

MEMORANDUM

To: Mr. David A. Lothspiech, Village Manager

Village of Long Grove

Fr: Mr. Geoffrey L. Perry, P.E. – Village Engineer

Date: June 8, 2020

Re: Drainage Review Summary & Recommendations

East Portion of Towner's Subdivision

Village of Long Grove

625 Forest Edge Drive, Vernon Hills, IL 60061

Tel 847.478.9700 ■ Fax 847.478.9701

www.gha-engineers.com

The Village of Long Grove continues to receive inquiries and complaints regarding the drainage in the easterly part of Towner's Subdivision. Recent drainage inquiries are primarily from the owners of 7040 and 7044 Osage Road, although there have been multiple inquiries by multiple residents regarding drainage in this area. In response to the inquiries, our office (GHA) has completed several site visits and engaged in a variety of research efforts.

Below is a summary of the investigative efforts and our recommendations:

Subdivision Drainage

The eastern portion of Towner's Subdivision generally drains from west to east and from north to south. Drainage is generally conveyed southeasterly via overland flow to the intersection of Osage Road and Meadow Lane Road. From that intersection, drainage flows approximately 100-feet west, to a culvert that crosses under Meadow Lane Road and then drains south to the Ravenna East Subdivision through the sideyards of 7001 and 7003 Meadow Lane Road. The attached map schematically shows the drainage patterns.

Upon review of the recorded Plats of Subdivision for the various phases of the Towner Subdivision, the only recorded drainage easement in the eastern portion of the subdivision is between 7001 (Lot 78) and 7003 (Lot 77) Meadow Lane Road. The Plat of Subdivision does not assign the any maintenance responsibility of the "drainage easement" to the Village.

Site Visits to 7040 Osage Road

GHA completed site visits to 7040 Osage Road on May 14, 2019 and October 2, 2019; reports attached. During both visits, we noted poor drainage along the western side of the property and along the Osage Road frontage. The driveway culvert is in poor condition and is adversely impacting drainage in the right-of-way.

During our investigations, our office observed an apparent drain tile that flows from a drainage structure at the northwesterly corner of 7044 Osage Road toward 7040 Osage Road and then southerly. Our office has not been able to confirm the discharge location of the drain tile; however, we observed several cleanouts along the drain tile. Attached is an exhibit showing our findings and approximate location of the drain tile and cleanouts.

7001 / 7003 Sideyard Drainage

Drainage in the eastern portion of the Towner's Subdivision ultimately exits the subdivision through the sideyard of 7001 and 7003 Meadow Lane Road. This drainage swale is in poor condition and needs to be re-graded. The presence of overgrowth and accumulated sediment is prohibiting positive drainage from the right-of-way, southerly. As noted above, the Village does not have a maintenance responsibility for the drainage easement in this location.

GHA contacted the property owners in March 28, 2019 to perform maintenance of the swale; letter attached. It is our understanding the swale is mostly on 7001, thus the owner of 7003 is not participating in the swale maintenance / regrading. To date, the maintenance has not been completed. Our office had conversations with the owner of 7001, whom is 83 RV, in November; 83 RV is sensitive to the situation and stated they would regrade the swale as

weather allows. 83RV began this swale maintenance the week of June 1, 2020. To date, our office has not observed the conditions of the work.

Ravenna East Drainage

GHA has received additional inquiries from residents in the Ravenna Subdivision and the Ravenna East Homeowner's Association. Ravenna East is located south of (the eastern portion) of Towner's Subdivision. Our office has reviewed the original subdivision stormwater report and plans for Ravenna East and concluded that drainage from the sideyard of 7001/7003 Meadow Lane is designed to flow into Ravenna East.

Our office is currently working with the Ravenna East Homeowner's Association to understand this flow and also complete some maintenance work within their subdivision to accommodate the drainage.

Meadow Lane Culvert Cleaning and Ditching

In late spring / early summer 2018, Ela Township ensured the culvert under Meadow Lane (approximately 100-feet west of Osage Road) was clear of any blockages and accumulated sediment. As part of their work, Ela Township removed any accumulated sediment in the ditch line, within the Village rights-of-way, upstream of the culvert. Their work was successful in restoring the Village right-of-way; however, the right-of-way cannot drain properly until the sideyard of 7001 / 7003 is re-graded; see above.

Baymont Hotel Drainage

Lots 30 and 31 of the Towner's Subdivision are currently developed with the Baymont Inn hotel. This property is addressed as 517 Illinois Route 83 and is in the Village of Mundelein. On several occasions, residents have stated that drainage from the hotel is contributing/causing the drainage issues in the eastern portion of the Towner's Subdivision.

In July 2019, our office obtained the design plans for the hotel, which were prepared by Craig S. Phillips & Associates, Inc. and last revised September 30, 1987. Based on our review of the hotel plans, the drainage pattern of the site was unchanged by the development. The drainage pattern is generally north to south, with the southeasterly corner of the site being the low point. Drainage from the hotel parking lot is collected in an oversized storm sewer, i.e. detention, system that outlets through a 2.6" diameter restrictor to the southeast corner of the site. This is also the northwest corner of 7044 Osage Road.

Our office has not visually confirmed the 2.6" diameter restrictor is still in place or confirmed the location of the outlet pipe. The Village of Mundelein has issued a Building Code Violation letter to Baymont Inn to clear the drainage structure and return the storm sewer to working condition. To date, that work has not been completed.

American Underground Investigation

The Village retained American Underground to televise and clean several storm sewer pipes in the Village in November 2019. On November 22, American Underground was onsite to clean the culvert crossing under Osage Lane. This work was successful, and the pipe was cleared of accumulated sediment. In discussions with property owners, it was believed there was a "blind" storm sewer that outlet this culvert to a storm sewer pipe under the street. The storm sewer televising did not reveal this storm sewer connection or other storm sewer pipe.

While in the area, American Underground also placed chemically inert dye in the storm structure at the northwest corner of 7044 Osage Road. As noted above, this is the upstream end of a drain tile. After some time (over $\frac{1}{2}$ hour), the dye percolated the ground on the western side of 7040 Osage Road, the driveway of 7040 Osage Road and the ditch on the southerly side of Osage Road. The end of the drain tile was not observed on November 22.

Lake County Stormwater Management Commission Evaluation

The owner of 7044 Osage Road recently contacted the Lake County Stormwater Management Commission (LCSMC)regarding the drainage in this area. The response is included in this report. In summary, the LCSMC concluded that this is a large "puzzle" with overflow routes that were designed prior to the Lake County Watershed Development Ordinance (WDO) and that "no one development is responsible for the land surface contours."

Summary and Recommendations

As noted above, the drainage in the eastern part of the Towner's Subdivision is generally west to east and north to south. There are improvements needed on various segments of the drainage system by various parties. Below is a summary of our findings and recommendations:

Sideyard Swale between 7001 and 7003 Meadow Lane Road

This swale needs to be re-graded. Re-grading of this drainage swale will allow the entire area, including the Village right-of-way to drain properly. 83RV began this swale maintenance the week of June 1, 2020. 83RV has confirmed the work is not complete and will continue their work in the coming weeks. Based on our observations, the initial work has allowed increased flow away from Meadow Lane Road

Private Drain Tile

Based on our observations and research, the pipe discharging the structure at the northwesterly corner of 7044 Osage Road is a drain tile. The drain tile has been repaired in different locations, as evidenced by the various materials, but is in poor condition. We state the drain tile is in poor condition as it took an extended period of time for the dye to flow through the system, thus suggesting accumulated sediment or blockage.

Maintenance of the drain tile is private responsibility. We recommend the owner's work cooperatively to hire a contractor to map the drain tile (start to end), confirm the condition and complete any improvements needed to restore flow.

7040 Osage Road Driveway Culvert

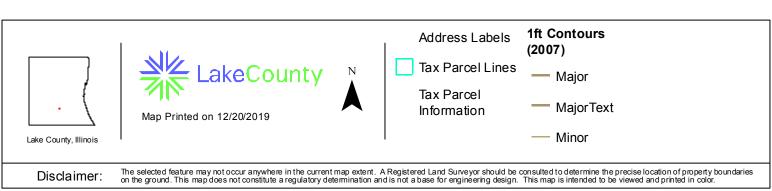
The driveway culvert is in poor condition and needs to be replaced. Driveway culverts are the property owner's responsibility. As part of this work, the right-of-way will need to be regraded as sediment has accumulated.

Right-of-Way Grading

The rights-of-way in this area are in good condition. After the property owners complete their improvements, noted above, it is possible the Village may need to complete some minor maintenance work.

Towner Subdivision Aerial





SITE VISIT REPORT

Project Name: CIRS Response
Project Location: 7040 Osage Road
Client: Village of Long Grove

GHA Project No.: 5000.100

Project Manager: Geoffrey L. Perry, P.E.

Weather: Sunny, 69 F Day & Date: Tuesday, May 14, 2019

Reason for Site Visit: Resident Complaint Arrival/Departure Time: 11:15 am to 11:45 am

Drainage Concern

Attendees/Contact Info: Dilyan Hinova, 773-474-8932

Lucy Hinova

Summary of Observation:

The purpose of this site visit was to complete a drainage inspection at the above referenced property.

Upon arrival on site, I met with both homeowners who filled me in on the back story of their drainage concerns. Since June 2017, there has been an area west of their home that during larger rain events bubbles up with ground water and creates ponding in their yard. This issue was present at the time of my visit. The homeowners informed me they located a clay pipe with what seemed to be a broken cleanout and had placed a stake in the ground at the approximate location. They have referenced foundation and water issues in their basement since this problem started.

Upon walking the property and adjacent properties to the north west, I located an open brick structure that is fed from what seemed to be a small creek at the north property line of 7046 Osage Road. This structure then discharges to 2 small CPP's that continue east and eventually south toward the property referenced above. Two small cleanouts were located along this route but were full of water and I was unable to determine if there was any transition to a clay pipe. Another area was found with a small chunk of what seemed to be broken clay near a small depression in the ground.

Additionally the homeowners have alerted me about issues with the swale drainage along the frontage of their property. During large rain events, the entire street floods and water enchroaches nearly to their back patio as well. They have supplied me with photos of this. During my visit, there was standing water in the ditch west of the driveway. Their driveway culvert was collapsed and the water was overtopping the driveway to make its way east into the adjacent cuvlert. This culvert continues south across the street where there was additional standing water that continued around Osage and on to Meadow Lane Road.

At this time, the culvert that runs underneath Osage road shall be inspected to ensure it is functioning properly as intended. Our office has found no record of easement or ownership of any drain tile located within the property limits at 7040 Osage Road. This pipe should be investigated by the property owners as it is located on private property. We recommend consulting with adjacent neighbors as it is expected that the drain tile originates or continues from an area outside of the property limits at 7040 Osage Road.



Northwest property corner 7044 Osage Road: Drainage structure. clay drain tile.



Facing Northwest: Area of pooling from

GEWALT HAMILTON ASSOCIATES, INC.

CONSULTING ENGINEERS

625 Forest Edge Drive, Vernon Hills, IL 60061

Tel 847.478.9700 Fax 847.478.9701

www.gha-engineers.com

5000.100 7040 Osage Road Site Visit Report_20190514.docx

Do the current overall conditions satisfactorily meet the requirements of the plans and specifications ☐ Yes ☐ No ☐ N/A		
Is a follow up site visit or is any additional inf ☐ Yes ☐ No	formation necessary to satisfactorily complete this site visit	
Attachments:	Prepared By:	
	Ken Meek	
	Civil Engineer I	

SITE VISIT REPORT



Project Name: 7040 Osage Road Project Location: Long Grove, IL Client: Village of Long Grove

625 Forest Edge Drive, Vernon Hills, IL 60061 Tel 847.478.9700 ■ Fax 847.478.9701

www.gha-engineers.com

GHA Project No.: 5000.100

Project Manager: Geoffrey L. Perry

Weather: Partly Cloudy, 71 F Day & Date: Friday, September 27, 2019

Reason for Site Visit: Drainage Arrival/Departure Time: 2:30 pm to 3:00 pm

Attendees/Contact Info:

Summary of Observation:

The purpose of this site visit was to investigate a drainage complaint at the above referenced property. Upon arrival, I inspected the cross culverts at 7040 Osage Road and 7001/7003 Meadow Lane as well as the associated surronding area.

The swales at both locations contained stagnant, standing water. The outlet of the cross culvert at Meadow Lane was pooled with water that seemed to have no positive drainage to the south despite what natural drainage patterns per Lake County GIS would indicate. The water was back pitched all the way through the culvert and around Meadow Lane through the cross culvert at Osage Road.

At this time, we recommend looking back into the memo sent to the homeowners at 7001 and 7003 Meadow Lane on March 28, 2019 that stated corrective work to the easement was required by June 30, 2019. The privately owned drainage easement that runs south through the side yards should be maintained to relieve standing water from the adjacent culverts. This may include vegetation/tree removal and regrading of the swale to provide postiive drainage. Our office is also inquiring into receiving quotes to televise the culvert near 7040 Osage road to confirm condition, clogging, or any unknown blind connections.



Facing west: Meadow Lane swale.

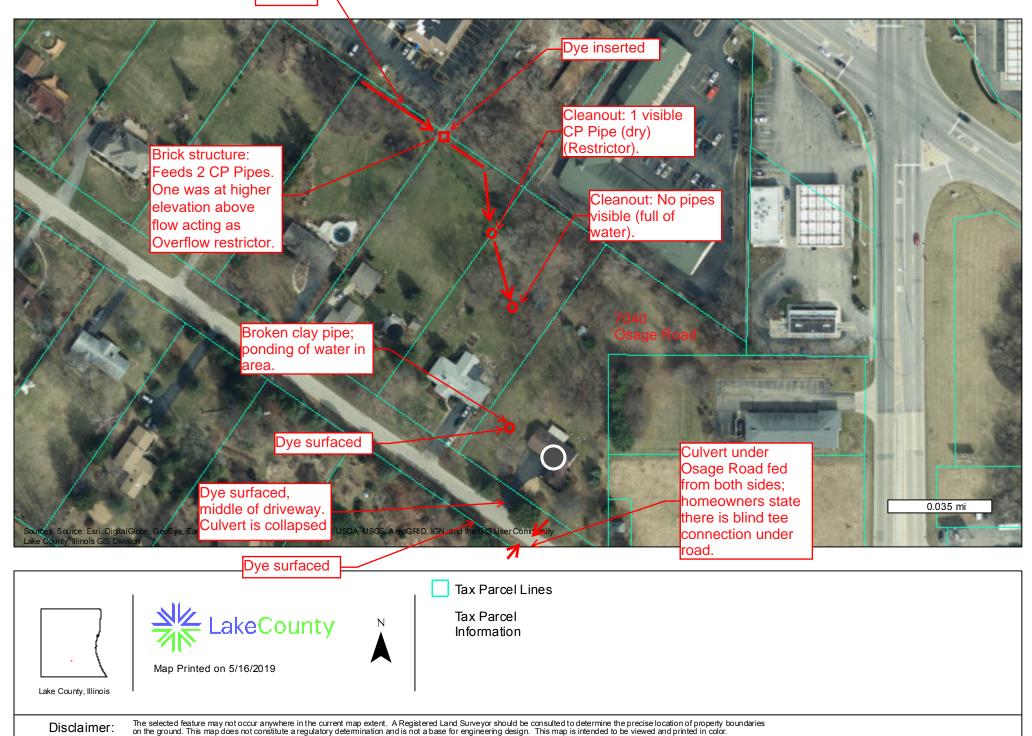


Facing south: outlet of Meadow lane cross culvert.

Do the current overall conditions satisfactory of the current overall conditions satisfactory over the current over the curre	ctorily meet the requirements of the plans and specifications?	
Attachments:		Prepared By: Ken Meek
Is a follow up site visit or is any additional Yes No	al information necessary to satisfactorily complete this site visit?	Civil Engineer
5000.100 7040 Osage Road Site Visit Repo	ort 20191002.docm	

Creek

Lake County, Illinois



March 28, 2019

GEVALT HAMILTON ASSOCIATES, INC.

625 Forest Edge Drive, Vernon Hills, IL 60061 Tel 847.478.9700 **•** Fax 847.478.9701

www.gha-engineers.com

Mr. Robert Novak 7001 Meadow Lane Road Long Grove, Illinois 60047

Mr. Kyle Downs 7003 Meadow Lane Road Long Grove, Illinois 60047

Re: Drainage Swale Maintenance Needed

7001 & 7003 Meadow Lane Road Sideyard

Village of Long Grove

Dear Mr. Novak & Mr. Downs:

As you are aware there is a road crossing culvert under Meadow Lane Road that flows from north to south at your common property line, extended. In May 2018, the Village cleaned this culvert and regraded the north side of Meadow Lane Road and cleaned the south side of Meadow Lane Road, within the Village owned right-of-way.

The drainage from the culvert is intended to drain from north to south, along your common property line into the Ravenna East Subdivision. A 10-foot wide Drainage Easement was recorded along this property line with the subdivision. The easement is ½ on 7001/Lot 78 Towner's Subdivision and ½ on 7003/Lot 77 Towner's Subdivision.

The Plat of Subdivision does not grant rights to the Village of Long Grove to maintain this easement, thus it is a privately-owned easement. This easement needs to be maintained to fulfill its drainage function.

We are contacting you as the Meadow Lane right-of-way has been filled during recent rain events and the drainage path is no longer functioning. Currently, there is no positive drainage along the route between your properties. The Village is requiring that you coordinate efforts to restore the drainage path from north to south. This will likely require a significant regrading of the sideyard and removal of vegetation. If left uncorrected, the water that collects in the sideyard swale can lead to barren earth, nuisance ponding and structural damage to the recently, repayed roadway.

As part of a joint effort to remedy the drainage, the Village will again clean the culvert and remove any debris within the right-of-way.

This swale restoration needs to be completed by June 30, 2019 as the current conditions are impacting the Village's public street. Please provide a corrective plan to Village Hall for approval and any required permitting prior to commencing any activity. The Village has agreed to waive any permit fees for engineering and trees removals as they may pertain to this project.

The Village looks forward to your cooperation in this matter. The Village is able to offer technical assistance and advice as needed.

If you have any questions regarding the above, please do not hesitate to call me at 847-821-6231 or email me at gperry@gha-engineers.com.

Sincerely.

Gewalt Hamilton Associates, Inc.

Geoffrey L. Perry, P.E. Village Engineer

cc (via email): Mr. David Lothspeich, Village Manager - Village of Long Grove



Geoff Perry com>

Drainage concern Mundelein and Long Grove PIN #1506103026 FW: Online Form Submittal: Report a Concern to the Stormwater Management Commission

Gardiner, Robert D. <RGardiner@lakecountyil.gov>

Fri. May 22, 2020 at 3:07 PM

To: "KGerstenbrand@gmail.com" <KGerstenbrand@gmail.com>

Cc: Jodi McCarthy <imccarthy@gha-engineers.com>, "gperry@gha-engineers.com" <gperry@gha-engineers.com>, "Crane, Juli" <JCrane@lakecountyil.gov>

Mr. Gerstenbrand,

Thank you for contacting the Lake County Stormwater Management Commission (SMC) concerning your drainage problem (PIN #1506103026). I took a look at the area using Lake County Maps Online (https://maps.lakecountyil.gov/mapsonline/) and I see parts of the problem. Much of the area was developed prior to October 1993 when SMC started and the Lake County Watershed Development Ordinance (WDO) began being enforced. In this case, both the Baymont Inn and Long Grove Car Care Center were both pretty much fully impervious in 1993 so we do not have the authority to require them to install stormwater management facilities. On the other hand, I think they are probably a small part of the puzzle. When I looked at the topographic contours I notice a large overland flow route drains through your and adjacent parcels. The orange arrows show the general direction stormwater runoff would travel based on topography. There appears to be a large area that drains through your parcel. Since this is based on the general contours of the land no one development is responsible for the land surface contours. The green areas show where water may tend to pond based on topography. While there may be storm sewers or overland flow routes that are in need of maintenance, a likely problem is (based on Chicago rainfall) the wettest May on record which broke the record set in 2019 which broke the record in 2018 and we continue to get larger storms more frequently. Bottom line is the entire county is saturated and all the depressions are filled with water and the Fox and Des Plaines Rivers are above flood stage. There is often nowhere for the water to go.

SMC does not have access to storm sewer information in this area. Furthermore, SMC does not have regulatory authority in either Mundelein or Long Grove because they are Certified Communities which are communities that have an ordinance as least as stringent as the County's. Therefore, I also copied Mr. Geoff Perry, who is the Stormwater Enforcement Officer for Long Grove, and Ms. Jodi McCarthy who is the Stormwater Enforcement Officer for Mundelein.

All that being said, I am hoping the Villages of Long Grove and Mundelein will be able to help your drainage problem.



Bob Gardiner

We would like to be of assistance. If you have any questions, or would like to set up a meeting, please call our office at (847) 377-7705 or feel free to e-mail me. If you have any additional concerns that have not been addressed by the regulatory staff regarding the above comments, you may contact Chief Engineer Kurt Woolford kwoolford@lakecountyil.gov or Executive Director Michael Warner mwarner@lakecountyil.gov at (847) 377-7700.

Sincerely,

LAKE COUNTY STORMWATER MANAGEMENT COMMISSION

Robert D. Gardiner, P.E., CFM

Permit Engineer

Lake County Stormwater Management Commission

500 W. Winchester Road

Libertyville, IL 60048

rgardiner@lakecountyil.gov

Direct: (847) 377-7704

General: (847) 377-7700

From: noreply@civicplus.com <noreply@civicplus.com>

Sent: Tuesday, May 19, 2020 8:30 AM

To: StormWater <StormWater@lakecountyil.gov>

Subject: Online Form Submittal: Report a Concern to the Stormwater Management Commission

Report a Concern to the Stormwater Management Commission

Concern Details

Concern Type

Drainage Issues

Additional Information

I live in the Towner Subdivision in Long Grove. In 1994 Mundelein allowed a motel to be built on route 83 (now the Baymont Motel). Rather then hooking up to the storm system they allowed water to be discharged on to our property. The discharge was to be at the same rate as the natural flow rate of the vacant land. Needless to say this never happened. With the amount of rain we had this past weekend water was just dumped on us causing more flooding .In addition we have a Remax located on 83 which I believe is dumping water into our subdivision. These two locations amount to an acre and half of asphalt and concrete.

Getting back to the motel, the area never dries up. There is water all year round. I have a catch basin for the water. I check it at night to monitor the level of water and in the morning it is higher so I don't know what else is being dumped.

Can they be forced to hook up to the storm system? Is IDOT planning any new storm sewers with the development of the 60/83 roadwork? Can anything be done to correct the dumping issue?

In addition the motel has it's commercial lighting shining into my neighbor's bedroom.

Konrad Gerstenbrand

KGerstenbrand@gmail.com

847-566-8285

File Upload	Field not completed.
Contact Informatio	on
	ct information in the event that we either need to contact you regarding equest a follow up contact.
First Name	konrad
Last Name	gerstenbrand
Phone	8475668285
Reply Email	kgerstenbrand@gmail.com
Follow Up	I would like to receive a follow-up contact regarding this concern.
	(Section Break)

Email not displaying correctly? View it in your browser.