# City of Findlay Engineering Department



**2017 Annual Report** 

# City of Findlay

Lydia Mihalik, Mayor

#### **ENGINEERING DEPARTMENT**

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Paul E. Schmelzer, P.E.,P.S. Safety Director

Brian A. Thomas, P.E., P.S. Service Director

Honorable Lydia Mihalik Mayor, City of Findlay January 31, 2018

RE: Engineering Department Annual Report for Calendar Year 2017

Honorable Mayor:

The City of Findlay Engineering Department has endeavored to provide citizens, developers, contractors, City departments, and other interested parties with the best service possible in regard to all of the following functions:

- Civil Engineering
- Project management
- Engineering records maintenance
- Infrastructure tracking
- Construction inspection
- Plan review
- Infrastructure planning
- Bonding, inspection, tracking of private development
- Contracting for City departments
- Utility/sidewalk permitting

- Address assignment
- GIS development
- Support for USACE Flood Feasibility Study
- Representation to numerous City Committees and Commissions
- Prevailing wage coordination
- Flood Hazard Mitigation
- City mapping
- Airport grant administration

The varied knowledge base, expertise and dedication of the Engineering Department staff make the provision of these services possible. The knowledge of our staff is truly our greatest asset, essential to maintaining cost effective and efficient service. With the support of the Administration, the Department hired a new Project Coordinator to fill a vacancy created by a resignation during 2017. During the year, the City Engineer also assumed the role of Director of Public Service and will continue that role in 2018. The Department had 7 full time employees, listed below for 2017:

Amanda Mooney	Project Coordinator
Jeremy Kalb	Project Manager
Jeff Corbin	Construction Inspector
Greg Craven	Engineering Technician (GIS)
David Ohl	Records Administrator
Mitch Heacock	Inspector/MS4 coordinator
Brian Thomas	Director of Public Service/Acting
	City Engineer

Deidre Ramthun continues to assist the office on a part-time basis as an administrative assistant in addition to her duties with the Civil Service Commission.

The following pages contain the Annual Operations Summary listing detailed statistical information and summaries of the projects the Engineering Department has worked on.

Please do not hesitate to contact me with any questions you may have regarding this information or department operations in general.

Respectfully Submitted,

Brian A. Thomas, PE, PS, CPESC, CFM

Director of Public Service/Acting City Engineer

### **City Planning Commission (CPC)**

The Engineering Department reviewed and made recommendations for the following submittals to the CPC; Twenty four (24) site plans, three (3) preliminary subdivision plats, five (5) final subdivision plats, seven (7) zoning amendments, four (4) special use/home occupation requests, three (3) conditional use applications and eight (8) street or alley vacations.

### **Development Inspections**

Engineering staff provided inspection and oversight for improvements that impact the City's infrastructure on the following projects; Villas at Hunters Creek 1<sup>st</sup> Addition, Falcon Gate – Hickory Lake, South Ridge Estates 3<sup>rd</sup> Addition, McLane Drive, Township Road 94 Sanitary Sewer and Waterline Extension, Woods at Hillcrest 8<sup>th</sup> Addition, King Court, and Davis Street Waterline.

#### **Resurfacing 2017**

Twenty (20) road sections totaling 10.12 lane miles in length were resurfaced and 5.16 miles of curb were replaced through the use of a contractor. Paving and milling costs totaled \$741,694.21. Curb, sidewalk and driveway replacements added \$722,987.35 to the final cost of \$1,464,681.56.

### Resurfacing 2017 - ODOT Large City funding

Three (3) road sections totaling 7.75 lane miles in length were resurfaced and 1.75 miles of curb were replaced through the use of a contractor. Funding from the Ohio Department of Transportation (ODOT) provided 80% of the construction cost (\$661,085). The remaining 20% (\$165,271) was paid with City Permissive License funds. The City received \$14,690 from ODOT to help cover the expenses of construction inspection services that were provided by the City Inspectors.

#### **Sewer Lining Program 2016**

This annual program adds a plastic liner to sanitary sewers to prevent storm water and groundwater infiltration and to structurally rehabilitate deteriorating sewers. In 2016, approximately 410 feet of 8" sewer, 7,750 feet of 10" sewer, 1,805 feet of 12" sewer and 417 feet of 15" sewer was lined. The total length of sanitary sewer lined was approximately 10,382 feet. LiquiForce Services of Romulus, Michigan performed the work at a cost of \$366,310.

### **Sewer Cleaning Program 2017**

This annual program inspects and cleans large diameter sanitary sewers. Similar to the previous year, there were not any large diameter sewers that needed cleaned, so the money was transferred to the Sewer Lining Program so that more sewers could be lined and a some sewer manholes could be lined.

### **West Hardin Street Sewer Separation**

This project installed storm sewers on West Hardin street between Western Avenue and Liberty Street. Sewers varied in size from 8" to 18". The total length of storm sewers installed was 1,192 feet. The contract was awarded to Hohenbrink Excavating of Findlay for a cost \$140,492. \$86,229 was funded through a grant from Ohio Public Works Commission and the remaining \$54,263 came from the City of Findlay's Sewer Funds.

### Central Avenue/Dayton Avenue Sewer Separation

This project installed storm sewers on Central Avenue and Dayton Avenue from Tiffin Avenue to Balsley Avenue. Sewers varied in size from 12" to 30". The total length of storm sewers installed was 2,615 feet. The contract was awarded to JDR Excavating of Findlay for a cost \$338,862. \$252,633 was funded through a grant from Ohio Public Works Commission and the remaining \$86,229 came from the City of Findlay's Sewer Funds.

#### McManness Avenue/McConnell Street Sewer Separation

This project installed storm sewers on McManness Avenue from Tiffin Avenue to Balsley Avenue and McConnell Street from McManness Avenue to Carnahan Avenue. Sewers varied in size from 12" to 18". The total length of storm sewers installed was 1,565 feet. The contract was awarded to Hohenbrink Excavating of Findlay for a cost \$159,643.

### Bliss Avenue/Elyria Street Waterline

This project involved the installation of 6" waterline on Elyria Street and Bliss Avenue. This project provided a loop between Elyria Street and Blaine Avenue. The total length of waterline installed as part of this project was approximately 794 feet. Great Lakes Demo Company of Vickery, Ohio completed the work at a cost of \$57,375.

#### **Other Waterlines**

There are six (6) waterlines that had construction started in 2017 but the projects will not be closed until sometime in 2018. These projects will be included in the 2018 Annual Report.

#### Emergency Sewer Repair - Lakeview Park Subdivision

There was an emergency sewer repair on a storm sewer in Lakeview Park Subdivision. The project was not closed in 2017 so that Engineering can make sure that the seeding does not need touched up in the spring. Since the project will be closed in 2018, it will be included in the 2018 Annual Report.

### **Traffic Signal Upgrades**

Traffic signal upgrades are necessary to replace aging span wire systems and install modern traffic control equipment. In 2017, one intersection was bid but has not started construction due to a delay in getting the new poles and mast arms from the manufacturer. Since the work has not been completed, this project will be included in the 2018 annual report.

#### Traffic Sign Upgrades

The traffic signs on Tiffin Avenue between Blanchard Street and Bright Road were being supported by cables that extended from poles on each side of Tiffin Avenue. Over the years, these cables have had a tendency to break and fall onto the pavement causing a safety issue. In 2017, new poles with mast arms and signs were installed. The Contractor still needs to remove the existing poles, cable and signs but the new poles and signs are in place. Plans for this project were done in two (2) phases, but it was bid as a single project and awarded to a single contractor. The contract amount for the project was \$82,450 and the Contractor was National Light & Power Inc.

### **Key Performance Indicators (KPIs)**

In 2017, Engineering continued to measure the Key Perfomance Indicators that were setup in 2016. These include:

- Project Cost Management Looking at the percent of projects that were closed that were at or below the bid price
- Miles Paved Tracking the number of lane miles that were paved during the year.
   Please not that this includes all paving done in the City (i.e. resurfacing project plus resurfacing ODOT large city funding plus paving done by the Street Department)
- Projects bid versus planned Looking on a quarter by quarter basis at the number of projects that engineering would like to get out to bid versus the actual number that are bid.
- MS4 Compliance Looking at the percentage of days that the City is in compliance with the MS4 requirements established by the Ohio Environmental Protection Agency.

The graphs showing the KPIs as they stand at the end of 2017 is included in this report.

#### Planning for 2018

Final design and construction plans are scheduled for completion and construction is planned for the following projects in 2018:

Upgrade GIS Software and start Enhancement of GIS ODOT Large City FY 18 Resurfacing Resurfacing 2018
West Sandusky Street Waterline Replacement Concord Court Waterline Replacement

Milton Street Waterline Replacement

Summit Street Waterline Replacement

Merryweather Drive Waterline Replacement

Washington Avenue/Park Street Sanitary Sewer Improvements, Phase 1

**Howard Street Improvements** 

Fishlock Avenue Improvements

Water Distribution System Prioritization and Ranking Project

Sanitary Sewer CCTV Project

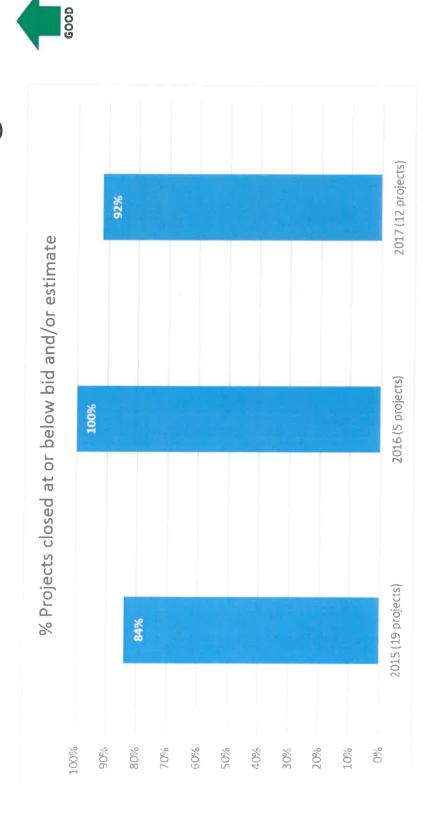
Traffic Signal upgrades at:

North Main Street/Center Street

South Main Street/Front Street

South Main Street/Hardin Street

Engineering KPI: Project Cost Management

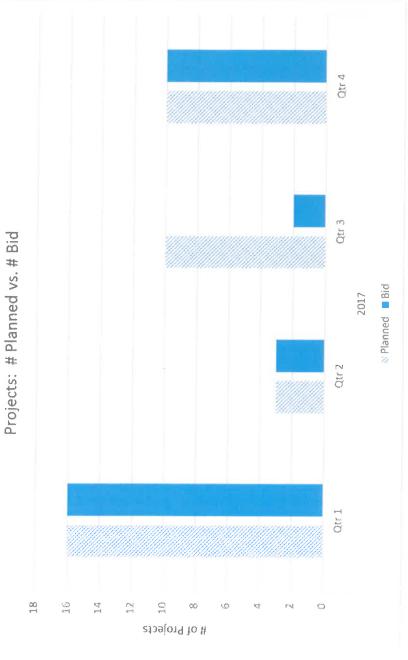


Data source: B. Thomas/Eng. Dept. Data



Data source: B. Thomas/Eng. Dept. Data

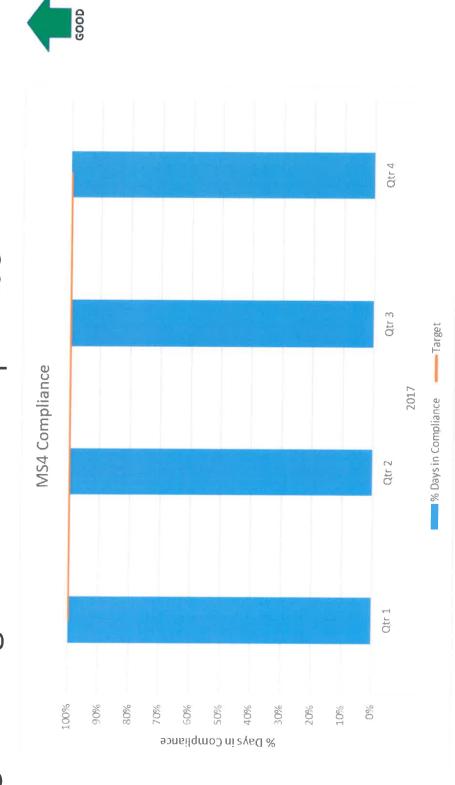




This is to show productivity/activity on getting projects bid on a timely basis.

Data source: B. Thomas/Eng. Dept. Data

Engineering KPI: MS4 Compliance



Data source: B. Thomas/Eng. Dept. Data

# **OPERATIONS SUMMARY FOR THE YEAR OF 2017**

The following information is provided as a report of operations in the Engineering Department for the year 2017. Corresponding years 2015 and 2016 are shown for comparison.

# **NEW SANITARY SEWER**

		2017	2016	2015
8" Force Main		0 LF	0 LF	0 LF
6" Force Main		0 LF	0 LF	1,130 LF
4" Force Main		0 LF	0 LF	-1,130 LF
6"		0 LF	0 LF	0 LF
8"		5,904 LF	5,028 LF	5,389 LF
10"		354 LF	1,954 LF	0 LF
12"		0 LF	2,287 LF	0 LF
15"		1,342 LF	0 LF	0 LF
18"		LF	0 LF	0 LF
	TOTALS	7,600 LF	9,269 LF	5,389 LF

# SANITARY SEWER PERMITS ISSUED

		2017	2016	2015
Outside City		58	69	56
Inside City		62	82	71
	TOTALS	120	151	127

# SANITARY SEWER FEES COLLECTED

	<u>2017</u>	<u>2016</u>	2015	
Tap/Inspection Fees	\$13,395.00	\$13,605.00	\$11,236.00	
Impact/Capacity Fees	\$161,828.00	\$243,819.00	\$123,414.00	
Rotary Fees	\$76,172.00	\$37,573.00	\$0.00	
	\$251,395.00	\$294,997.00	\$134,650.00	

# **OPERATIONS SUMMARY FOR THE YEAR OF 2017**

The following information is provided as a report of operations in the Engineering Department for the year 2017. Corresponding years 2015 and 2016 are shown for comparison.

### **NEW STORM SEWER**

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		<u>2017</u>	-	<u>2016</u>	<u>)</u>	2015	
6"		0	LF	0	LF	0	LF
8"		280	LF	0	LF	0	LF
10"		150	LF	176	LF	0	LF
12"		2,423	LF	502	LF	198	LF
15"		2,261	LF	1,083	LF	20	LF
18"		2,361	LF	410	LF	0	LF
21"		0	LF	0	LF	0	LF
24"		953	LF	468	LF	55	LF
27"		0	LF	0	LF	0	LF
30"		2,540	LF	0	LF	1,232	LF
36"		0	LF	0	LF	0	LF
42"		0	LF	0	LF	1,353	LF
48"		0	LF	0	LF	330	LF
54"		0	LF	0	LF	266	LF
60"		0	LF	0	LF	0	LF
84"		0	LF	0	LF	0	LF
	TOTALS	10,968	LF	2,639	LF	3,454	LF

# STORM SEWER PERMITS ISSUED

		2017	2016	<u>2015</u>
Outside City		35	33	36
Inside City		58	51	49
	TOTALS	93	84	85

### STORM SEWER FEES COLLECTED

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Tap/Inspecton Fees	\$7,630.00	\$6,825.00	\$7,000.00

# **OPERATIONS SUMMARY FOR THE YEAR OF 2017**

The following information is provided as a report of operations in the Engineering Department for the year 2017. Corresponding years 2015 and 2016 are shown for comparison.

# **NEW WATERLINE**

		2017	-	2010	<u> </u>	2015
2"		865	LF	313	LF	(846) LF
6"		7,954	LF	3,243	LF	1,144 LF
8"		5,271	LF	8,623	LF	4,095 LF
10"		1,420	LF	0	LF	0 LF
12"		932	LF	1,668	LF	1,810 LF
16"		0	LF	0	LF	0 LF
20"		0	LF	1,930	LF	0 LF
24"		0	LF	2,320	LF	0 LF
30"		0	LF	0	LF	0 LF
36"		0	LF	0	LF	0 LF
	TOTALS	16,442	LF	18,097	LF	6,203 LF

# WATER SERVICE PERMITS ISSUED

		2017	<u>2016</u>	2015
Outside City		54	73	61
Inside City	_	84	71	59
	TOTALS	138	144	120

# WATER FEES COLLECTED

		2017	<u>2016</u>	<u>2015</u>
Tap/Meter Fees		\$134,225.00	\$143,550.00	\$123,900.00
Rotary Fees	_	\$24,828.00	\$20,526.00	\$2,420.00
	TOTALS	\$159,053.00	\$164,076.00	\$126,320.00

# **OPERATIONS SUMMARY FOR THE YEAR OF 2017**

The following information is provided as a report of operations in the Engineering Department for the year 2017. Corresponding years 2015 and 2016 are shown for comparison.

NEW PAVEMENT	(HARD	SURFA	CF	WITH	CLIRB)
TAIL AN TURNITURE A	UILLIUL	DUILIT		AATTI	CUIDI

NEW PAVEMENT (HARD SC	Krace with C	UKB)	
	<u>2017</u>	2016	2015
Total(construction and annexations)	0.17 Miles	0.30 Miles	0.00 Miles
STREET RESURFACING			
2	<u>2017</u>	<u>2016</u>	2015
Total Increase	54,330 LF	25,648 LF	39,600 LF
	10.29 Miles	4.86 Miles	7.50 Miles
CURB CUT PERMITS			
	2017	<u>2016</u>	2015
Permits Issued	92	66	62
Fees Collected	\$2,225.00	\$1,650.00	\$1,500.00
SIDEWALK PERMITS			
	2017	2016	2015
Total Repaired	4595 LF	3267 LF	3681 LF
Total Constructed	4449 LF	4287 LF	946 LF
Permits Issued	105	98	106
ANNEXATIONS			
	2017	<u>2016</u>	2015
Total Increase	0.000 Acres	0.172 Acres	28.651 Acres
	0.000 Sq Mi.	0.000 Sq Mi.	0.045 Sq Mi.

# **OPERATIONS SUMMARY FOR THE YEAR OF 2017**

# **WATERLINES**

Total through 2016	321.18	Miles
Constructed - 2017	3.48	Miles
Removed - 2017	0.00	Miles
TOTAL through 2017	324.66	Miles
SANITARY SEWERS		
Total through 2016	299.28	Miles
Constructed - 2017	1.44	Miles
Removed - 2017	0.00	Miles
TOTAL through 2017	300.72	Miles
STREET RIGHT-OF-WAY AND PAVEMENT		
Hard surface with curb through 2016	134.18	Miles
Hard surface without curb through 2016	61.25	Miles
TOTAL pavement through 2016	195.43	Miles
TOTAL Right-of-Way through 2016	195.05	Miles
Vacated -2017		
Hard surface with curb	0.00	Miles
Hard surface without curb	0.00	Miles
Right-of-way	0.56	Miles
Constructed - 2017		
Hard surface with curb	0.17	Miles
Hard surface without curb	0.00	Miles
Dedicated - 2017		
Right-of-way	0.17	Miles
Annexed - 2017		
Hard surface with curb	0.00	Miles
Hard surface without curb	0.00	Miles
Right-of-way	0.00	Miles
TOTAL Hard Surface with curb - 2017	134.35	Miles
TOTAL Hard Surface without curb - 2017	61.25	Miles
TOTAL Pavement through 2017	195.60	Miles
TOTAL Right-of-way through 2017	195.22	Miles
ANNEXATIONS		
Total through 2016	20.1587	Sq. Miles
Annexations - 2017 0.000 Acres		Sq. Miles
TOTAL through 2017	20.1587	Sq. Miles