

THE MEDINA COUNTY ENGINEER QUARTERLY UPDATE

2004 - ISSUE #2 SPRING

David L. Miller, P.E., P.S.

PERMIT DEPARTMENT

Permits

A long miserable winter kept permit numbers stable, but with the spring weather coming, and the number of subdivisions increasing, it should be a long busy year for builders and the permit department.

A few changes have occurred in the department, one of them the coming addition of a sidewalk permit.

Since the County is responsible for maintaining the road right-of-ways for the traveling public, and generally the sidewalks are installed within that right-of-way area, it is apparent that sidewalks fall within the County's recordkeeping jurisdiction. Originally the Permit Department had included the inspection and recordkeeping of the sidewalk installation with their driveway permits. As subdivisions requiring sidewalks increased, it was found that the driveway would be in and completed, but the permit had to remain open because the sidewalk was not completed or, in some cases, not even started. Permits that would have been completed in three months, now had to be renewed once and sometimes twice before the sidewalk was installed.

Originally, the developer would obtain a one year permit for an additional fee, which would cover the sidewalk installation as well. In order to better track the installation, and to keep costs down for the contractors, the Engineer's office is separating the two installations and creating a Sidewalk Permit. This may be taken out at the same time as the Driveway Permit, for a minimal fee. Since not all subdivisions have the sidewalk requirement, it will only effect those builders and developers with such a requirement. Applicants will still have the option of obtaining a drive permit for a period of three, six, or 12 months, but the sidewalk permit will be open for a period of one year.

With the pre-inspection completed for both the drive and the sidewalk at the initial visit to the site, the driveway and sidewalk permits would both be able to be issued. When the apron is completed, the inspector would be able to final, and file that permit. The sidewalk permit would then stay open until such time as the installation was complete, or one year, without compromising the drive permit, and would be more cost effective for the applicants.

At a meeting between contractors and inspectors, the sidewalk permit was discussed and received with approval by all those in attendance. The permit is being designed at this time and hopefully will go into effect within the next month.

ANNUAL CONTRACTOR/INSPECTOR MEETING

The Permit Department held their 2nd Annual



Contractor/Inspector meeting on March 24th to discuss procedures, new techniques, permit requirements and specifications for driveway installations and various work within the right-of-ways under the County's jurisdiction.

Work zone safety and contractor offenses on sites were discussed, along with the importance of notification when work was scheduled or in progress. One item stressed was construction site safety pertaining to cleaning road areas during work, especially when weather conditions could increase unsafe driving conditions. Brushing, washing, and salting the areas is required, and if there is a safety factor, non-compliance will end with a call to the Sheriff's office.



Most of the contractor's are very safety conscious because of the cost of liability, but it was stressed that everyone needed to be diligent when working within the right-of-way.

Jane Blair, our permit clerk, discussed the new permit program. An actual billing program, and permit program has been completed and is now being installed. Under the old computer permit program, we were very limited in the amount of information that was able to be listed on the issued permit. This led to an excessive amount of abbreviating, which sometimes caused the reader to be confused if unfamiliar with any of the abbreviations. The new program allows a large amount of information to now be typed, without abbreviating, making it much easier for contractors and homeowners to understand what is being required.

MEDINA COUNTY CONTRACT PROJECTS - 2004

Improvements

- 1.) Friendsville Road south of Seville Road - "Major Culvert Replacement" - \$292k

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Kennard Road Bridge #30 "before picture"

- 2.) Westfield Road @ CSX Crossing -
"Improving Grades @ RR Crossing" - \$268k

Bridges

- 3.) Ryan Road north of S.R. 162 - "Bridge Replacement" - \$125k
- 4.) Seville Road west of Wadsworth City -
"Bridge Replacement" - \$240



Medina Line Road, Culvert #8 "before picture"

- 5.) Medina Line Road north of State Route 261 -
"Bridge Replacement" \$125k
- 6.) Bellus Road in Hinckley Metroparks -
"Bridge Deck Resurfacing" - \$80k

Issue 2 Culvert Package

- 7.) Abbeyville Road north of Hamilton Road -

"Culvert Replacement"

- 8.) Kennard Road west of Lake Road -
"Culvert Replacement"
- 9.) Acme Road north of Seville Road -
"Culvert Replacement"

Total of 7, 8, and 9 = \$107k
Resurfacing



Seville Road Bridge # 12 - 2003 "before picture"



Medina Line Road - Bridge 26 "before picture"

- 10.) Hamilton Road Paving - From SR42 to SR 3
- 11.) Spieth Road Paving - From CH47 to SR 252
- 12.) Windfall Road Paving - From SR18 to CR21

Total of 10, 11 and 12 = \$350k

ANNUAL TRUSTEES' DINNER

The Annual Trustee's Dinner was held on March 11 at Williams-on-the-Lake, with once again a wonderful meal served by the staff at Williams-on-the-Lake. This year was actually the last Trustee's Dinner to be given by County Engineer David Miller, who will be retiring at the end of this year.

This year the invitation was extended to any of the Village

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Mayors because of a special presentation that related to Village Mayors as well as the County and Townships. Information was discussed on the New Force Account Law, and was presented by Bill Thorne of the Prosecutor's Office.

Commissioner Sharon Ray and one of her staff, Dianne Ranftl, also discussed was the Community Development Block Grant and how a very detailed request of improvements is needed by each township in order to receive maximum amounts of grant monies.

State Representatives Chuck Calvert and Bob Gibbs were also in attendance and both took the time to present new, existing and upcoming legislative actions that were pertinent to the various government representatives attending. Dave Miller followed up with information pertinent to the Township Trustees.

This was one of the best attended dinners in the last few years, with over 113 people present. At the end of the evening Colene Conley, York Township Trustee, expressed appreciation on behalf of the Township Trustees, for all the years of assistance, dedication, caring and hard work that David Miller had given to them all.

After much deliberation, seemingly endless lines of coding, and countless migraines, the new Permit Program has finally reached its final stage of completion. Lou Trenka and Lowell Filak of the computer department have designed an entirely web-based permit program that addresses some important problems and issues that the old program did not. The searching, editing, and issuing of permits will be made easier with the changes. Originally, trying to explain requirements was difficult because of the lack of space, and much of the information was abbreviated to the point of confusion. Although the face of the permits is not as aesthetically pleasing, the additional information and explanations now able to be installed on the face of the permit, more than make up for the new appearance.

The program has been handed over to the Permit Department at this time and as information is being installed, the wrinkles are being smoothed out and hopefully all glitches and bugs will be deleted. Once this is done the old permit information will be saved over to the new program and the complete switch will be made.

With the arrival of new computers for the permit department employees, speed should also be increased along with the amount of information that will now be able to be attached to the permit face.

Once this has been done, the old Permit Program will be given a proper funeral. Sadly, none are expected to attend.

MEDINA COUNTY DIGITAL 2' CONTOUR DATA

The Medina County Digital 2' Contour Data is finally available and shipping for a cost of \$500.00 on a single CD-ROM. In late 2001/early 2002, the Engineer's Office negotiated and entered a contract with Aerocon Photogrammetric Services, Inc. for production of County-wide 2' contours and hydrologic inventory.

The progression of the project was always readily apparent on the Public Access System under the "Contours" option but was not optimized until February of 2004.

In November of 2003, Aerocon delivered the final version of the data and that is when the real work for the County started. The first issue dealt with was due to the size of the data. Because the data needed to be shipped in 4 parts, upon arrival each layer half needed merged together and the 2 layers merged into one before it could be loaded into the ArcStorm database as a single entity. This also required that the data be clipped to fall within the geographic extent of the existing county data. The size of the data did not allow for a normal "clip" operation and an "intersect" and manual select-delete combination was used to achieve the required result.

The next issue was the size of the resulting CAD (Computer



Appearance of the Existing Computer Program on the Screen

COMPUTER DEPARTMENT/PERMIT PROGRAM



New Program's Appearance on the Computer Screen

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Aided Design) accessible file. It was verified upon testing that the data needed to be tiled to enable the CAD application to use it without crashing. Most of the tiles were automatically created using the conventional "clip" operation with the exception of Hinckley Township, which required the fore mentioned solution to create the tile.

During preliminary investigations, it appeared that there would be no way to successfully use the DTM (Digital Terrain Model) points and Breaklines that were supplied to create a TIN (Triangulated Irregular Network). The decision was made to directly supply/redistribute the contours themselves for design and analysis work as software can be used to go backwards from contours to TIN.

The next question was how to get 17 DXF files (CAD format) and 3 Shapefiles (GIS format) to fit on a single CD allowing for one Shapefile which alone consumed 328MB compressed! The solution was to eliminate every unnecessary attribute in the GIS data and limit the DXF output to 4 decimal places. Allowing for the origin of the data, limiting the decimal places should not have an effect in accuracy. The final total on the dataset is 712MB and must be written to 750MB CD-R's.

EMPLOYEE NEWS

A hardy welcome to our newest employee: Ryan Schuster. Ryan has recently joined the Stormwater Department as the newest Technician. Ryan brings added experience with him, as he has his bachelor's in Civil Engineering, is more than capable with computers, and has already worked in the stormwater and drainage fields. With his knowledge and work ethics, we know that he will be a welcome addition to the Stormwater Department. Ryan and his wife, Sharon, have two children: Martin and Victoria and live in Medina.

HAPPY BIRTHDAY!

Employee Birthdays in January, February, March.

Fred Boreman
Gina Frimel
Beth Mika
Roxana Rohrich
Bill Viovide
Tom Sass
Adrian Vistucis
Lowell Filak
Hal Gerspacher
and Tom Girard

Happy Birthday to all!

Welcome To Our Summer Employees

With the coming of spring also comes the influx of students hoping to work at the Highway Garage for the summer period. The students are used for flagging at road projects, cleaning up debris, branches, etc. from along the roadway,

running errands, helping with paving and culvert installations, groundskeeping and even roadside mowing. Summer workers also help with traffic counting and computer data input. This year has several returns along

with some new faces. Returning to work in the highway garage are:



Rachelle Crouch, Emmaline Fabich, Nate Fabich, Mike Gamauf, Daniel Hayes, Jr., Melanie Henthorn, Andrew Jindra, Forest Mercer, Jeff Miller, Thomas Mitchell, John Perkins, and Ken Skala will be returning to the Highway Garage this year.

Matt Martin will be returning to the Engineer's Office with the Survey Department.

Newcomers to the Highway Department this year are: Ryan Casenhiser, Christopher Casteel, Tim McCall, Samantha Mercer, and Ken Qvallich.

ASSISTANT COUNTY ENGINEER, MICHAEL SALAY WILL RUN UNOPPOSED FOR COUNTY ENGINEER

David Miller is retiring at the end of this year as Medina County Engineer. David's deputy, Michael Salay, will be running for County Engineer.

Mike Salay has served for the past 15 years as Assistant County Engineer with David Miller, was the Medina County Bridge Engineer from 1975 to 1988, and an engineering co-op for the City of Barberton's engineering department from 1973 to 1975. Mike has a bachelor of science degree in civil engineering cum laude from the University of Akron and is a 1971 graduate from Wadsworth High School.

Mike and his wife, Shelly, have 2 daughters: Karla, 19 yrs. old is studying civil engineering at the University of Dayton; and Holly, a Cloverleaf High School Student, as yet undecided on her choices for the future.

Ohio is the only state in which citizens elect their county engineers, and Mike feels that this is a good procedure, to have Ohio county engineers directly responsible to the voters.

The Medina County Engineer is responsible for the maintenance, repair, widening, resurfacing and reconstruction of 330 miles of roadways on the county

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highway system as well as the maintenance, construction and inspection of 300 bridges in Medina County. The county engineer often uses contractors to perform large construction projects.

Our office is involved with flood plain management, storm water management and sediment control, traffic control and impact studies as well as serving as technical adviser to townships and the County Planning Commission. The office also reviews plans and inspects construction in new residential and commercial streets in unincorporated areas.

The Engineer's Department employs 35 laborers, mechanics and teamsters and operators as well as a staff of 35 technical support personnel (civil engineers, technicians, surveyors, CAD drafters, inspectors and supervisors).