

The Orange Brigade



Summer 2019

Logan County Engineer's Office

Volume 55



Coleman's Comments

We are very excited that after years of working with the state legislature to develop adequate transportation funding for Ohio, we have been successful. beginning of this year we were able to develop a coalition of local governments and business partners to work with the state legislature and Governor Mike DeWine to develop a plan for funding state and local transportation needs. The final solution passed by the legislature and signed by Governor DeWine was 10.5 cents per gallon tax on gasoline, 19 cents per gallon on diesel, \$200 registration fee for electric vehicles, and \$100 registration fee for hybrid vehicles. The Ohio Department of Transportation has estimated that each county will receive about \$1.5 million annually from the increase and each township will receive \$56,729 annually. Local municipal revenues vary by size of the community, Bellefontaine is estimated to receive an additional \$297,351 annually.

Collection of the additional motor vehicle fuel tax begins July 1, 2019. We will not know the true annual impact until about September of 2020 when we will have received a full year of the fuel tax collections. At that time we will have a better understanding of the impact on local transportation funding. I would like to thank Governor Mike DeWine for his leadership and support of local governments in getting the fuel tax increase passed. I also thank our State Representative Jon Cross for supporting local governments and economic development by voting for this transportation funding.

The past six weeks have been very challenging for Logan County as well as much of Ohio. We have experienced multiple major rainfall events in rapid succession. In the May 17th storm, bridge 28-4.21 was destroyed south of Pickrelltown and we had several other bridges, culverts, and roads damaged. We then experienced several more

events that damaged some of the same areas multiple times. During the June 19 event, bridge 105-2.07 was significantly damaged and many other locations were flooded and partially washed out. These events and emergency repairs have set our normal construction work behind schedule, but we will continue with our scheduled construction as we make storm repairs. We have been approved for state funding assistance for the May 17 event and it appears that we will qualify for assistance for the June 19 event as well.

The 2019 county paving contract was bid at \$2,367,466.50 for 16.8 miles of roads by The Shelly Company. Asphalt prices increased by about 7 percent this year. Township chip sealing was awarded to Henry W. Bergman, Inc. in the amount of \$522,187.10. Township paving was awarded to the Shelly Company for \$389,945.65. The 2019 village Ohio Public Works Commission paving project was bid at \$1,114,945.24 by The Shelly Company. The township and county paving construction is nearly complete.

The past winter season was above average for snow and ice control costs. We spent \$486,734.97 on winter road treatment, which is above the average cost of \$369,000. This past winter, we paid \$84.94 per ton for salt. We just received the results of the statewide bid for road salt, and our cost for this coming winter will be \$87.94 per ton. So we know heading into winter that we will experience a slight increase in road salt costs. We will plan to maximize our use of Beet Heet® sugar beet molasses for prewetting our salt and controlling our material costs while maintaining our level of service for road treatment.

Sincerely,

Scott C. Coleman, P.E., P.S. Logan County Engineer

Storm Damage

By Todd Bumgardner Administrative Coordinator

The May 17th, 2019, flash flood storm event has brought much work to our crews. The major part of the storm generated up to a reported 6.6 inches of rain in a narrow band cutting through our county, generally from Santa Fee in the northwest to Middleburg in the southeast. In total we have 12 structures damaged and 1 bridge failure. Of the 12 structures damaged, the 3 located in Monroe Township were near failure and in need of immediate repairs. In addition to the structure damages, we had 13 bridges and 8 roadside ditches that are plugged with organic debris. Our crews have identified a total of 45 sites that were in need of work. As we move to the repair and clean up stages of work these sites are ranked in order of importance taking in factors such as probability of failure and risk to public safety.



The Logan County Engineer's Office is working close with other agencies, in particularly the Logan County Emergency Management Agency (EMA), to assess the estimated nearly half a million dollars of damage to our highway system. With the combined efforts of our local EMA and other public entities our hope is to receive assistance in recovering a portion of the costs related to repairing and cleaning up our highway system. We ask that the public be patient and understand that our crews will be working hard over the next several months to complete the repairs in addition to our regular scheduled maintenance work.



THANK YOU NOTE from Logan County Commissioners: The Logan County Commissioners would like to express our appreciation and **Thank You** to you and your staff at the Logan County Engineer's Office for taking time out of your busy schedule to help provide the Logan County Sheriff's Office gravel during the recent flooding. Your efforts and support in keeping access open to the Sheriff's Office is greatly appreciated.



New Hires, Milestones and Promotions

By Donna Dahlke Personnel Specialist

Joining our summer intern program this year is **Samuel Knight**, a graduate of Ben Logan High School and he will be attending Wright State University, **Baylie LeVan**, a graduate of Ben Logan High School and she will be attending Bowling Green State University, **Dakota McKinnon**, a graduate of Indian Lake High School and he will be attending University of Akron, and **Darien King**, a graduate of Bowling Green State University and will be attending Radford University.

Joining our organization as a Highway Technician is April Yelton and Garrett Horsley. Welcome April and Garrett!

Four employees have received promotions this year including **Jerry Todd Wisse** to Highway Tech III, **Andrew Farris** to Bridge Tech III, **Luke Jolliff** to Bridge Tech III, and **Chris Hackley** to Highway Tech II. Congratulations and **THANK YOU** for your hard work!

Congratulations to Michael Kerns! He has received his Professional Engineer License effective May 2019. Michael graduated from Ohio University with a Bachelor of Science in Civil Engineering and joined the Logan County Engineer's Office in 2013.



Highway Update

By Joel Miracle Highway Superintendent

Our highway maintenance schedule has been delayed 3-4 weeks due to the heavy rainfall this spring. Our chipseal program which normally begins mid-June has been delayed until July.

The highway crews have been clearing debris and dipping out inlets of culverts and tiles with the assistance of the Gradall, backhoe and mini excavator to provide proper drainage of our roads. One particular culvert, CUL C 43-4.91, has washed out twice this spring due to the abnormal rainfall. This structure has required 112 tons of #310 stone, 18-tons of shot rock and 14 dump truck loads of soil to stabilize it.

In addition to the drainage issues, we also have had numerous berm stone washouts. To date we have documented over 600 man hours of labor, 500 equipment hours, and over 900 tons of berm stone to make our roads safe for the community.

Map Room

By Suzie Cochran Map Room Supervisor

The Map Room records are located on the Logan County Engineer's Office website at www.lceo.us under the Map Room link in the upper left-hand corner of the main web page. These records include surveys, recorded subdivision plats, railroad plans, highway plans, and cemetery plats. Tax books for each township ranging from 1870 to 1966 are also online for those persons doing genealogical research. There are links to the county shapefiles, school district maps, voting precinct maps, tax district maps & fire district maps. The current County Tax maps with the 2017 aerial photography can also be viewed along with aerial photos from 2011 & 2005. Additionally, there is a link to FEMA for the flood plain maps. If you need assistance locating a specific record you can call (937)599-7230 or send an email to maproom@co.logan.oh.us.

Summer Update

By: Michael Kerns Assistant Engineer

The 2019 Bridge Program was off to a great start with the replacement of these two large culverts: CUL 142-3.72, just south of West Mansfield, where a 66" diameter aluminized steel pipe was installed and CUL 53-4.56 in Stokes Township, where a 103" x 71" aluminized steel pipe-arch was installed. Shortly after CUL 53-4.56 was completed, Logan County started experiencing heavy and intense rain events which caused flooding damage to many structures, including the destruction of one bridge.

This bridge, BR 28-4.21 in Monroe Township, is slated for a fall 2019 replacement due to needing to wait for additional appropriations and needing to wait for the bridge crew to become available as they continue performing vital repairs on structures that are still salvageable.

In addition to repairing flood-damaged structures, the county crews have been tasked with repairing flood-damaged waterways, which means they have been removing debris like corn fodder from waterways, doing waterway realignment and waterway stabilization. This work is being done in order to protect the county structures, keep structures and waterways flowing at their designed capability, keep the streams from creating a dangerous scour issue to the structures, and to minimize land loss due to erosion.

Speaking of scour, flooding events also trigger inspections of Logan County's four scour critical bridges, which are bridges that are at the highest risk for scour. These inspections help minimize the likelihood of losing one of these structures by ensuring they are still stable and that their foundations are still sound.

Safety Driving Tips During Heavy Rain Storms

The best thing you can do to protect yourself and your car when there's a flood is to follow this advice **TURN AROUND, DON'T DROWN.** If you come upon a roadway that appears to be flooded, **DON'T** try to drive through it. Temporary barriers blocking flooded roadways are placed by emergency personnel for a reason; never drive around them into a flooded area. Turn around and find a detour to your destination. Don't destroy your car or risk your life due to impatience.

Every flood is dangerous to drivers and summer thunderstorms can dump several inches of rain in a very short time. Even if the water running across the road appears shallow, what you can't see under the rushing water is the greatest hazard of all. The road could be washed out and the water may be much deeper than you realize. Even if appears intact, the roadway could collapse under the weight of your vehicle. Be especially cautious when driving at night when it is much more difficult to recognize flooding condition. Less than an inch of water can cause a driver to lose control and as little as six inches of rushing water has enough force to push your car off the road. The force of rushing water and debris can be strong enough to cause bridges to collapse.



Flash floods are those that develop within six hours of a rain storm. That may sound like a lot of time, but severe flash floods can occur in a matter of minutes,

depending on the intensity and duration of the rain, the topography of an area, and the conditions of the soil and ground cover. If you find yourself stalled in rising flood waters, do not attempt to stay with the car. A floating car can be swept into deeper water and can easily roll over. Escape if possible and get to higher ground immediately.

Tips for Traveling Safely in Work Zones

PLAN AHEAD: Before setting out on the road, research your route. When possible, avoid work zones and use any detours that are available.



PAY ATTENTION: You should always keep your eyes on the road, but this is exceptionally important in work zones. Be aware of all signage throughout work zones that can indicate reduced speeds, lane changes and other important information. Avoid distractions such as your cell phone, eating, drinking, the radio, GPS and conversing with other passengers.

SLOW DOWN: Lane closures, traffic pattern shifts and reduced speeds are common in work zones. Make sure to slow down when entering a work zone and keep an eye out for road workers. Give workers extra room, slow down as you approach workers, be prepared to stop.

MOVE INTO THE OPEN LANE: When approaching lane closures, move into the open land as soon as possible. Be sure to pay close attention to vehicles around you that could be in your blind spot.

KEEP YOUR DISTANCE: Rear-end crashes are extremely common in work zones, maintain extra space between your vehicle and the one in front of you at all times.

Bridge Crew Update

By: Dan McMillen Bridge Superintendent

Early this spring the Bridge Crew installed two large culverts in the County. The first one is located on C.R. 142 at the West Mansfield city corporation limit. This culvert replaces an old cast in place concrete structure. The new culvert is a one piece aluminized steel pipe measuring 48 feet long by 66 inches in diameter. The second culvert is on C.R. 53 and it replaced an older corrugated metal pipe that had seen better days. We replaced it with a 50 foot long 103 inch by 71 inch modified arch aluminized pipe.

Now our attention has turned to the May 17th storm that damaged structures in addition to recent rainfall leaving flooding and debris. We have four structures with critical damage to them. One structure on C.R. 28 cannot be saved and will need to be replaced. Others have had the stream bed lowered by up to 42 inches from under the abutment wall due to the amount of water and force that flowed through the structures. Debris on many other structures are being unclogged and cleaned and some are requiring erosion-protection material like dump rock and salvaged concrete to be put back around them to keep them in place. Following is a list of roads where projects that needed repair to some degree were located:

Twp Rd 178	C.R. 28	Twp Rd 45
Twp Rd 163	C.R. 29	C.R. 153
Twp Rd 165	C.R. 10	C.R. 49
C.R. 39	C.R. 105	C.R. 63
C.R. 64	Twp Rd 179	Twp Rd 26
C.R. 26		

We are making progress with this task at hand and hope that the rain slows down as that would be a big help.



Twp Rd 178 Bridge Wash out below abutment



Corn fodder



CR 28 Bridge



Washed out guardrail

Ditch Maintenance & Traffic Department

By Steve Tracey
Ditch/Traffic Superintendent

The Ditch Department has had a busy spring. We removed two beaver dams on the Slough Ditch and cleaned up corn and bean fodder on various ditches due to the heavy rain we have had. As a result of the recent floods we are assessing damages from these storms.

Currently we are playing catch-up with roadside mowing and spraying. Again, with the rainfall this year it has been difficult to do these normal jobs. Logan County has seen approximately 9-11 inches of rain in June of this year with a yearly precipitation of approximately 34 inches compared to 21 inches at this time last year. It has been a challenge to perform our regular maintenance duties and we are currently focusing on sight distance problems due to high vegetation growth.

Recently with the help of Ohio CAT, the Ditch Department rented a forestry machine to clear the outlet of Emery Ditch. This will allow us to perform future maintenance on the outlet.







The Sign Department has had a busy and eventful spring as well. Due to the high amount of rainfall, we have focused all of our attention on high water and road closures. With the amount of roads closed and high water we reached out to Union County Engineer's Office and borrowed additional road closed barricades as we had depleted our supply.

In addition to these emergency road services, we are performing our normal maintenance of over 7,000 signs and working with villages and townships on shared services.

Thank you to the crews for your hard work!

