

# 2018 MEDINA COUNTY ENGINEER'S ANNUAL REPORT

By: Andrew J. Conrad, P.E., P.S., Medina County Engineer

To the Board of Medina County Commissioners

It is my privilege to present the Annual Report for the Office of the Medina County Engineer. In accordance with the Ohio Revised Code, an annual report must be made to the County Commissioners summarizing the activities and accomplishments of the County Engineer's office. It also provides a summary to the citizens of Medina County of an accounting of where dollars were spent in order to improve and maintain the County's system of roads and bridges.

The County Engineer is responsible for the maintenance, repair, and construction of the 325.97 miles of roadways on the County highway system and the 292 bridges on both the County and Township roads. Employees of the County Engineer also assist the County Commissioners with management of the stormwater and floodplain regulations, highway use permitting, and subdivision infrastructure planning. Employees of the Engineer also manage the tax map office and various computer operations for the County, including GIS functions.

I want to wish the very best to Frank Demczyk, Gary Emmons, Linda Kemp, Mitch Staniford, and Sandy Truelson on their retirements from the County Engineer's office in 2018.

## WINTER MAINTENANCE

Each winter season brings its own set of unique challenges. Winter operations for our highway department personnel consists primarily of snow and ice control and removal. The total cost of all snow and ice operations which includes plowing, spreading salt, stacking/loading, brine making and application, and dispatch and supervision was \$784,023.

## TREE TRIMMING

As a result of the continued infestation of the emerald ash borer insect, there are a large number of dead and dying ash trees along most of the roads in Medina County. As time permits and where needed, work crews have been out in many locations performing tree trimming and removal. The work is made more difficult with the number of overhead utilities that occupy our road right-of-ways. Contractors are sometimes utilized when large trees are encountered. During 2018, the total cost of tree trimming and removal was \$246,284.

## VEGETATIVE CONTROL

Three rounds of roadside mowing were completed over the 325.97 centerline miles of County Roads. The first two rounds involved mowing mainly roadsides as well as intersection locations where sight distance was impacted. The third round also included backslopes in addition to roadsides and intersections. The cost of applying herbicide spray at spot locations by County forces was \$4,885.

## SUBSTATION ROAD RESURFACING

The Medina County Engineer was the lead agency for a joint project to resurface Substation Road with the City of Brunswick, Brunswick Hills Township, and Medina Township. Substation Road extending from Hamilton Road to Grafton Road, approximately 4.71 miles in length, was resurfaced with hot mix asphalt. The resurfacing project consisted of milling the existing asphalt surface, repairing pavement edges, resurfacing with asphalt placed in two lifts, and pavement marking. The prime contractor for this project was Karvo Companies. The contract amount was \$1,099,297, of which, 50% was paid for with an OPWC grant.

## EAST SMITH ROAD IMPROVEMENT

East Smith Road was improved from the east corporation line of the City of Medina to River Styx Road, approximately 1.60 miles in length. Prior to resurfacing, the contractor constructed the proper super elevations and runoff tangents associated with the existing curves to address the run-off-the-road crashes that were occurring. The resurfacing project consisted of milling the existing asphalt surface, widening and repairing pavement edges, resurfacing with asphalt placed in two lifts, and pavement marking. The prime contractor for this project was Karvo Companies. The contract amount was \$512,579, of which, 71% was paid for with an OPWC grant. The remaining 29% local match was made up of Medina County auto and gas funds.

## GREENWICH ROAD RESURFACING

The Medina County Engineer was the lead agency for a joint project to resurface Greenwich Road with the Village of Seville and Westfield Center Village. Greenwich Road was improved from Harris Road to SR 3, approximately 7.33 miles in length. The prime contractor for this project was Melway Paving Company, Inc. The contract amount was \$2,077,515, of which, 80% was paid for with Federal Highway Gas Tax Funds administered through NOACA (Northeast Ohio Areawide Coordinating Agency). This office used Medina County auto and gas funds for the 20% local match for our portion of the project.

## PAVING AND CHIP SEAL PROGRAM

The remaining portion of the County paving program for 2018 consisted mainly of applying a 2" surface course of County Spec. 405 cold mix asphalt (motor-pave) with chip seal to 13.09 miles of roadway. The contract amount was \$1,070,269. Spot full-depth repairs were also performed on these roads as part of the resurfacing contract and included in the total cost.

The chip seal program consisted of applying a single seal of asphalt emulsion and #8 slag cover aggregate to 28.50 miles of various County Roads. The contract amount for the chip seal work amounted to \$764,495.

The work for both the 405 motor-pavement and the single chip seal application was performed by Melway Paving Company.

## SPOT PAVEMENT REPAIRS

County crews performed hand and machine patching and repair on various roads in 2018 where needed. We expended \$412,051 to perform this work. Also, a contract was let for more extensive repairs to miscellaneous roads. Melway Paving Company furnished equipment, material and labor to mill and repair sections of these roads. The total cost of this contract work was \$145,215.

## CRACK SEAL

Crack sealing of various County Roads was performed by County Forces in 2018. Material and labor cost for this work amounted to \$96,358.

## PAVEMENT MARKING

Annual pavement marking was performed by contract to renew centerline, edgelines, and miscellaneous markings. AERO-MARK, Ohio was the striping company to whom the contract was awarded for this work. A total of 99 miles of centerline and 110 miles of edgeline were painted at a cost of \$128,456.

## BRIDGE REPLACEMENTS

<u>Project Location</u>	<u>Contractor</u>	<u>Total Contract Amt.</u>
Kennard Road, Bridge No. 4	Cuyahoga Bridge & Road, Inc.	\$413,555
Ballash Road, Bridge No. 9	Medina County Forces	\$42,009 (As-built)
Friendsville Road, Bridge No. 1 (Deck Replacement)	Medina County Forces	\$66,157 (As-built)

ODOT replaced one bridge on the County inventory through the Ohio Bridge Partnership Program on Remsen Road.

## FORCE ACCOUNT CULVERT AND SHOULDER WORK

The Highway Department was able to replace numerous road culverts, build and repair shoulders and berms on various roads, and address a large number of work order requests related to drainage concerns and ditching. This force account work was performed utilizing both County Highway equipment and personnel as well as outside contractors. During 2018, Medina County Highway forces repaired, replaced, and extended thirty-seven road culverts of various sizes at a cost of \$261,870.

## VEHICLE/EQUIPMENT PURCHASES

\$46,534.20 - 1/2 Ton truck (2 units)  
\$102,533.00 - Cat 308 excavator  
\$81,591.09 - John Deere tractor with mower  
\$143,555.60 - Western Star plow truck,bed hydraulics,plow frame  
\$23,894.96 - Gledhill snow plow (2 units)  
\$1,299.00 - Snow Blower (Facility)  
\$527.96 - Stihl Chainsaw  
\$2,395.00 - MBW Ground Pounder  
\$1,683.000 - Grade Laser

## FINANCIAL SUMMARY

The maintenance, repair, and construction of roads and bridges on the County Highway System is funded primarily from portions of license plate fees collected for vehicles registered in Medina County and a share of the Ohio twenty-eight cents/gallon fuel tax. No real estate or sales tax is used for highway purposes. Federal gas tax and State Issue 1 funds are utilized on specific projects when our office is successful in securing these funds.

Below are the general summaries of the major Expenses and Revenues for 2018.

### 2018 EXPENSES

Salaries	\$2,574,927
Fringe Benefits	\$1,006,242
New Equipment	\$419,519
Travel/Training	\$3,387
Road/Bridge Contract Repairs	\$2,481,598
Contract Services	\$737,913
Materials/Fuel	\$929,616
Miscellaneous	\$49,496
Land	\$5,805
Total	\$8,208,503

### 2018 REVENUES

License Plate Fees	\$5,989,280
Gasoline Tax	\$2,417,404
Fees	\$173,945
Fines	\$36,534
Sales/Reimbursements	\$255,673
Investment Income	\$115,680
Other	\$48,658
Total	\$9,037,174