



ALAN BRUBAKER, P.E., P.S.

SUMMIT COUNTY ENGINEER

**Engineering Services
for Sagamore Hills Township
Summary of 2009 Projects**

Summary of 2009 Projects

Construction Projects – Roadway

No activities this year.

Construction Projects - Bridges

No activities this year.

Road Maintenance

2009 Pavement Marking Program

This project involves the repainting of centerlines and edge lines along various County roads throughout the County, including those in Sagamore Hills Township, as needed. Bids were received on August 7, 2009. The project was awarded to Mar-King, Inc. by the County's Board of Control on August 26, 2009. This work is expected to be performed in October 2009.

The cost of this work county-wide is approximately \$69,000. The cost of the work performed in Sagamore Hills Township is \$3,500.00. This work is being funded 100% by Summit County Engineer funds.

Pavement Maintenance – Township

Sagamore Hills Township – Spring Ledge and Spring Wood Improvements

This project involves the reconstruction of Springledge Road from Boyden Road and extending to the east for 200 feet. Also, yard drains and storm sewer will be installed on Springledge Road from the end of the reconstruction to Springwood Road to handle subsurface flow from springs along Springledge Road. Further, Springwood Road will be reconstructed from 63 feet east of Springledge Road to the Township Line.

Bids are scheduled to be opened on September 21, 2009. The construction estimate is \$138,347.00. This work is funded 100% by Sagamore Hills Township. Work is expected to begin this fall.

The Summit County Engineer's Construction Section prepared the engineer's estimate and bid documents, and will review proposals and recommended the contract award. The Construction Section will provide construction inspection and will review and recommend approval of pay requests and change orders for the Township.

Sagamore Hills Township – OPWC Application

Assisted the Township in preparing an OPWC application by developing a construction estimate and bid documents for the Holzhauser/Canal/Walton Road Resurfacing Project.

Construction Projects - Bridges

No activities.

Bridge Inspection

All 6 County bridges in Sagamore Hills Township were inspected earlier this year, as they are every year, by our crew of ODOT certified bridge inspectors. All bridges were found to be safe for vehicular traffic. The bridges are listed below.

<u>Roadway</u>	<u>Stream</u>
Olde Eight Road	Branch of Cuyahoga River
Valley View Road	Feeder to Ohio Canal
Highland Road	Cuyahoga River
Holzhauser Road	Branch of Cuyahoga River
Houghton Road	Branch of Sagamore Creek
Greenwood Parkway	Branch of Cuyahoga River

Last year it was discovered that Cuyahoga County and Summit County were both inspecting the Sagamore Road Bridge over Sagamore Creek because it was on the county line. Following further research, it was determined that the Cuyahoga County Engineer's office is responsible for the structure

Bridge Maintenance Projects

Bridge SAG 2767 0051 Greenwood Parkway over Branch Cuyahoga River

Crews from the office of the Summit County Engineer replaced the guardrail and posts along the east side of the bridge in June, 2009. This work was completed without any closure of Greenwood Parkway.



Bridge SAG 016 0731 Ole Eight Road over a Branch of the Cuyahoga River

SCE Crews repaired an opening in the stone façade along the east side of this bridge. This work was completed without any closure of Olde Eight Road in April, 2009.

Legend has it that this bridge was once used as an equestrian underpass by the late Cyrus Eaton.

Bridge SAG 016 0731 Olde Eight Road over a Branch of the Cuyahoga River

Crews from the office of the Summit County Engineer repaired the erosion at the Southwest wingwall of this bridge in August, 2009. This work was completed with only temporary lane closures of Olde Eight Road.

Proposed Bridge Projects

No bridge construction projects are currently programmed or planned for Sagamore Hills Township.

Proposed Bridge Maintenance Projects

There are no current outstanding bridge maintenance projects in Sagamore Hills Township.

Highway/Traffic Projects

Valley View Road Speed Limit

The existing speed limit on Valley View is comprised of a 1.5-mile section at 50 mph and a 1.5 mile section at 40 mph in Sagamore Hills Township, and a 1.0 mile section at 35 mph in Sagamore Hills and Northfield Center Townships. We will be conducting a speed study along Valley View Road in an effort to establish a uniform speed limit. Results of the speed study should be finalized this fall.

Drainage Projects

Springledge/Spring Wood Drainage

The Township Trustees contacted this office in March 2008 requesting plans be developed to address drainage problems along Springledge Road and to address deteriorating roadway conditions on Springledge and Spring Wood Roads. Plans and a cost estimate were prepared as part of a Township application for OPWC SCIP/LTIP funding in June 2008. The estimated project cost is \$138,347. We were notified in early 2009 that an OPWC grant had been awarded to Sagamore Hills Township for this work. Final plans and bid documents were submitted to the Township on September 2,

2009. Anticipated bid opening date of September 21, with project likely being awarded sometime that week.

Allotments – Construction

No current plan review activities.

Allotments – Post Construction

Silverleaf Court

The surface course was placed in June 2009. Awaiting final maintenance bond to be submitted.

Allotments – Assessments

There are ten subdivisions in Sagamore Hills Township that have been subject to drainage maintenance assessments. These subdivisions include Greenwood Parkway Extension, Inverness Highlands Ph. V, Ballantrae, Eaton Estates, Towpath Park, Sandstone, Ashford Glen, Hawthorne Ridge, Southridge Estates and Charbonneau Allotment. Assessments collected to date total \$635,827.40. One new assessment in a Sagamore Hills Township subdivision is going to be collected as a result of the recently enacted County Council legislation. This subdivision is Red Hawk Reserve. Assessments from this subdivision are expected to generate \$8,559.18 annually. Assessment funds are used to maintain drainage features constructed in the subdivision and includes detention basin repairs and mowing, ditch maintenance and repairs to storm sewer and drainage structures.

Proposed Capital Improvement Projects (C.I.P.)

Proposed Roadway Projects

At this time, there are no roadway construction projects planned or programmed.

Proposed Bridge Projects

At this time, there are no bridge construction projects planned or programmed.

Proposed Road Maintenance Projects

There are no pending road maintenance activities in Sagamore Hills Township.



Proposed Bridge Maintenance Projects

There are currently no outstanding bridge maintenance projects in Sagamore Hills Township.

Geographic Information Services (G. I. S.)

The G.I.S. / Engineering Technical Section are responsible for the mapping of infrastructure features using Handheld G.P.S. equipment. Creation of design drawings, misc. mapping, as-built creation and house numbering are just a few of the engineering support services provided by this section.

LBRS (Location Based Response System) Project

The Engineers office field verified the data in the summer of 2007 & 2008 using Student helpers in three two person teams. The results of the field work has shown most single family homes where error free, but condos and strip malls or location with multiple address need work. Using our existing GIS section staff and one clerical employee we have started the final QA/QC of the data to meet the LBRS specification. The estimated completion data is 18 to 24 months, bringing one or two township online via the County's Arclms website every quarter.

The Engineer's office has completed the digital and field verification phase of the (LBRS) Location Based Response System Project. The next phase will begin in late September and cover two tasks, correcting errors and developing the process for assigning addresses electronically with an estimated completion date of early spring.

GPS Data Collection

The Engineer's office has implemented a rental program to allow Townships to rent Trimble Handheld GPS units. The rental fees are \$30 per day or \$400 per month.

House Numbering Services

The Engineer's office provides house numbering services to a number of municipalities, villages, and to the townships, including Sagamore Hills Township. Temporary and permanent house numbers are provided to a single unit or to multiple units within a new development. The GIS Department has started a House Numbering Task Force, to help create countywide house numbering standards and meet the State's Location Based Response System (LBRS) data requirement.

Summit County Highway Map

The Highway map has been updated, incorporating a new layout, size and paper quality.

AutoCAD Civil 3D Implementation & Drafting Standards Update

This software upgrade will allow the Engineers office to design all infrastructure projects with cutting edge technology, while delivering the most efficient services possible. The G.I.S. Data will be seamless integrated into all of our design projects. The updated drafting standards will allow for a uniformed look to all plans created by engineering consultants.

Survey Section

Project Surveys

The Survey Section is providing a major supporting role in the projects that are reported by other Sections.

Towpath Park – Sagamore Hills Township

Determined property line between lot 16 and 17 and stake for the SCE right of way section during negotiations to access properties for SCE Maintenance to flush storm sewer line.

Holzhauser Roadway Improvements– Sagamore Hills Township

Surveyed for the drainage design section to provide road and drainage information for the improvement.

Highland Road Streambank Stabilization

This section provided drainage survey information for this project.

Storm Water Program

Phase II Storm Water Program Update

On March 10, 2003, the Summit County Engineer's Office filed the Summit County Countywide Storm Water Management Program (SWMP) on behalf of 26 communities. Sagamore Hills Township is one of those communities. The communities were successful at completing nearly all the minimum requirements of the Ohio EPA permit within the required 5-year period that ended in 2008.

A new 5-year permit was issued June 17, 2009

The Summit County Engineer's office and the Summit Soil and Water Conservation District are facilitating monthly meetings to discuss and plan the implementation of the program Best Management Practices (BMPs). The next meeting is scheduled for 9:00 a.m. on the third Thursday of each month at the Cuyahoga Falls Natatorium, unless otherwise scheduled. Regular attendees are sent reminders of meetings, including any changes of location or dates.

Up-to-date information on the Summit County Communities for Clean Storm Water can be found on the program webpage at:

<http://engineer.co.summit.oh.us/cgi-bin/displayContent.pl?type=section&id=439>

South Summit Flood Task Force

The Huntington District of the US Army Corps of Engineers (USACE) visited this office on September 10 and 18, 2007, investigating flood impacts from the rainfall events of August 20, 2007. On September 21, 2007, a letter of intent was sent to USACE from



the Summit County Engineer requesting a watershed-wide study of the Tuscarawas River basin upstream from the southern line of Summit County.

A meeting was held on Friday, September 5, 2008, at the Lake Anna YMCA in Barberton with the Huntington District Corps of Engineers and LNE Group to develop further a strategy to obtain Congressional appropriations to address flooding problems.

We are continuing the effort to secure funding.

Summit County FEMA Map Update Program in Sagamore Hills Township

New FEMA Flood Insurance Rate Maps (FIRM) has been issued effective July 20, 2009, on a new countywide grid instead of a community basis, and was generated using a digital format.

Summit County Rainfall/Runoff Modeling Program

The Summit County Engineer's Office and the USGS have been acquiring stream flow and precipitation data on the Yellow Creek, Mud Brook, and Schocalog Run watersheds. Data acquisition began in 1992. Rainfall/runoff models of the characteristics of these watersheds are being developed by the USGS. The models will be calibrated to the stream flow and precipitation data acquired in each watershed. Once the rainfall/runoff models are calibrated, the models also will be applied to the other watersheds within the county that exhibit similar watershed characteristics. The rainfall/runoff models will be used to plan and evaluate potential watershed flood mitigation projects; and to proactively assess the impacts that proposed development and other changes within the watershed may have to stream flows.

Weight Enforcement Program

The Engineer in cooperation with the Sheriff equips a mobile vehicle weight enforcement team to detect and deter commercial vehicles exceeding posted weight limits within the County. The program is designed to improve the safety of those driving on our county roadways and increase the longevity of the pavement. The mobile unit consists of two specially trained deputies who patrol the roadways looking for vehicles that appear to be overweight. Once a vehicle is identified, it is pulled over and a mobile weight scale is set up to test the vehicle weight. The team works various areas of the county targeting areas where there is a large amount of construction activity or citizen concerns about overweight vehicles. Townships should notify the Engineer's office if they see a large amount of truck traffic or receive citizen concerns in a given area and the team can be dispatched to the area during its regular operations. The program costs the Engineer approximately \$100,000 per year and returns between \$25,000 and \$30,000 in revenue from vehicle weight citations.



Alan Brubaker, P.E., P.S.
Summit County Engineer
Sagamore Hills Township
Fall - 2009

Submitted By: Gus Kabbara – Director of Public Services
October 13, 2009

Public Service Department Activity

I Total Number of Request for Service: 35

Mailbox Repairs (S & I Season):	4
Dead Animal Pickup:	7
Ditch & Culvert Cleaning:	3
Snow & Ice Removal:	5
Debris & Trees on Road:	0
Pot Hole Repair:	0
Repair Shoulder & Apron:	2
Lights, Flasher, School Zone:	0
Sign Installation & Replacement:	10
Guardrail Repairs & Upgrades:	0
Miscellaneous Repairs/Requests:	4

II Projects Completed

Station Work:

- #11643 Dunham Road – Ditch enclosure
- Olde Eight Road – Replaced old/worn sewer lids
- Valley View Road – Ground down excessive bumps in road
- District wide – Ditching, #405 asphalt repairs, cleaning and replacement of drive pipes (as needed)

Ditch Work:

- No projects performed in district

Bridge Work:

- Greenwood Parkway Bridge – Guardrail replacements
- Olde Right Road – Scour repairs

Summit County Engineer
Sagamore Hills Township
Fall – 2009

III Future Maintenance Work – 2010

Station Work:

- No anticipated district work

Ditch Work:

- No anticipated district work

Bridge Work:

- Olde Eight Road Bridge – Guniting and grouting repairs

