, 2014 through June, 2015.

- Processing of 2,863 work orders dealing with final readings, re-reads, turn-ons, turn-offs, leaks, frozen meters or services, high bills and new meter sets.
- Set up of 61 new accounts in the utility billing system.
- Mailing of 46,409 billings to customers, including past due notices, final billings and regular quarterly billings.

Michigan Department of Environmental Quality Certifications

Following is a list of Water & Sewer employees who are certified as Water Distribution System Operators. The Michigan Department of Environmental Quality (MDEQ) recertifies operators every three (3) years. In order to be recertified, a certain number of training credit hours must be completed within the three year period. Certified, competent and professional operators are very important to the delivery of safe drinking water to Norton Shores residents. These employees and the certification level are:

Derek Gajdos	Certified S-1	Jan. 2012-Jan. 2015
Scott Houghtaling	Certified S-1	Nov. 2011-Jan. 2015
Craig Lehan	Certified S-1	Jan. 2012-Jan. 2015
Scott Ellison	Certified S-4	Jan. 2012-Jan. 2015
Scott Hannahs	Certified S-4	Jan. 2012-Jan. 2015
Rich Hagye	Certified S-4	Oct. 2011-Oct. 2014
Eric Mattson	Certified S-4	Jan. 2014-April 2017
Keith Schaffer	Certified S-4	Aug 2012-Oct 2015

Classification of distribution systems:

Rule 1902. The following four classifications are assigned to distribution systems for type I public water supplies:

Class S-1: Distribution systems for type I public water supplies serving a population greater than 20,000.

Class S-2: Distribution systems for type I public water supplies serving a population from 4,000 to 20,000.

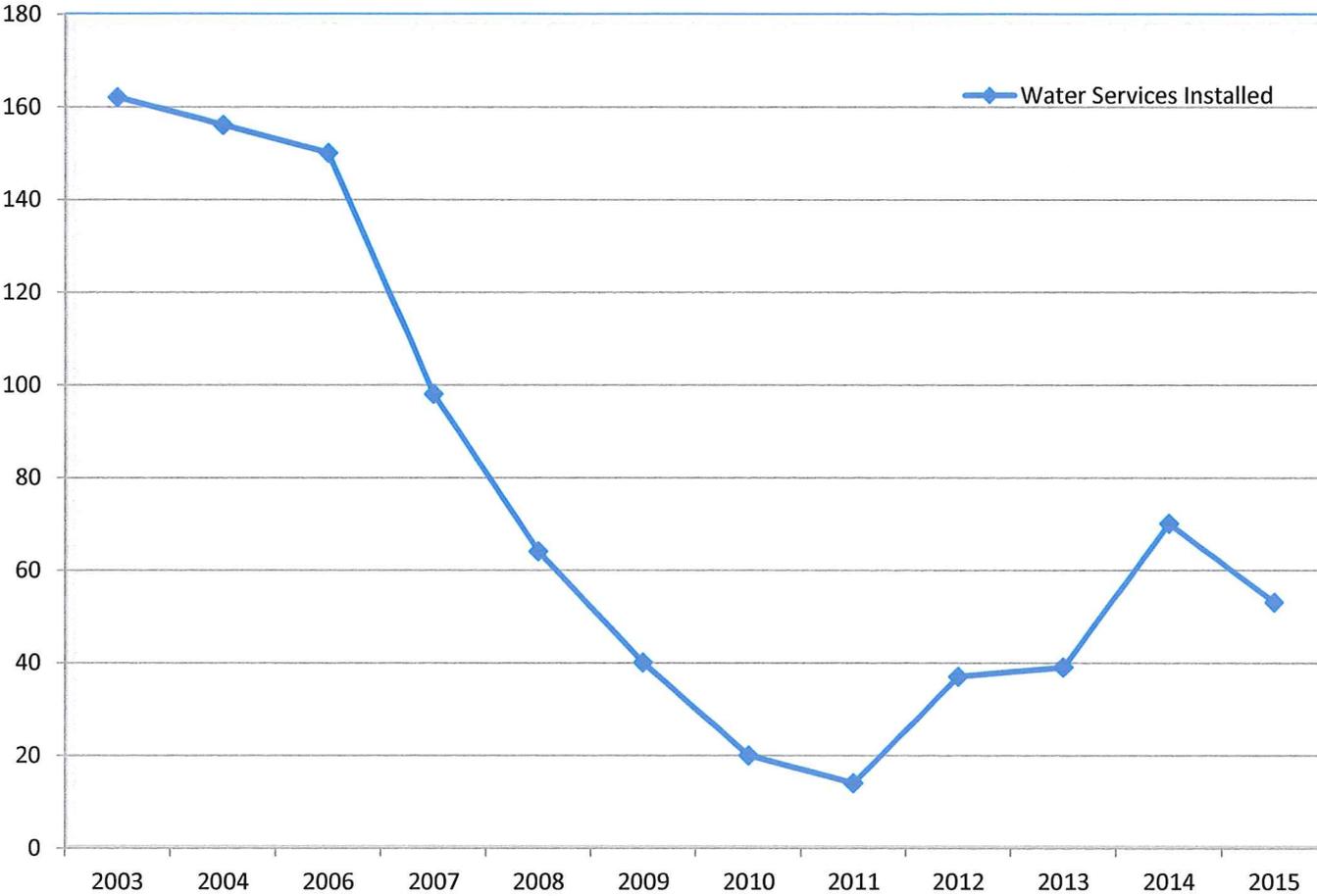
Class S-3: Distribution systems for type I public water supplies serving a population from 1,000 to 4,000.

Class S-4: Distribution systems for type I public water supplies serving a population of less than 1,000.

NORTON SHORES ATTACHMENT A WATER SERVICE INSTALLATIONS

YEAR	TOTAL SERVICES
2003	162
2004	156
2006	150
2007 FY-2006	98
2008	64
2009	40
2010	20
2011	14
2012	37
2013	39
2014	70
2015	53

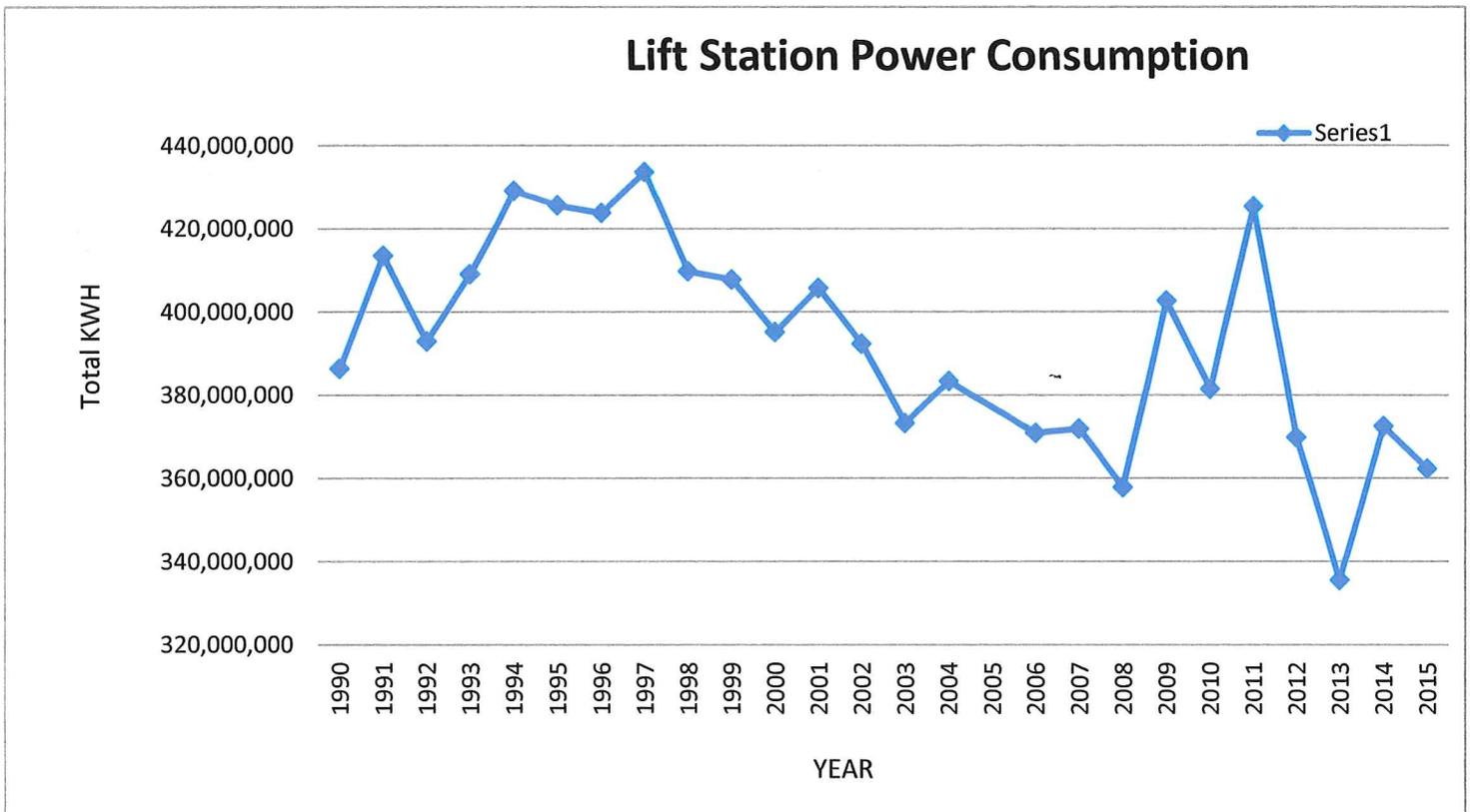
Water Services Installed



Attachment B Lift Station Electrical FY 2015

1990	386,275,000
1991	413,421,000
1992	392,882,000
1993	409,003,000
1994	429,037,000
1995	425,575,000
1996	423,766,000
1997	433,567,000
1998	409,671,000
1999	407,742,000
2000	395,087,000
2001	405,650,000
2002	392,279,000
2003	373,231,000
2004	383,311,000
2006	FY 2006 370,866,000
2007	371,866,000
2008	357,807,000
2009	402,557,000
2010	381,430,000
2011	425,306,000
2012	369,789,000
2013	335,445,000
2014	372,454,000
2015	362,201,000

* In KWH





MICHIGAN DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT
ENVIRONMENTAL RESOURCE MANAGEMENT DIVISION

2014 WATER SUPPLY CROSS CONNECTION REPORT

Issued under authority of 1976 PA 399, as amended, and the administrative rules.

Failure to submit this form is a violation of the Act and may subject the water supply to enforcement penalties.

Administrative Rule R 325.11405 states in part that "a water utility shall report annually to the department on the status of the cross connection control program on a form provided by the department." Return the completed form by March 31, 2015 to the appropriate Department of Natural Resources and Environment (DNRE) district office. For district office addresses, visit www.michigan.gov/dnre and click on Contacts.

WSSN: 4850

- A. Name of water utility: City of Norton Shores County: Muskegon
- B. Year that the current written cross connection control program was approved by DNRE: 1981
- C. Total number of industrial, commercial, institutional, residential, and governmental accounts that must be routinely reinspected for cross connections: 783
Of this number,
- How many are High Hazard accounts: 324 Frequency of Reinspection: Once per Year
- How many are Low Hazard accounts: 459 Frequency of Reinspection: Once per: 3 Year
- D. Number of accounts from "C" above that received their initial inspection in 2014: 24
- E. Total number of reinspections required and completed in 2014 based on degree of hazard:
- High hazard reinspections required: 324 High hazard reinspections completed: 324
- Low hazard reinspections required: 268 Low hazard reinspections completed: 268
- F. Number of accounts where a cross connection(s) was found to exist during inspections or reinspections in 2014: 64
- G. Number of accounts from "F" above where corrective actions have been completed: 7
- H. Total number of accounts from "C" above which are now in compliance with the local cross connection control program; $H = C - (F - G)$: 726
- I. Total number of backflow prevention devices in system requiring testing: 645
- J. Number of backflow prevention devices tested in 2014: 522

Narrative Description of Program

(Outline briefly any changes or significant findings since last reporting; use additional sheets if necessary.)

The City's inspection program is scheduled to be completed during the month of November and December annually. After all accounts were inspected, an audit of the program revealed two backflow devices did not receive testing as required during 2014. These devices will be required to be tested in 2015. All cross connections that were identified during the 2014 inspections program revealed only low hazard corrections. These corrections are being followed up during the first quarter of 2015. The 122 testable devices in the system that were not tested in 2014 were not required to be tested during the calendar year.

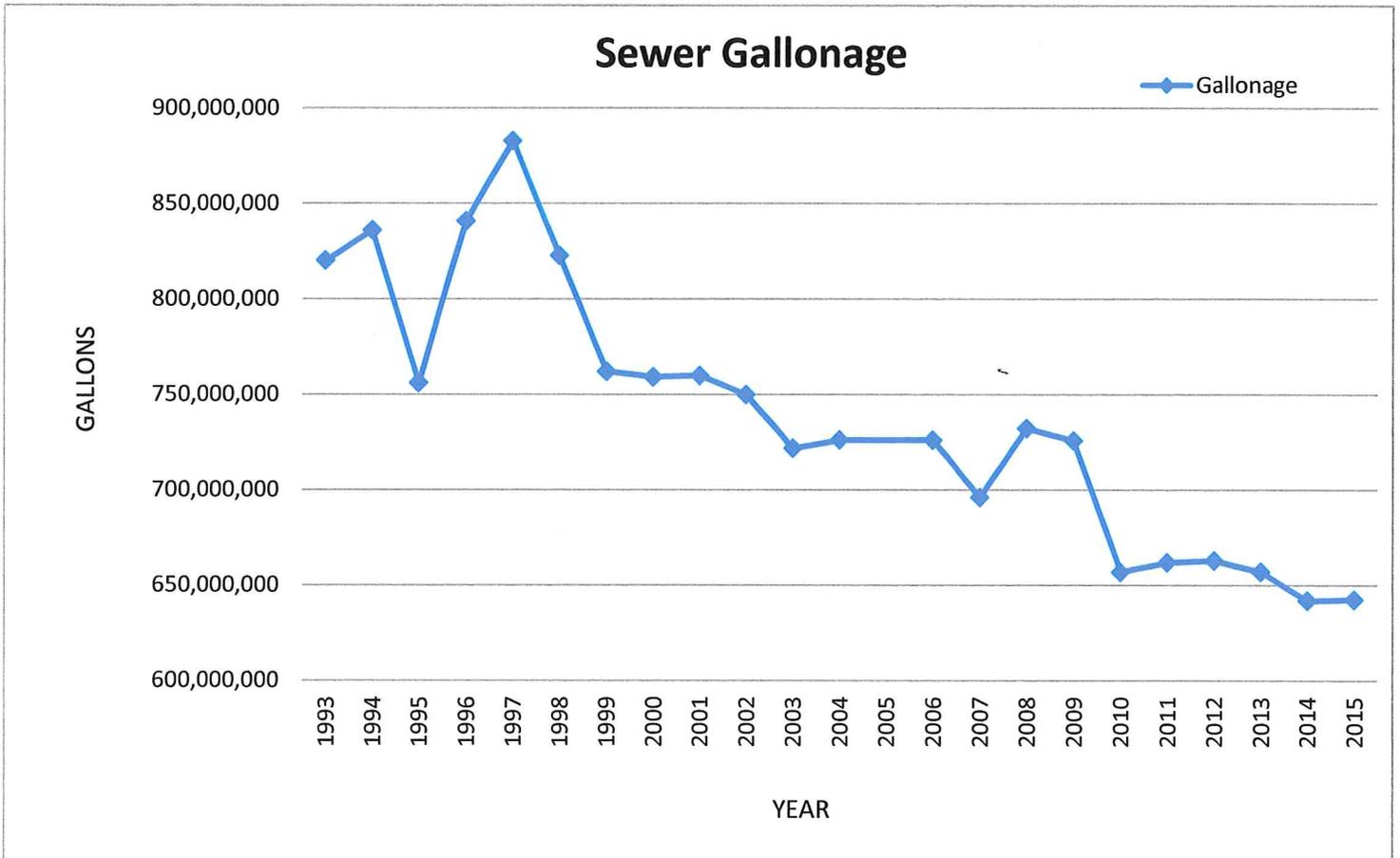
Name: Derek Gajdos

Title: Water and Sewer Superintendent Date: February 9, 2015

Attachment D Sewer Gallonage FY 2015

1993	820,000,000
1994	835,810,000
1995	755,820,000
1996	840,710,000
1997	882,740,000
1998	822,550,000
1999	761,760,000
2000	758,900,000
2001	759,752,000
2002	749,630,000
2003	721,550,000
2004	725,960,000
2006 FY 2006	725,890,000
2007	695,830,000
2008	732,130,000
2009	725,540,000
2010	656,730,000
2011	661,690,000
2012	662,750,000
2013	656,780,000
2014	641,690,000
2015	642,290,000

* In gallons



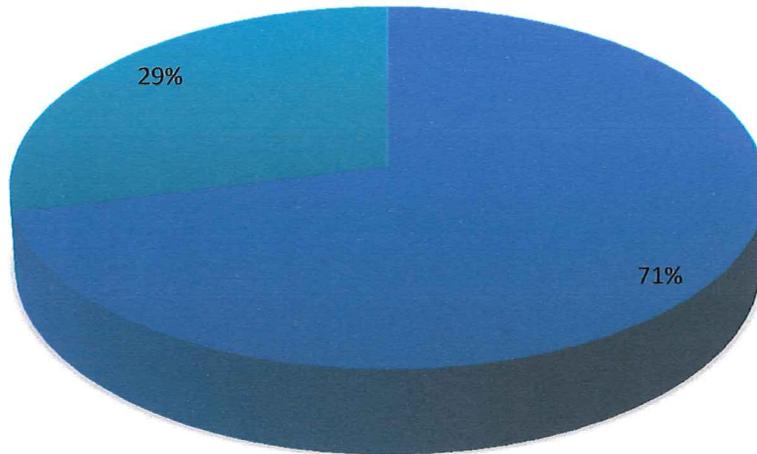
**Attachment E
Water Purchase
FY 2015**

City of Norton Shores
960,402,000

Fruitport
392,912,000

* In Gallons

Water Purchased

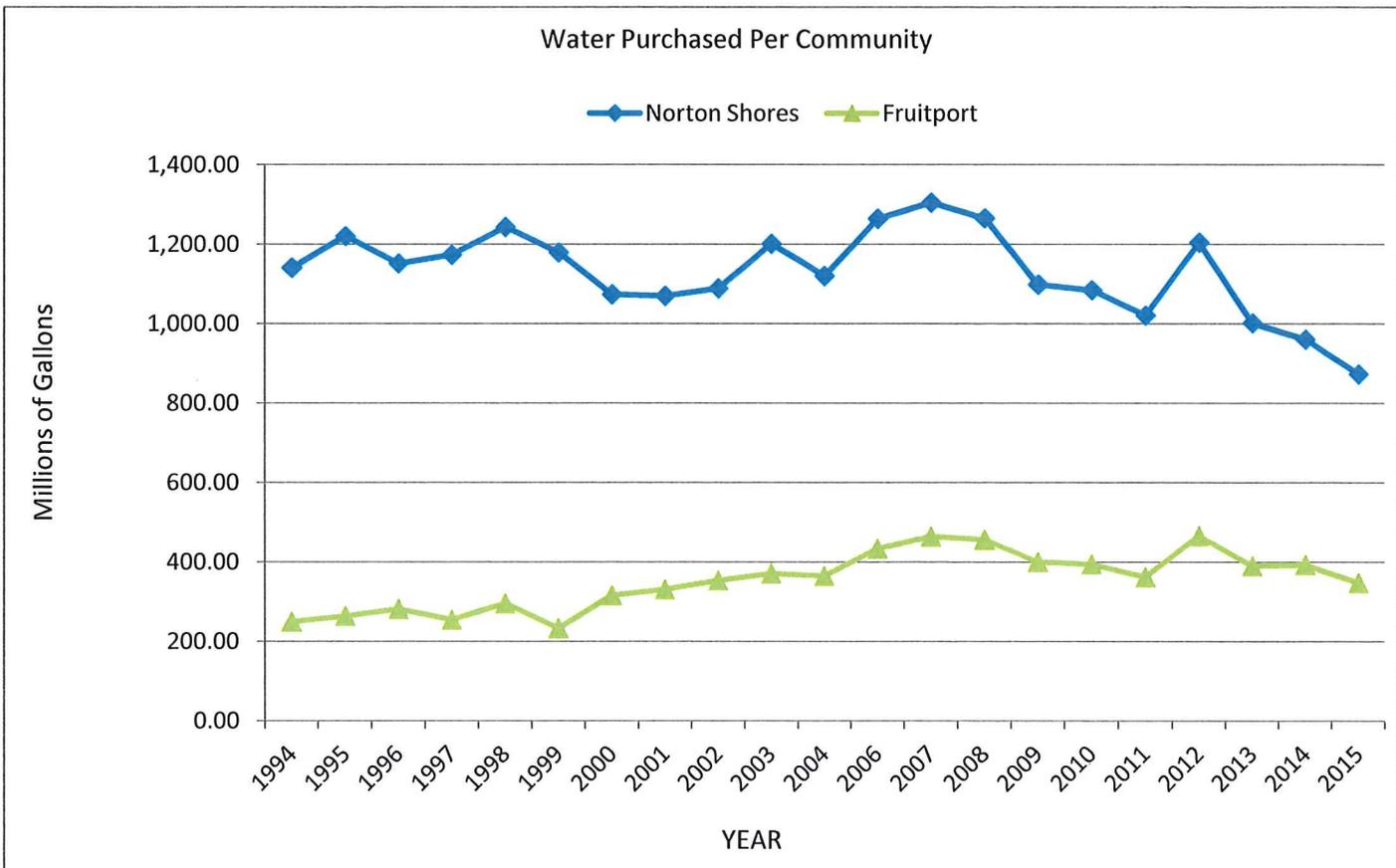


■ City of Norton Shores
■ Fruitport

ATTACHMENT F COMMUNITY WATER PURCHASED

YEAR	NORTON	FRUITPORT
1994	1,140.72	249.70
1995	1,220.00	263.80
1996	1,151.39	281.61
1997	1,172.98	254.99
1998	1,243.17	295.91
1999	1,178.99	233.26
2000	1,073.80	316.18
2001	1,069.81	331.08
2002	1,088.87	353.89
2003	1,201.26	370.91
2004	1,120.12	364.98
2006 FY 2006	1,263.99	433.93
2007	1,304.73	464.49
2008	1,265.31	456.37
2009	1,098.47	400.23
2010	1,084.48	394.50
2011	1,020.83	362.00
2012	1,204.25	466.11
2013	1,001.61	390.35
2014	960.40	392.91
2015	873.22	347.89

*In Millions of Gallons



STREETS & DRAINAGE DIVISION FY-2015 REVIEW

Streets & Drainage Division personnel are kept busy throughout the year with a wide scope of tasks.

Street sweeping begins early in the spring and continues until the snow begins to fall. Road repair work is continuous throughout the year and includes pavement crack sealing, repairs to asphalt shoulders and utility cuts, and in areas where water main breaks have occurred. In the fall, equipment is readied for inclement weather when, from November through April, crews spend many hours clearing City roadways of ice and snow.

The de-icing system continues to work well, utilizing a pre-wet system, which activates the road salt with liquid calcium chloride. This method de-ices to lower temperatures, begins to work more quickly, and sticks to the roadway reducing waste that occurs when dry salt bounces off the road. As this method de-ices to lower temperatures, sand is rarely used which, in turn, keeps our roads and drainage systems cleaner.

Tree branches are routinely trimmed or removed to avoid obstructed vision at intersecting roads. Dead or damaged trees are removed from the right-of-way; many are replaced by the Streets Division, as well.

Gravel roadways are graded on a regular basis and three brining applications are completed through the summer on roads that have property owner participation.

Streets personnel also maintain many major and local street right-of-way areas with scheduled mowing. City drains and drainage ditches are monitored continuously and kept clean of debris.

Streets crews regularly assist Republic Waste Services in removing yard waste from the leaf disposal sites to be transported to the composting facility in Coopersville. The Streets Division also provides attendant service at the Wood Road leaf site seven days a week in the spring and fall and on weekends through the summer months.

Traffic control devices, i.e., signs, barricades, etc. are provided by the Streets Division for special events including the Ross Park Arts and Drafts Festival and the Motorcycle Hillclimb. Additionally, the City's many street signs are maintained throughout the year with damaged signs being repaired or replaced.

The Director of Public Works and the Streets & Drainage Superintendent continue to be active in the Muskegon Area Municipal Storm Water Committee. This committee is working cooperatively on a regional basis to address the Environmental Protection Agency's Storm Water requirements. This past year the focus has primarily been working on the development of a storm water ordinance to serve all member jurisdictions of the storm water group. The ordinance will provide measures to handle storm water on newly developed property. Also, a bi-monthly inspection process was implemented to promote good storm water housekeeping practices at City facilities.

The Streets & Drainage Division continues to be a vital part of the City's service program.

STREET SIGNS

Street sign maintenance including installation, repair, and replacement is a continual task for the Streets Division. During this reporting period, a total of 100 signs were either replaced, repaired, or installed by the Department of Public Works.

FUEL DISPENSATION FY-2015

Following is an itemization of the fuel dispensation for FY-2015:

Administration	293.4 gallons
Building & Grounds	1,164.4 gallons
Building Inspections	408.4 gallons
Fire	12,683.1 gallons
Police	23,675.3 gallons
Recreation	2,326.6 gallons
Streets & Drainage	32,187.6 gallons
Water & Sewer	11,596.0 gallons
Total Gallons Dispensed	84,334.8 gallons

MISS DIG MICHIGAN UTILITIES DAMAGE PREVENTION ASSOCIATION

The Department of Public Works logged 2,090 staking requests during FY-2015. These requests were submitted by contractors, as well as DTE Energy, Consumers Energy, Frontier, Comcast Cable, and residential homeowners. The Divisions of Streets & Drainage and Water & Sewer placed 155 orders for City utility installation and maintenance.

The City receives Miss Dig requests via computer and then distributes the information to Water & Sewer personnel to physically locate and mark all water & sewer utilities and storm drain infrastructures. Blue flags signify water, brown flags denote sanitary sewer, and green flags represent storm water. After staking, the clerical staff is notified, and the information is recorded as a completed order. Various flag colors represent the following utilities:

Yellow	Oil and Gas
Orange	Telephone and CATV
Red	Electric
Blue	Water
Green	Storm Drain
Brown	Sewer
Pink	Surveying

WOOD ROAD AND ROSS PARK LEAF DISPOSAL SITES

Republic Waste Services removed a total of 5,430 yards of yard waste from the Wood Road and Ross Park leaf sites.

The following numbers of vehicles, by classification, were monitored at the Wood Road site:

Cars	3,154
Trailers	6,823
Pick-up trucks	<u>5,181</u>
Total	15,158

The total of all recorded vehicles visiting the Wood Road site during FY-2015 was 15,158; the total counted during FY-2014 was 15,286.

No vehicle counts were recorded for the Ross Park site as the site is unattended.

EQUIPMENT/MECHANICS DIVISION

Care of the City’s equipment is a priority for the mechanics in the Equipment Division. In addition to handling routine maintenance and repair work on all City vehicles, this crew is also responsible for preparing and/or modifying new vehicles purchased by the City for all departments.

The total number of vehicle services during FY-2015 was 1,242.

Following is a list of City equipment replaced during FY-2015:

- 1 – Caterpillar Loader
- 1 – Elgin Street Sweeper
- 1 – Chevrolet Pickup
- 3 – Ford Police Interceptors
- 1 – Police Dodge Caravan
- 1 – Peco lawn vac
- 1 – John Deere mower

As a result of the City purchasing equipment at State and Oakland County pricing, used equipment has been successfully liquidated through Internet resources. Following is a list of equipment sold or traded in along with the sale or trade in price:

1 – 2004 John Deere Loader (trade-in)	\$60,000.00
1 – 2005 Elgin Street Sweeper	\$46,449.00
1 – 2008 Chevrolet Tahoe	\$ 6,982.50
1 – 2007 John Deere Mower (trade-in)	\$ 5,200.00
1 – 2011 Crown Victoria Police Interceptor	\$ 4,201.05
1 – 2010 Crown Victoria Police Interceptor	\$ 3,676.65
1 – 2004 Ford Taurus	\$ 3,667.65
1 – 2004 Chevrolet Silverado	\$ 2,783.55
1 – 1997 Dodge Caravan	\$ 924.00
1 – 2003 Trailer Mounted Leaf Vac	\$ 540.75
1 – 2005 John Deere Generator	<u>\$ 420.00</u>
Total Sales	\$134,844.55

FY-2015 GRAND TOTALS

Miles of streets maintained		149
Number of times local streets/sidewalks were plowed during FY-2015		10/10
Tons of salt usage for FY-2015		1,839
Gallons of liquid calcium chloride (de-icer) applied		13,295
Tons of winter mix asphalt patch used		134
Tons of bituminous hot mix used		398
Miles of streets swept		229
Debris collected from sweeping operation (cu. yd.)		393
Number of times gravel-surfaced roads graded		36
Tons of road gravel leveled & used to maintain surface		275
Gallons of 38% calcium chloride (brine) applied		22,887
Number of trees removed		28
Number of trees planted		7
Residential use of County Landfill:	Cars	318
	Trucks/Trailers	<u>279</u>
	Total Vehicles	597

Storm drain/under drain footage cleaned		6,268
Pounds of crack sealant dispensed		35,351
Square feet of sidewalk replaced		1,120
Acreage mowed along off-road drainage courses & along road right-of-way		285
Fuel dispensed (gallons)		84,335
Vehicle services		1,242

**BUILDINGS & GROUNDS MAINTENANCE DIVISION
FY-2015 REVIEW**

Following is a listing of the Buildings and Grounds Maintenance Division activity beyond normal daily routines.

CITY BUILDING

- Window tinting was installed in all south windows of City Hall and Police Department.
- Two roof-top HVAC units were replaced on City Hall/Police Department.
- The reception area of the Inspection/Fire office was re-arranged.
- The bike rack and cement column post at the public entry to City Hall were painted.
- Election materials were delivered and picked up from the various voting precincts throughout the city.
- The information boards were installed on the walls for the Fire/Inspections office.
- An electric photo eye for the parking lot lights was replaced.
- Kitchen cabinets and sink were replaced in the main office of the Police Department.
- Boilers were inspected.
- The Police Chief's office was painted.
- A few sidewalk sections were ground with a rental machine to avoid tripping hazards.
- The Police Department main office was painted and new carpet was installed.
- A sewer vent near a roof top HVAC unit was extended by 30 inches to stop odors from being pulled into the building.
- A flag pole light fixture was replaced.
- A backsplash was installed behind the sink and counter-top in the Police Department.
- A new table was constructed to hold the fax machine in the Police Department office.
- The carpet in the Police Department main office and two smaller offices was replaced.
- The Police Department main office and three smaller offices were painted.

- A new water line was run from the boiler room to the Police Department to replace the original galvanized line.
- An outside light fixture on the north side of the City building was replaced.
- The fire alarm system was tested and is in working order.
- The irrigation backflow preventer was tested.
- A coat rack was repaired and reinstalled in the Police Department.
- Carpet throughout City Hall was cleaned.
- The old window in the boiler room was removed and cosmetically boarded up.

LIBRARY

- Four new DVD shelving units assembled and set up.
- A cabinet door in the children's area was repaired.
- The carpet was cleaned.
- Bookshelves were re-arranged per request from the librarian.
- A projector was installed and hooked up to the sound system in the Community Room.
- The boiler was inspected.
- Shelving units were assembled.
- The roof and roof drains were inspected and cleaned of debris.
- A new phone was installed in the kitchen of the Community Room.
- Electric work was completed for the projector in the Community Room.
- Repaired (tightened nuts and bolts) a shelving unit in the children's area.
- The air compressor motor was replaced.
- A new CD rack was assembled and installed.
- Wood timbers around the parking lot were reinstalled.
- Five dead trees were marked for removal.

CEMETERY

- Sixty-eight burials were performed.
- Forty-five graves were purchased.
- Thirty-four tombstone foundations were installed.
- Leaf pick-up and recycling was completed.
- The irrigation system was turned on and a couple of leaks were repaired. One leak required digging up the road in the cemetery which will need to be repaired.
- The irrigation backflow preventer was tested.

DPW Garage

- The roof drains were cleaned.
- The boiler was inspected.

ENGINEERING FY-2015 REVIEW

Airline Road Reconstruction

Limits: Airline Road, between US-31 and Shettler Road
Description: Replacement of existing pavement and storm water improvements
Consultant: Paradigm, Grand Rapids, MI
Contractor: To be determined
Year's Work: Paradigm has been contracted to provide engineering design and construction service and has been working actively with the City staff in the design of the project.
Funding: MDOT STIP Grant with local match
Start Date: Spring 2016
Finish Date: Summer 2016

2014 (FY15) Road Reconstruction Projects

Limits: Intersection of Mt. Garfield Road & Davis Road, Green Street, Seaway Drive to Lakeshore Blvd. & Rood Road, Hendrick Road to Neece Drive, and Torrent Street, Harbor Drive to Bundt Drive
Description: Reconstruction of existing paved roadways with replacement of existing sand sub-base and aggregate base. Work includes improvements to storm drainage and placement of leaching basins. Replacement of existing cast iron water main with ductile iron.

Consultant: ENG, Inc., Lansing, MI
Contractor: Connan, Inc, Holland MI
Year's Work: The existing roadways were reconstructed with new aggregate base and HMA pavement. Improvements were made to existing storm sewer and drainage system along with the placement of leaching basins. In addition existing cast iron water mains were replaced with ductile iron.
Funding: Capital Improvement, Municipal Road and TIFA funds
Start Date: August 18, 2014
Completion Date: November 15, 2014

2015 (FY-16) Road Reconstruction Projects

Limits: Castle Avenue, Lincoln to Leon; Mayfair Street, east of Leon; Wellwood Street, Mayfair to Southwood; and Schamber Drive north of Pontaluna.
Description: Reconstruction of existing paved roadways. Improvements to storm drainage and placement of leaching basins. Replacement of existing cast iron water main with ductile iron.
Consultant: Prein & Newhof, Grand Rapids, MI
Contractor: Hallack Contractors, Hart, MI
Year's Work: Contractor started work on Castle Avenue and Schamber Drive with the removal of the existing pavement and installation of the replacement of existing cast iron water main with ductile iron.
Funding: Capital Improvement, Municipal Road and TIFA funds
Start Date: June 15, 2015
Finish Date: Fall 2015

2014 (FY-15) Hot-in-Place/HMA Overlay Project

Limits: Various locations throughout city
Description: The hot-in-place (HIP) recycling of existing selected roadway pavements with ¾ to 1 ½ inch bituminous pavement overlay.
Consultant: City staff
Inspection: Westshore Consulting, Muskegon, MI
Contractor: Hot-In-Place Recycling: Gallagher Asphalt, Thornton, IL
HMA Overlay: Rieth-Riley, Ada, MI
Year's Work: The Hot-In-Place recycling and HMA Overlay started in July and was completed in August of 2014. Affected traffic loops were replaced along with pavement markings and road signs.
Funding: Capital Improvement, TIFA, and Municipal Road funds
Start Date: June 16, 2014
Completion Date: August 12, 2014

2015 (FY-16) Hot-in-Place Recycling & HMA Milling & Overlay

Limits: Various locations throughout the city
Description: Hot-in-Place recycling of selected streets with the placement of HMA Overlay on top of pavement. Other selected roadways to be milled down to aggregate and repaved with HMA material.
Consultant: City staff
Contractor: HIP Recycling: Gallagher Asphalt, Thornton, IL
HMA Milling & Overlay: Rieth-Riley, Grand Rapids, MI
Inspection: Westshore Consulting, Muskegon, MI
Year's Work: Work on this project has started with the lowering of the manholes and the milling of roads scheduled to be Hot-in-Place (HIP) Recycling.
Funding: Capital Improvement, TIFA and Municipal Road funds
Start Date: June 17, 2015
Estimates Finish: September 30, 2015

2015 Sidewalk Projects

Limits: Getty Street, Overbrook to Airline; Harvey Street, Ellis to Sternberg; intersection at Henry Street and Sherman Boulevard; also added as part of the Community Development Block Grant was sidewalk along McDermott Street between Broadway Avenue and Summit Avenue.
Description: Place 5 foot concrete sidewalk along proposed routes.
Consultant: AECOM (URS Corporation), Grand Rapids
Contractor: Kamminga & Roodvoets, Grand Rapids, MI
Year's Work: AECOM worked with City staff on plan design and creation of bid package. Kamminga and Roodvoet was awarded the work and will start construction in August 2015.
Funding: Capital Improvement, Community Development Block Grant and TIFA funds
Estimated Start: August 2015
Estimated Finish: November 2015

Ellis Manhole Lining

Limits: Ellis Road, near Stariha Drive
Description: Epoxy lining of two existing sanitary manholes on Ellis Road.
Consultant: City staff
Contractor: Plummer's, Byron Center, MI
Year's Work: Plummer's cleaned out the damaged interior material from structures and lined the sanitary manholes with a protective coating.
Funding: Sewer funds
Start Date: Late June, 2014
Completion Date: July 11, 2014

Estes Street Water Main

Limits: Estes Street, between Lindberg Drive and Manor Drive
Description: Replacement and upsizing of existing cast iron water main with ductile iron
Consultant: Prein & Newhof, Grand Rapids, MI
Contractor: Hallack Contracting, Hart, MI
Year's Work: Work started with the milling of the Estes street pavement, installation of the replacement water main and restoration of the roadway and disturbed soils.
Start Date: May 28, 2015
Finish Date: June 30, 2015

Hendrick 14-inch Gate Valve Placement

Limits: Hendrick Road just east of Henry Street
Description: Placement of new 14-inch gate valve and box on existing 14-inch sanitary force main to accommodate future maintenance work.
Consultant: City staff
Contractor: Accurate Excavating, Muskegon, MI
Year's Work: Excavation of the cast iron force main and the preliminary tapping of the pipe started in June, but due to an emergency, the subcontractor for Accurate Excavating was delayed in the valve tap until the first week of July.
Funding: Sewer Funds
Start Date: June 22, 2015
Completion Date: July 10, 2015

Grand Haven Road Reconstruction

Limits: Pontaluna to Wilson
Description: Reconstruction of existing roadway with improvements to drainage and under drainage. Work included the installation of concrete sidewalk within the Pontaluna Village area.
Consultant: Fleis & VandenBrink, Muskegon, MI
Contractor: C&D Hughes, Charlotte, MI
Year's Work: C&D Hughes continued the work on this project with the installation of the underground storm sewer improvement (including under drain), placement of the aggregate base and HMA pavement. Work was completed on the sidewalks for the "Pontaluna Village" district along with the placement of roadway pavement marking, signage, and restoration.
Funding: State TEDF grant with matching funds
Start Date: May 27, 2014
Completion Date: August 29, 2014

Regional Water System:

Limits: Cities of Norton Shores, Muskegon, and Fruitport Charter Township
Description: Construction of water transmission main(s) between the City of Muskegon and the City of Norton Shores and Fruitport Charter Township with accompanying booster station, water tower, and high service pumps.
Consultant: URS Corporation Great Lakes, Grand Rapids, MI
Contractor: Contract A: Owen-Ames-Kimball, Grand Rapids, MI
Contract A1: Kennedy Industries, Inc., New Hudson, MI
Contract B: Jackson-Merkey Contractors, Muskegon, MI
Contract C: McCormick Sand, Twin Lake, MI
Contract D: Landmark Structures, Ft. Worth, TX
Contract E: McCormick Sand, Twin Lake, MI
Contract F: Tetra Tech, Grand Rapids, MI

Year's Work:

- Contract A1 (High service pumps at Muskegon Filtration Plant): After the manufacturer (Kennedy Industries) completed the assembly of the pumps, they were delivered to the Muskegon Filtration Plant site in the fall of 2014 for installation by Owens-Ames-Kimball.
- Contract A (Installation of High Service Pumps and connection at Muskegon Filtration Plant): Work awarded to Owen-Ames-Kimball. High service pumps along with accompanying piping, valves and electronic controls installed at the Muskegon Filtration Plant.
- Contract B (36" Transmission main from filtration plant to Norton Shores): Work continued and was completed for the 36-inch transmission main from the filtration plant to the existing regional main at the intersection of McCracken Street and Seminole. Road restoration of disturbed soils and roadways was also accomplished by early summer of 2015.
- Contract C (Fruitport 12 & 16 inch mains): McCormick Sand started the installation of the regional water mains in June 2014 and completed this work in the fall of 2014.
- Contract D (Water tower in Fruitport): Foundational work and construction of the tower pedestal is actively being complete with the bowl being prepped for its placement in July 2015.
- Contract E (Booster Station at Black Creek Road): Work on the booster station and it's relocation from Getty Street to Black Creek Road near Sherman Boulevard was awarded and started with completion scheduled for mid-summer of 2015.
- Contract F (SCADA System): Work awarded to Tetra Tech of Grand Rapids who started the design for the SCADA system.

Funding: Water Fund/Municipal Bonds

Finished/Active Status: Contract A: Finished w/ punch list items
 Contract A1: Finished
 Contract B: Finished w/ punch list items
 Contract C: Finished w/ punch list items
 Contract D: Active, Completion scheduled in winter in 2015
 Contract E: Active, Completion in fall 2015
 Contract F: Active, Completion in winter of 2015

Stormwater, Asset Management and Wastewater (SAW) Program

Limits: City wide
 Description: Perform and establish asset management plans and practices for City storm and sanitary sewers.
 Consultants: In house and Prein & Newhof, Grand Rapids, MI
 Year's Work: With the awarding of the SAW Grant by the State, the City hired Prein & Newhof for the consulting work through the RFQ/RFP process. Work started on the assessment of the storm and sanitary sewer system in July 2014 with the cataloging and inspection of the sanitary and storm sewer structures along with the video inspection of the mains. The City has purchased equipment and trained staff to assist in the asset management of the existing sewer. City staff has met with Prein & Newhof on numerous occasions to guide and direct the project.
 Funding: SAW Grant
 Start Date: July, 2014
 Completion Date: June, 2017

Major Private or Other Projects:

<u>Project:</u>	<u>Address:</u>	<u>Developer/Owner:</u>
APWA Snow Plow Roadeo	DPW Garage	Planning & Hosting
BR US-31 (Seaway)	US-31 to Shoreline Drive	MDOT
Broadway Bridge	US-31 BR	MDOT
Henry Street	North of Sherman Blvd	City of Muskegon
US-31/Shettler Bridge	US-31/Shettler Bridge	MDOT
Pontaluna/US-31	US-31	MDOT

**PLANNING
FY-2015 REVIEW**

PLANNING AND ZONING DIVISION

Analysis

The year FY-2015 saw steady growth in new residential development throughout the city with an additional 48 housing units constructed primarily in existing subdivisions throughout the community.

Growth continued to improve in the commercial and industrial sectors as well. Major office site plans approved included a new 13,000 square foot addition to the Life Circles/Tanglewood facility on Seminole Road, a new 7,000 square foot facility for Comerica Bank on W. Norton Avenue, and a 2,000 square foot structure housing the Dunstan Animal Clinic on E. Sternberg Road. Also, a build-out of the West Michigan Eye and Laser building on E. Farr Road was completed for additional tenants as well as the retrofitting of a former residence on Seminole Road into an office facility. Commercial site plans were approved for the construction of a new 4,000 square foot WESCO Gas Station and Convenience Store on Pontaluna Road and a 9,500 square foot Dollar General Store on W. Sherman Boulevard. Cinema 12 also completed a major renovation of their facilities on Grand Haven Road. The City also approved the development of a mixed-use facility on the northwest corner of Grand Haven Road and E. Pontaluna Road with construction to commence later this year. The major industrial project for the year was the continued expansion of the Polycem facility on Enterprise Drive. The City also approved 13,000 square feet of additions to City Hall for Police Department expansion.

Staff also administratively approved numerous other commercial, office and industrial site plans of a scope that did not require Planning Commission or City Council review, as well as 357 other site plans for improvements requiring building permits. These included new houses, additions, accessory buildings, fences, signs etc.

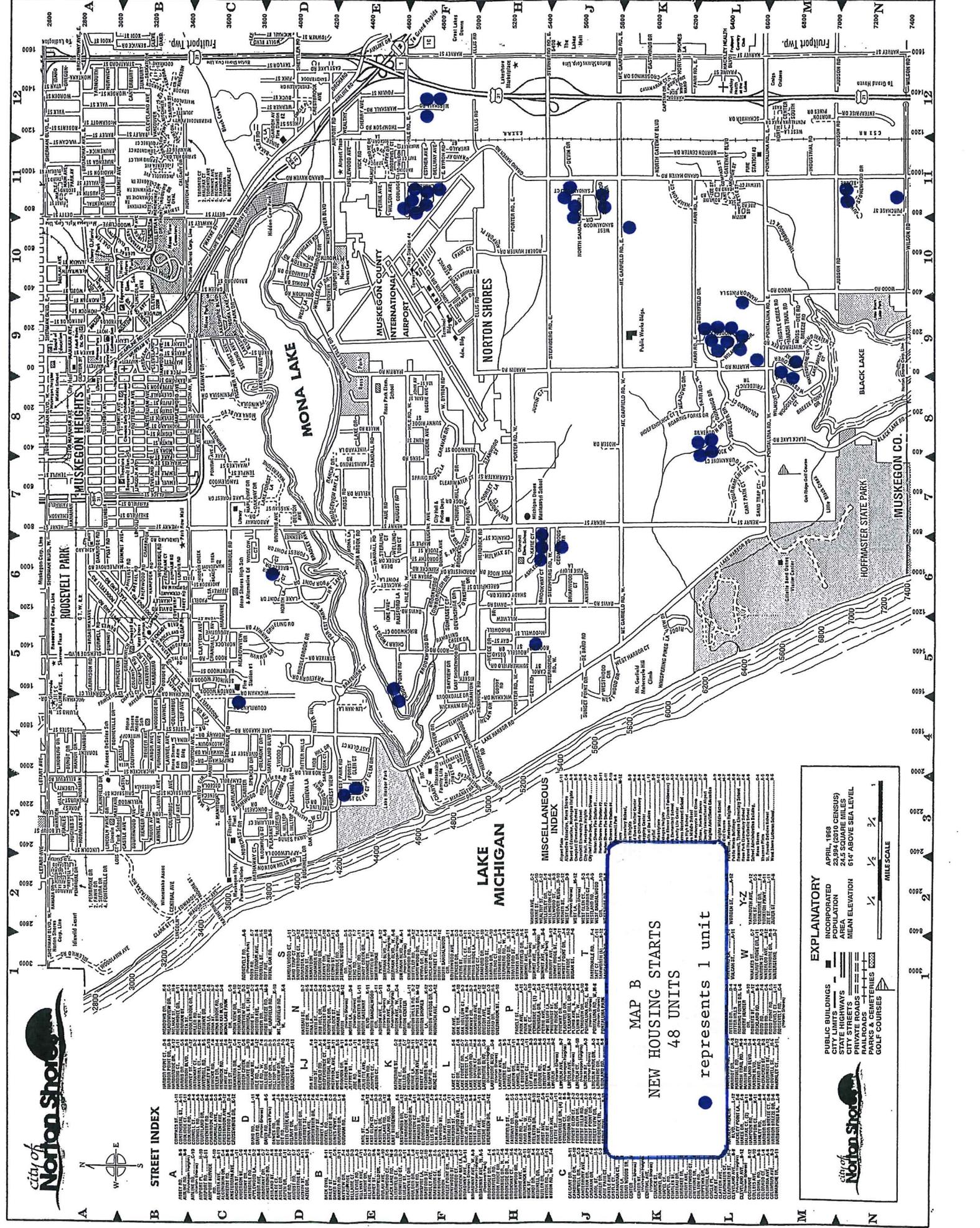
Staff presented to the Planning Commission and City Council various Zoning Ordinance updates in 2014. These included amendments to the kennel provisions as well as updates to the City's Wireless Communications Tower Overlay Map. As a result, the City approved two (2) new cell towers for Verizon Wireless. Staff oversaw the completion of the adoption of new Flood Zone maps as coordinated by FEMA. By their adoption the City assured FEMA that the Construction Code Act and the State Construction Code will be administered and enforced within its boundaries. Staff also began participation in a Target Market Analysis Housing Study. The study, partially funded by MSHDA, will take a closer look at housing opportunities in the Seminole Road/Eastowne Development Corridor and results of the study are anticipated to be completed later in 2015. Staff also oversaw the design and installation of the first phase of the City's Wayfinding signage program. Funds have been appropriated for additional signs in the upcoming year.

Activity Summary	2013	2014	2015
Administrative Site Plans	35	25	20
Land Divisions	3	2	2
Residential Lots Developed	0	12	0
Residential Site Plans	215	257	357
Site Plans	7	6	8
Special Use Permits	7	4	7
Variances	11	12	8
Zoning Ordinance Amendments	4	5	7
Zoning Ordinance Violations	45	40	40

TABLE A

TOP TEN COMMERCIAL AND INDUSTRIAL PROJECTS

1.	Life Circles/Tanglewood Office Addition	560 Seminole Road	\$4,800,000
2.	Lakeshore ENT Office Remodel	1450 E. Farr Road	2,275,000
3.	Cinema 12 Commercial Remodel	4289 Grand Haven Road	1,750,000
4.	Comerica Bank Commercial Building	875 W. Norton Avenue	1,564,697
5.	City of Norton Shores Police Addition	4814 Henry Street	926,000
6.	WESCO Commercial Building	1025 E. Pontaluna Road	810,300
7.	Dollar General Commercial Building	1793 W. Sherman Boulevard	769,000
8.	Polycem Industrial Remodel	7103 Enterprise Drive	550,000
9.	Salon 297 Commercial Remodel	4915 Harvey Street	450,000
10.	Norton Pines Commercial Remodel	6875 Norton Pines Drive	405,700
TOTAL COST			\$14,300,697



Map grid labels: A through N (horizontal) and 1 through 12 (vertical)

STREET INDEX

Map grid labels: A through N (horizontal) and 1 through 12 (vertical)

MISCELLANEOUS INDEX

Map grid labels: A through N (horizontal) and 1 through 12 (vertical)

MAP B
NEW HOUSING STARTS
48 UNITS
 ● represents 1 unit

EXPLANATORY

- INCORPORATED
- POPULATION
- AREA
- MEAN ELEVATION
- 614' ABOVE SEA LEVEL

LEGEND

- PUBLIC BUILDINGS
- CITY LIMITS
- STATE HIGHWAYS
- CITY STREETS
- RAILROADS
- PARKS & CEMETERIES
- GOLF COURSES

MILE SCALE

0 1/4 1/2 3/4 1

City of Norton Shores logo