



# The Orange Brigade



Summer 2023

Logan County Engineer's Office

Volume 63

## *Coleman's Comments*



The Ohio Senate Finance Committee recently added an amendment to the state budget bill that would reduce the qualifications of the County Engineer. I strongly oppose the amendment to remove the requirement for the County Engineer to be licensed as a Professional Surveyor in the State of Ohio as part of the requirement for the office. There was also no specification that the engineer must be a Civil Engineer (I do not want an Electrical Engineer designing roads and bridges anymore than you would like me designing our electric distribution system).

The State of Ohio was the testing ground for developing the surveying methods for use throughout the United States of America, and we have all forms of surveying throughout Ohio. One of the original offices created by the General Assembly was the County Surveyor, which became the County Engineer in 1935. As such, we are still responsible for the surveying of public roads, establishing lost corners, approving survey plats and descriptions, and maintaining tax maps for the Auditor's Office, among many other surveying duties. Last year the Engineer's Office checked legal descriptions on 2,863 real estate documents, filed and recorded 2 condominium plats, 7 Declarations, and 2 road extension dedications.

New property splits totaled 151 for the year, with 75 new survey descriptions recorded along with 48 documents combining properties into one Tax Parcel Number. Surveyors submitted 261 new surveys that we reviewed, approved, indexed, scanned, and filed. Additionally, 106 house numbers were entered into the 911 system and 1,064 parcels were adjusted on the maps to reflect the new property splits and surveys. Surveying is a full-time duty for today's County Engineer.

Eliminating the requirement of a dual registered engineer and surveyor would be a huge detriment to our citizens, the counties and the state. The cost of hiring a Professional Surveyor would be a significant burden to every county. The cost of hiring a separate Professional Surveyor would likely be over \$100,000 per year with benefits included. This is equivalent to one small bridge replacement, 0.8 mile of road resurfacing, or 6 miles of chip sealing annually.

The pool of registered surveyors has continued to decline over the past decades and cannot accommodate the hiring of professional surveyors from private practice. We all have a limited number of surveyors working in our counties and cannot afford to lose them from serving in private practice. There are not enough land surveyors available to meet Ohio's citizens' demands. It is not uncommon in Logan County for surveyors to have a 9 to 12 month backlog of work.

## **Coleman's Comments cont.**

Some have argued that the high level of expertise and qualifications required to be County Engineer means that there is too little competition for the position. There is rarely a contested election against an incumbent local elected official. There are currently four dual licensed engineers and surveyors in Logan County. The County Engineers Association of Ohio (CEAO) has always assisted in ensuring that there is a dual licensed engineer and surveyor eligible to run for County Engineer in even the most rural counties in Ohio. The problem is competitive wages, not qualifications. If the Legislature wants more competition for elected offices, they will need to make the wages more competitive with the private sector.

I believe this issue should be debated in a standalone bill with input from County Engineers, surveyors, the CEAO, the Ohio Board of Engineers and Surveyors, and other interested parties if the Legislature wishes to make changes to this elected official position.

We cannot afford to reduce the education, technical expertise and experience requirements of our public offices. I do not believe that we should reduce requirements for County Engineers, Prosecutors, Judges, Sheriffs, Coroners or any other elected officials. I ask you to contact your state legislators and tell them how important it is to maintain high qualifications for elected officials to ensure the safety and welfare of the public.

Thank you,



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

## **Statements of Support to Keep the PS Qualification for County Engineer**

### **Catastrophic To The Surveying Profession As A Whole**

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*“As a surveying educator in the State of Ohio, I can say that most of the Civil Engineering students at Ohio University who are concurrently studying Surveying, are doing so due to the present requirements of the County Engineer position, even though most of these students will not become County Engineers. If the requirement for surveyor licensure is removed, most of these students would no longer study surveying, further reducing the number of surveyors in the state. This would have knock-on effects to the surveying profession as fewer students in these surveying courses would force most universities to completely cancel their programs due to low enrolment and high costs. This would be catastrophic to the surveying profession, which is struggling to attract new students to create young professionals.”*

– John Telesz, PE, PS & LEED AP at Ohio University Russ College of Engineering and Technology, Dept. of Civil & Environmental Engineering

## **Coleman's Comments cont.**

### **Jeopardizes the Safety of the Traveling Public**

*"In accordance with Ohio law the elected county engineer reviews, approves and monitors construction on all county roadways, bridges and culverts and is responsible for overseeing county property records. In order to perform these duties prescribed in Ohio law, and protect the public, the county engineer must have the knowledge, skills and abilities of both a professional engineer and surveyor and must be able to exercise responsible charge of both the engineering and surveying work performed in the county to ensure that engineering and surveying work is performed safely. In order to perform the duties of the elected county engineer prescribed in Ohio law the county engineer must:*

- *Have the engineering and surveying knowledge and expertise to review and to change, reject, or approve the proposed work, the work in progress and the final work product, through a continuous process of examination, evaluation, communication, and direction throughout the development of the work.*
- *Be in direct supervisory control and have personal professional knowledge of the engineering/surveying work product and be able to supervise and direct other design professionals and/or support staff working on engineering and surveying projects."*

- John Greenhalge, Executive Director of the State Board of Registration for Professional Engineers and Surveyors

### **Dual Registration Ensures the County Engineer has Appropriate Professional Education & Experience.**

*"Ohio does not license engineers with separate licensure designations. In Ohio, a "Professional Engineer" can hold degrees and an engineering license as a chemical, electrical, nuclear, mechanical, aeronautical or other area of specialization. Dual registration as a Professional Engineer and Professional Surveyor is ONLY available to engineers who meet the requirements as a CIVIL engineer. Taking that one step further, there are numerous types of Civil Engineers – ones that their careers do not involve roadway and bridge design and construction. The majority of PE holders in Ohio would be completely unprepared for County Engineer work - even if that work did not involve any surveying."*

- Matt Johnson, P.E., Branch Manager at Palmer Engineering – Medina, Ohio

*"I believe we should oppose this and, absolutely, support the requirement that our engineers be certified/registered as surveyors, etc. Qualified Engineers are vital to each of our counties. They are relied upon not just for roads and bridges, but also for their expertise for annexations, eminent domain cases - all which require surveying, etc."*

- A Probate & Juvenile Court Judge recently stated

### **Opposing the removal of the PS to run for office**

- State Board of Registration for Professional Engineers and Surveyors
- Ohio Municipal League
- Professional Land Surveyors of Ohio
- County Auditors' Association of Ohio
- Ohio Recorder's Association
- Ohio Clerk of Courts Association
- Buckeye State Sheriffs' Association
- Ohio Prosecutor Attorneys Association
- Ohio Judicial Conference
- Ohio State Coroners Association

## New Hires, Milestones and Promotions



*By Misty Centers  
Personnel Specialist*



### Milestones

**Jonathan Parthemore** earned a Geographic Information Systems Certificate from Columbus State in May 2023. Congratulations!

**Kyle Rumer, David Kirkpatrick, Trent Helmlinger, Dick Sidders** and **Chris Loudermilk** obtained tanker endorsements.

### Employee of the Quarter

We are very pleased to announce that **Greg Kennaw** was selected for the Employee of the Quarter award for Q1 of 2023!

### New Hires

**Candy Powell** joined our staff as Operation Clerk. **Josh Campbell, Jesse Strayer, Zail Gammell** and **Michael Smith** joined our crew as Highway Worker Trainees. Welcome to the team!

## Bridge Crew Update

*By: Elliott Fullerton  
Bridge Superintendent*

This spring, the Bridge Crew removed pack rust between the stringers and floor beams on CR 13-1.56 McColly covered bridge. The pack rust created gaps allowing the wood plank floors to move around. They also welded shims into the planks, which secured the wood floor back in place.

Bridge CR 12-7.42 had some channel alignment work done, as well as a facelift. Years of weathering on the concrete inlet was causing delamination on the concrete abutment walls. The Bridge Crew chipped away old concreted, tied in reinforcement steel, and poured new faces on both abutments. The new concrete and channel alignment will help support the bridge beams and help with water flow under the bridge, extending the 60-year-old bridge's life for years to come.

On rainy days, the Bridge Crew spent time in the garage welding a new bottom in the bed of an 18-year-old fleet dump truck. This truck is being repurposed as a ditching/dump rock haul truck. The new, thicker steel bed floor will help the county get another 5-10 years of life out of the truck.

Once the weather broke, the Bridge Crew placed a couple of culverts on Twp Rd. 29 for Jefferson Township. The culverts were found to be in poor condition and they were replaced before any damage occurred to the roads. This work was completed as part of our shared service program, which helps townships get projects completed by county crews versus a contractor, which is a cost-saving benefit to the townships.



CR 64 culvert replacement



## County ditch maintenance and assessments

*By: Michael J. Kerns, P.E.  
Assistant Engineer*

As you may know from the Annual Engineer's Report, the Logan County Engineer's Office (LCEO) is responsible for maintaining 47 ditches consisting of 38.00 miles of open waterway ditches, 17.38 miles of tiled ditches, and 9.2 miles of grassed waterways. Typical maintenance items include mowing, spraying, center dipping for improved flow, crossing and bank slip repairs, erosion control, tile repairs, and removing log jams. Last year we completed some level of maintenance on every county-maintained ditch - but who pays for said maintenance? How are the values of the special ditch assessments calculated? And how much money is in each ditch account?

Ohio Revised Code (ORC) mandates that, as of 1957, approved and completed county-petitioned ditches are to be placed under permanent maintenance and the County Commissioners and County Engineer are responsible for overseeing this maintenance. ORC 6137 requires maintenance to be funded by landowners who are found to benefit from the ditch. Funds come from ditch assessments, which show up as 'Special Assessments' on tax bills and are paid by any landowner (this includes state, county, and township entities) who is found to be within the watershed of the ditch.

These assessments go into the specific ditch fund that the landowner lives in and nowhere else. I.e., all special assessment money collected for a specific county ditch fund will be used solely to maintain that ditch. Said maintenance includes LCEO engineering, surveying, and administration costs as ORC mandates said costs are to be reimbursed by the applicable ditch fund.

Assessments are determined by the LCEO and the assessment calculations are modeled after a procedure first developed by the Preble County Soil and Water Conservation District in 1981. This procedure considers the following four physical features of a watershed: benefitted acres, land use, soils, and topography. Drainage need unit is the term used for the calculation that determines the drainage need of each parcel based upon the parcel's land use (the amount of runoff on a particular parcel is directly related to the amount of impervious areas that it has, i.e., there is a greater need for drainage for those parcels of land with a large amount of impervious areas when compared to pervious areas), soil type (the U.S. Department of Agriculture and Soil Conservation Services has classified soils into four hydrologic soils groups according to their infiltration and transmission rates), topography (elevation factors are assigned based upon the presumption that land at higher elevations has less of a need for the drainage improvement and therefore receives less benefit from drainage improvement projects), and benefitted acreage (the amount of a parcel's acreage within the ditch's watershed).

ORC Section 6137 allows for the Logan County Commissioners to review petitioned ditches and to "add to the schedule of benefitted owners any other owner who, in the judgment of the board, is benefited by the operation and maintenance of the improvement" (ORC 6137.11). With this in mind, the LCEO has been and will continue to monitor and update the landowner assessment schedules using the most accurate data available to ensure all benefitting owners are being assessed as fairly as possible. Currently this means watersheds are created using 2-foot contours obtained from 2019 LiDar (whereas watersheds created in the past typically used 5-foot or 10-foot contours), using aerial imagery from 2019 to determine land use values, and using 2006 soil data to determine soil group values.

Per ORC, the maximum amount of money allowed in each ditch fund is 20% of the permanent assessment base, which is usually the original cost of construction. ORC 6137.112 states "the county engineer [is] to estimate the construction cost of the improvement if that improvement were to be constructed at the time of the permanent assessment base review" which allows ditch funds to keep up with inflation.

## ***Continued from page 5***

Typically, the total amount of funds in each ditch is based on the historic maintenance needs of each ditch and the Ditch Supervisor's verbal report on the current condition of each ditch. The minimum maintenance assessment is \$2.00 per parcel.

Please contact Ditch Supervisor Steve Tracey (Phone: 937.592.2791 Email: stracey@lceo.us) if you discover any issues or concerns regarding a county-maintained ditch.

## **Ditch Maintenance & Traffic Department**

*By Steve Tracey  
Ditch/Traffic Superintendent*

The Ditch and Sign Department had an eventful spring. The Ditch Crew performed maintenance and repair on the Faulkner-Wheeler, Hankinson, Hoover, McClure, Green, Mouser, South Fork of Great Miami River, Liggett, Emery, North Fork of Great Miami River, and Lamb ditches. At the Faulkner-Wheeler ditch, the crew located two sub-main tiles not hooked up to the main. They placed dump rock at the end wall, dipped the outlet, and investigated four potential suck holes. The crew dipped the tile outlet on the Hankinson ditch, removed failed CMP (corrugated metal pipe) pipe from the tile outlet, and placed dump rock and cut trees at the tile outlet. The upper end of the Hoover ditch was center dipped, the spoils leveled with a dozer by the inlet tile, and the ditch crew placed 30' of 6" tile. The McClure, Green, Mouser, and Lamb ditch were center dipped. The ditch crew also cleaned the Lamb tile outlet. They removed log jams and a beaver dam from the South Fork. They repaired the crossover and 10' of 8" tile and placed dump rock at the Liggett. A jet-vac was used on over 600' of the main tile on the Emery. A jet-vac was also used on the North Fork tile and the Ditch Crew cleaned catch basins at the North Fork.



Faulkner-Wheeler

The Ditch Crew began mowing the roadside and running the boom mower throughout the county for sight distance issues. They also completed our guardrail spraying program and are working on spraying the roadside ditches.

The Sign Department performed work for Jefferson, Miami, Union, Harrison, and Richland Townships. They repaired or replaced over 200 damaged culvert markers and finished this year's sign spraying program. Currently, the Sign Department is installing reflectors on the back of stop signs to help drivers and emergency responders see intersections better when traveling our roadways. They also put up all the 'FRESH TAR/LOOSE STONE' signs in preparation for the chip seal and paving programs this spring and summer.



# Equipment Purchases

By Todd Bumgardner  
Administrative Coordinator

2023 is shaping up to be a big year for equipment within our organization. The high cost and limited availability of newly manufactured items have nearly frozen our purchasing ability. More significant acquisitions have been minimal over the last three years, and delayed deliveries of our committed purchases are common. During these years, we have relied on repairing, upgrading, and re-commissioning older pieces readying to be retired. These new purchases allow our operations to continue completing vital highway, bridge, and ditch work with county crews, thus saving dollars compared to contracting work to an independent outside contractor. Our equipment purchasing still needs to be completed for 2023, as we plan five more major purchases totaling an additional \$500,000. The table below shares our committed investments and paid invoices for the 2023 calendar year.



## 2023 Equipment Delivery and Payment Schedule

Department	Item	Cost
Office	Computers and misc.	\$1,080.86
Survey	Used Suburban	\$24,285.00
Survey	Used Suburban build	\$5,000.00
Highway (Apr. 2021 PO - Unit 357)	Cab chassis tandem axle	\$94,000.00
Highway (Apr. 2021 PO - Unit 357)	Bed, plow, spreader, lights and hydraulics	\$70,000.00
Highway (Mar. 2022 PO—Unit 358)	Cab chassis tandem axle	\$100,000.00
Highway (Nov. 2022 PO—Unit 359)	Cab chassis tandem axle	\$107,000.00
Highway (Unit 358 build scheduled for 2023)	Bed, plow, spreader, lights and hydraulics	\$94,275.00
Highway (Unit 359 build scheduled for 2023)	Bed, plow, spreader, lights and hydraulics	\$94,275.00
All	Compactor flat plate 1,000#	\$13,500.00
Ditch	Single wing mower x2	\$31,162.40
Road	Distributor cab and chassis	\$115,495
Road	Distributer tanker	\$179,400.00
All	Boom mower	\$78,174.25

**Scheduled Payment Total**

**\$1,0007,647.51**

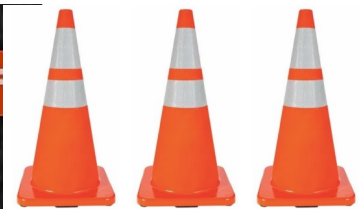
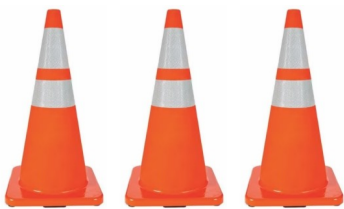


## Safety Update

*By Misty Centers  
Personnel Specialist*

The Logan County Engineer's Office and Highway Department started the year off with one recordable workplace injury but are back on track and continue to add to our days with no lost time accidents. We have been adding reflective tailgate stripping on the back of our trucks on rainy days to help make us more visible on the roadways.

Our monthly safety meetings to date have focused on chainsaw and tree trimming safety, chipper safety, defensive driving, blind spots, and tick and heat illness awareness. We continually train to implement safe work practices and implement lessons learned from the past.



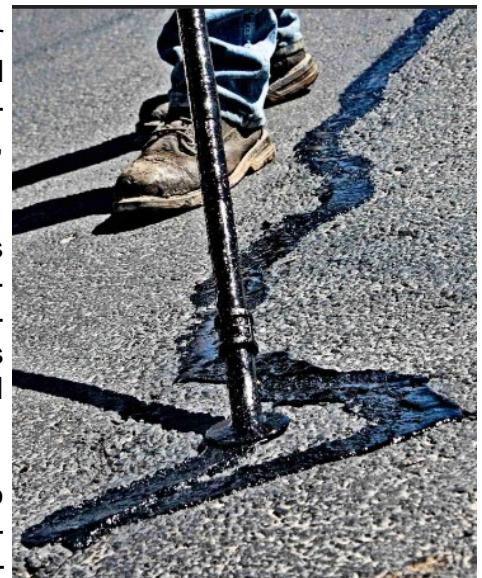
## Highway Update

*By Dan McMillen  
Highway Superintendent*

You may not notice, but pavement is always moving horizontally or vertically to some degree which can form cracks. Cracks come in all shapes and sizes, and no pavement is immune to cracking. If left untreated, those cracks are only the start of more significant problems, from potholes to sub-base failure.

According to the Pavement Preservation & Recycling Alliance's [roadresource.org](http://roadresource.org), 75 percent of unsealed cracks develop into potholes within three years, while only 1 percent of sealed cracks develop into potholes in that same timeframe. Considering the benefits gained from reduced vehicle damage, increased driver safety, and reduced road maintenance, it's clear why crack sealing is important.

Crack sealing is the process of placing an adhesive sealant into cracks on the pavement surface, preventing the infiltration of moisture and non-compressible materials into the pavement. It is a cost-effective pavement preservation treatment that can slow pavement deterioration and extend pavement life by three to five years. This season, road crews have applied approximately 32,800 lbs. of material to the twenty-three county roads scheduled for this year's chip seal resurfacing program.



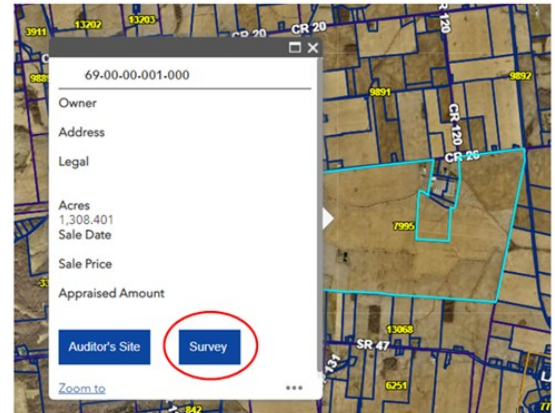
When the crew wasn't crack sealing, they installed culverts on CR 29, CR 188, CR 12, CR 277, and CR 44.



## Map Room

By Suzie Cochran  
Map Room Supervisor

The Logan County GIS map webpage has recently been updated with the 2022 aerial photos and some new features. One of the new features is that this GIS interactive map has additional layers that allow users to view contours, watersheds, culverts, soil types, and other data in addition to the parcel shapes and addresses. Another new element is the 'Survey' button. By selecting any specific parcel and clicking on the 'Survey' button in the parcel data window, users can view the survey file for that particular parcel if one is available. This GIS interactive map can be accessed by clicking on the 'Map' tab at the top of this page: <https://realestate.co.logan.oh.us/>



The Map Room records can be found on the Logan County Engineer's Office website at [www.lceo.us](http://www.lceo.us) under the LCEO Map Room link on the main web page. The survey records, road information, highway plans, field books, railroad plans, subdivision plats, and cemetery plats are included under the Surveys link. Tax books from 1870 to 1977 are also available for review, along with various other maps. If you need assistance locating a specific record, contact the Map Room at (937) 599-7230 or [maproom@logancountyohio.gov](mailto:maproom@logancountyohio.gov)

## Work Zone Safety in Ohio: Stats & Tips

Construction season is here. We have been out on the roads filling potholes, crack sealing, repairing berms, and chip sealing, amongst other roadway maintenance and repairs. None of these activities can take place without Work Zones being installed.

So, let's talk about Work Zone Safety. We can start by reviewing some Work Zone Crash Statistics obtained from [www.transportation.ohio.gov](http://www.transportation.ohio.gov). In 2022, there were 20 fatal crashes in Ohio's work zones and 82 serious injury crashes. And there was a total of 4,518 reported work zone crashes. Speeding and following too closely are the top contributors to crashes in work zones, followed by distracted driving.

Now for some Safe Driving Tips for work zones. Proceeding with caution is the number one tip for driving, but it is imperative in areas where roadwork occurs. Be aware of all signage throughout work zones indicating road work ahead, reduced speeds, lane changes, flaggers, and other important information. Avoid distractions such as your cell phone, eating, drinking, the radio, GPS, and conversing with other passengers.

Speeding through construction zones is an extreme hazard. Lane closures, traffic pattern shifts, and reduced speeds are expected in work zones. Make sure to slow down when entering a work zone and keep an eye out for road workers.

Rear-end crashes are prevalent in work zones – always maintain extra space between your vehicle and the one in front of you. You'll need that space for your reaction time in case they need to stop quickly, which is a common occurrence in work zones. Remember, we all play a role in Work Zone Safety!

## CDL Training

By: Mark Hilty  
General Superintendent

Beginning February 7, 2022, prospective drivers wishing to obtain a CDL are required to complete Entry-Level Driver Training (ELDT).

ELDT, a federal rule, establishes minimum training requirements for individuals applying for a Class A or Class B CDL, an upgrade of their CDL, or a hazardous materials (H) endorsement for their license for the first time. ELDT contains two parts, Theory and Behind The Wheel (BTW) training. A training instructor must cover all topics outlined in the curriculum. The instructor must determine and document that each driver-trainee has demonstrated proficiency in all elements of the BTW curriculum. Training instructors must document the total number of clock hours each driver-trainee spends to complete the BTW curriculum.

Sending drivers to training schools can cost up to \$6,000.00 per driver. We are fortunate to be able to do our training and registering "in-house" at a cost savings. We ensure that our prospective drivers pass the Theory curriculum with roughly a 400-question quiz that must be passed by at least 80% before moving out to the shop for Pre-Trip inspection. We practice this until prospective drivers can pass the examination in 30 minutes or less. Next, our maneuverability (Range) course is set up using paint and traffic cones. Future drivers practice different parking and docking maneuvers. Once the prospective driver safely gets through the course, it's on to the Open Road segment of training, which now puts the CDL-permitted driver out on the road along with a CDL-licensed driver to gain experience driving in traffic.

After meeting all ELDT criteria, prospective drivers are entered into a national registry with the Federal Motor Carrier Safety Administration.

To date, we have trained and registered three new CDL drivers and currently have an additional three going through Theory right now.

Thanks to all the employees that have helped with this!



## JOB OPPORTUNITIES



### Positions Available:

- *Mechanic*
- *Highway Worker Trainee 1*

For job descriptions and employment applications, please email [hr@lceo.us](mailto:hr@lceo.us) or call 937-592-2791.



1 of 2 New pick-ups

have a nice  
summer

A small illustration of a sun and a beach umbrella in the top right corner of the text area.