

## Oak Valley Subdivision

The Village has inherited numerous drainage issues upon incorporation. The Village currently has a list of approximately 50 drainage issues, located across the Village, that need to be addressed. Since 2010, the Village has completed three drainage improvement projects within the Oak Valley subdivision. The most recent project being the reconstruction of the central storm water detention pond. As discussed in past conversations with the Oak Valley HOA, the Village understands there is additional work needed in the subdivision. This will require cooperation with the Forest Preserve District of Will County to clear the area, where the outfall from Oak Valley discharges into their property. The drainage flow through their property has been slowed/blocked by vegetation and sediment, that has built up over the years. Unfortunately, the FPDWC has been unwilling to address this area. However, the Village will continue to work with the FPDWC to try to address this issue.

This list of 50 drainage projects is constantly growing and reprioritizing, based on updated and available information. The storm that occurred on September 27, 2019 was definitely a significant amount of rain in a relatively short period of time. Information collected, as a result of this rain event, including the roadway flooding, will be used to further update our drainage list, including the project priorities. We will look for both short-term, and if necessary, long-term solutions to address the drainage issues.

Below is a summary of the three drainage projects that have been completed in the Oak Valley subdivision, since 2010 and a brief summary of future potential phases.

### Phase I – Construction Spring/Summer 2010:

As a result of roadway flooding along Beaver Den Trail, near the mid-road cul-de-sac, the Village completed the first drainage improvement project in the Oak Valley subdivision.

Due to a lack of roadway drainage structures, during heavy rain events, the water would pond on the road, until the water could drain into the limited number of catch basins. The drainage into the catch basins was often impeded due to leaves, garbage and other debris blocking the catch basin grates. Once the debris was removed, the water would typically drain down in a short amount of time.

- The Village's Phase I drainage project in the Oak Valley subdivision included the installation of two new 36-inch diameter storm sewers, and four (4) new catch basins, to increase the capacity of the drainage from the roadway into the nearby detention pond.

### Phase II – Construction Spring/Summer 2012:

As a result of rear yard flooding for properties located on the north side of Beaver Den Trail, both at the northeast corner of the Oak Valley subdivision and the several properties east of the cul-de-sac on Beaver Den Trail, the Village completed the second drainage improvement project in the Oak Valley subdivision.

Due to an undersized 24-inch diameter storm sewer, which conveyed offsite drainage through the Oak Valley subdivision, from areas north of 159<sup>th</sup> Street and east of Bell Road, drainage flows would often exceed the capacity of the 24-inch diameter storm sewer and flow through the rear yards of the adjacent properties, often damaging the properties and carrying landscaping and other debris into Beaver Den Trail.

For the properties located directly east of the Beaver Den Trail cul-de-sac, a 15-inch diameter pipe, located under an existing shed, collected and conveyed drainage from areas north of 159<sup>th</sup> Street as well as the various rear yard valleys in the Oak Valley subdivision. This pipe was significantly undersized for the tributary drainage area. As a result, during moderate to heavy rain storms, the water would exceed the capacity of the pipe and would back up and flow through the adjacent properties, causing property damage.

- For the area at the northeast corner of the subdivision, the existing 24-inch storm sewer was removed and new 42-inch storm sewer was installed. In addition, a new turning structure and end section was installed, to direct the heavy drainage flows into the new storm sewer, as it turned and entered the Oak Valley subdivision, near Bell Road.
- For the area east of the Beaver Den Trail cul-de-sac, the existing shed and 15-inch diameter storm sewer were removed. A new 36-inch diameter storm sewer and end section was installed to direct the heavy drainage flows from 159<sup>th</sup> Street and the upstream valleys, into the new storm sewer.

### Phase III – Construction Summer/Fall of 2013

With the two preceding drainage projects completed by the Village, staff had continued to work with the Oak Valley HOA to address maintenance issues with the central detention pond. Due to the age of the detention pond, sediment had built up over the thirty plus years since the pond was constructed. As a result, a significant amount of sediment had filled the bottom of the pond over time, reducing the capacity of the detention pond.

- The excess sediment, that had deposited in the bottom of the detention pond was excavated and removed. Approximately 134 truckloads of sediment were removed from the bottom of the pond. In addition, the existing concrete low flow gutters in the bottom of the pond were cleaned, and removed and replaced, where needed. Two additional concrete low flow gutters were also constructed, from the new inlets installed as part of the Phase I project. The bottom of the pond was fine graded, seeded and blanketed. Some additional repair work was also completed on the inlet structure at the east side of the pond and the southeast side of the pond.

## Future Phases

The Village understand that future drainage work will need to be performed in the Oak Valley subdivision. This includes coordination with the Forest Preserve District of Will County, with regard to the cleaning/clearing of sediment, debris and possibly vegetation on their property, which is downstream from the Oak Valley storm outfall. Additional storm improvements may also include the upsizing of other storm sewers in the subdivision, and/or as noted previously, the potential addition of more drainage structures, including on Beaver Den Trail.

## Questions Received & Responses

1. Has there ever been a written engineering study/survey of where and how all the water flowing in Oak Valley subdivision is coming from?

***The Village has not completed a formal study or survey regarding the source of water flowing through the Oak Valley subdivision. There are multiple tributary areas flowing through Oak Valley, that the Village is aware of. This includes the detention pond for the retail development at the northwest corner of 159th Street and Bell Road (Big R/Stock & Field), a tributary originating near Hadley School and drainage originating from the east side of S. Bell Road, near the Mother of Good Council Church. In addition, portions of 159th Street also drain through the Oak Valley subdivision, toward to Spring Creek.***

2. If there has been a study completed previously would the Village be able to locate the study/survey and share it with the residents at a set meeting?

***As noted above, no study has been completed.***

3. If a study has not been completed, would the Village locate the funds/grant to begin and complete an engineering study/survey to locate how and where all the water is flowing into Oak Valley?

***As previously noted, a significant amount of work has already been completed in this neighborhood. There are no funds allocated for additional studies; however, a future project (as mentioned above) is contemplated if cooperation from the FPDWC can be obtained***

4. Could retention ponds be constructed on 159<sup>th</sup> street north of the subdivision to allow the water flow at a slower rate into Oak Valley?

***The State is nearing completion of the 159th Street improvements. Part of the 159th Street improvements included stormwater detention for the roadway improvements. Two detention ponds have been constructed adjacent to 159th Street, with one pond located just west of Twin Lakes Drive and the other pond located east of Messenger Circle. In addition, the 159th Street improvements included oversized roadside ditches and oversized storm sewer to provide stormwater detention. The outlets from these drainage features have also been restricted, to reduce the runoff flows from the roadway.***

5. Because IDOT is widening 159<sup>th</sup> street and with the construction of a new drainage system being constructed by IDOT would this help diminish some of the water flowing into Oak Valley?

**As can be expected with a project spanning the length of 159th Street, there are multiple drainage areas or watersheds, where the drainage flows to. The standard practice is to keep the water draining to the same areas throughout the project. If water from one or more drainage areas was diverted to another location(s), this could result in increased flooding downstream in other areas. However, a way to control the amount of water that flows downstream is by restricting the flows and providing stormwater detention, which IDOT did include in the design of 159th Street.**

6. If so, how much water volume/runoff is taken off the current system into the 159<sup>th</sup> draining system? In addition, where does the drainage system drain?

**Please see response Nos. 1, 4 & 5 above.**

7. If the Village is not able to answer the above questions, would the Village inquire about the draining system from IDOT? For example, some of the questions to IDOT would be: Where are the drainage systems located, how does it drain and where does the water drain?

**Please see response Nos. 1, 4 & 5 above.**

8. Was there a written engineering plan/survey/study completed when the retention area in Oak Valley was excavated and dredged out in 2013? How much sediment taken away and was the retention area graded to drain better? If so, would you be willing to share the study with us?

**A topographic survey was performed as part of the preparation of the engineering plans and specifications. The project was designed to restore the original stormwater detention volume for the Oak Valley detention pond. The project included the removal of sediment that had built up in the base of the detention pond, the regrading of the bottom of the pond, to provide positive drainage, and the construction and reconstruction of concrete low flow gutters in the base of the pond, to allow the low flow water to drain through the detention pond, without keeping the bottom of the pond saturated. Thus, allowing continued regular mowing and maintenance of the pond. The project resulted in over 1,550 cubic yards of sediment being removed from the pond.**

9. I am concerned that there has been talk of putting a cover/grate onto the new opening. I would prefer that no grates were put onto the intake and that it stay as it was originally engineered. This opening is located in a forested area and there is much debris which could potentially clog the pipe if there is a covering. Have you checked with the engineers who put the plans together to ask their opinion of the consequences of putting grates on the intake?

**With regard to your first concern, about the drainage structure behind your home, the Village does not have any intentions of installing a grate over this storm sewer end section. In our recent conversations with representatives from your HOA, the discussions regarding grates were for the storm sewer pipe entering and exiting the detention pond.**

10. I would also like to know if there are plans for regular inspection of the intake to check for debris and then clear the debris.

***The Homer Township Road District has a list of drainage structures that they regularly check, both before and after predicted storm events. There are several in the Oak Valley subdivision that are on this list, including the structure behind your home and the one located east of your property, where the drainage from 159<sup>th</sup> Street and from Bell Road enters the subdivision.***

11. It appears that more storm sewers are needed on Beaver Den Trail which will divert rainwater to the detention area.

***Phase I of the drainage improvements in the Oak Valley subdivision, which took place in 2010, involved the installation of additional storm sewer and drainage structures, to provide added capacity to drain Beaver Den Trail. Part of the problem was the lack of sufficient drainage capacity. However, part of the problem was also related to the existing drainage structures becoming clogged with leaves and other debris. The Homer Township Road District does try to inspect, and clean when necessary, drainage structures and grates, prior to predicted storm events. Unfortunately, they may not be able to get to all locations throughout the Village in time. Should you see the grates clogged or covered with debris, please let us know, so that we can have someone clean the grate. Or, if possible, we would ask residents for their assistance in cleaning the grates as well. In the future, we will also look to determine whether there are sufficient drainage structures for Beaver Den Trail. Should additional structures be needed, this is something that could potentially be added to one of our future drainage projects, or a project suitable for completion by the Homer Township Road District.***

12. The detention area probably needs to be made deeper and the drainage into the Forest Preserve needs to be increased.

***Phase III of the drainage improvements completed in the Oak Valley subdivision included the regrading and removal of excess sediment from the detention pond, that had built up over the years. Upon completion of that Phase, approximately 134 truckloads of sediment were removed from the bottom of the detention pond. Unfortunately, the pond can only be dug so deep, as the pond would not be able to drain properly, if it were excavated any deeper than the outlet to the Forest Preserve property to the south. The Village has attempted to work with the Forest Preserve District of Will County to have the area on their property cleaned/cleared of excess sediment and vegetation. The Village will continue to work with the FPDWC in hopes of getting this area cleaned, so that the drainage from the Oak Valley detention pond can freely flow into this area and further downstream.***

***Also, please note that the purpose of the detention pond is to restrict/reduce the amount of stormwater released from the subdivision to downstream waterways. Therefore, it may not be possible to increase the amount of water flowing out of the detention pond during storm events.***

13. I am asking that Homer Glen take responsibility for both correcting and maintaining the detention area and providing increased drainage from Beaver Den Trail to the

retention area and from the retention area to the Will County Forest Preserve. If the flooding was only caused by storm water runoff from within the subdivision, I would not make this request. However, considering the huge acreage (commercial, residential and agricultural) from outside the subdivision which contributes storm water runoff to the dangerous flooding problem, I believe the Village of Homer Glen should step in and help out.

***As noted above, the Village has assisted the Oak Valley subdivision with a large-scale reconstruction project for the existing Oak Valley detention pond. The pond was excavated, regraded and seeded and blanketed. This is similar work that has taken place in other subdivisions throughout the Village. However, as with the case of the Oak Valley detention pond, the pond is owned by the HOA, and thus it is still the responsibility of the local HOA to provide the weekly/regular maintenance of these facilities. This includes regular mowing and the regular cleaning/removal of sediment from the concrete low flow gutters at the bottom of the detention pond. Regular cleaning of these low flow gutters will help minimize the need for future large-scale cleaning projects.***

14. The white house at the corner of 159th Street and Oak Valley Trail is an eyesore to our neighborhood and the entire community. Now that the Bank owns it, we are very interested in getting this property cleaned up. You said that you would start issuing tickets but that does not seem to be adequate. The fence needs to be repaired or torn down and the grass needs to be mowed.

***This report is an ongoing issue previously recorded on a different application. To summarize, the property at 12929 W. 159th was foreclosed and acquired by Bank of NY Mellon through a Sheriff's deed. Altisource is the maintenance provider assigned and Bank of NY Mellon stated via email to contact the servicer as they are only the deed's trustee. The grass had not been cut all season. Altisource confirmed the property's vacancy on 5/14 and stated they were seeking bids for grass maintenance and fence repair. As of 7/3 no work had occurred. The Village informed Altisource daily fines would begin to be assessed if the grass was not cut within seven days. Subsequently, \$100 fines were issued daily from 7/14-7/24 totaling \$1,000. On 7/24 Village maintenance crews cut the grass and weeds on site for a cost of \$704.00 Melinda Lange, attorney for Altisource appeared at the adjudication hearings on 8/21. A continuance was granted until 9/18 hearing in order for her to review all related emails which were forwarded to her email. On 8/22, at approximately 11am Chief Building Official Joe Baber observed police activity at this property and inquired with the deputies on scene what was occurring. The previous tenants had reoccupied the property and the Will County Sheriff's Dept. was in the process of evicting them again.***

***Village information shows that previous property maintenance violations have been addressed and fines have been paid to the Village. The Village is currently monitoring property maintenance violations and will be notifying responsible parties. The home has gone to auction by Hubzu and they are currently reviewing the bids received.***

15. Oak Valley sign at 159th Street and Oak Valley Trail. This sign was torn down by IDOT about 3 years ago. It seems they replaced the island which they removed with an

identical version. We need some directions to what replacement sign will be erected there and what landscape plans are in IDOT's plan. Who can help us with this question?

***The previous subdivision sign was removed by IDOT as part of the 159th Street Improvement project. Additional right-of-way was required and obtained by IDOT, for the widening of 159111 Street. The section of the island, where the sign was located, was removed and is now covered by new pavement, at the intersection. Thus, it was not possible to keep the sign in place with the new improvements to the roadway. We are not aware of any plans by IDOT to replace any subdivision signs that were removed as a result of the 159111 Street construction project, nor does the Village have any plans to replace any of these signs as well. According to IDOT's landscape plan, it does not appear that there will be any additional plants (trees/shrubs) installed within the island. It is likely that anything installed this close to the north end of the island could be a visual impediment for drivers trying to access 159111 Street.***

***If the HOA desires to install a new sign at their cost, please contact the Village of Homer Glen prior to installation, as sign review and permit is required.***

16. Water Detention Area - We are experiencing some flooding issues in the past couple of years. We appreciate the Village's assistance in 2013 toward getting the grant from IDOT to clean out this area but, with the construction on 159th Street, it seems to be silting in again. Currently, it is flooded in the middle and the grass is uncuttable. There is also one viaduct without a safety cover.

***The maintenance for the detention areas within the subdivision are the responsibility of the HOA. To aid the residents and HOA for the subdivision, the Village obtained a grant from the Department of Commerce and Economic Opportunity, to reconstruct the detention pond. This included the removal of sediment from the bottom of the pond, which had built up over the years, the reconstruction of the existing low flow concrete gutters, and the installation of a new low flow concrete gutter. Upon completion of the project, in the spring of 2015, it was the responsibility of the HOA to address the continued maintenance of the pond, including the cleaning/removal of sediment that would normally build up in the low flow concrete gutters.***

***Based on concerns raised under public comment at a recent Village Board meeting, and following an inspection as a result of these concerns, it does not appear that regular maintenance, to remove the silt/sediment has taken place. Thus, this material has been allowed to build up within the low flow concrete gutters, blocking the free flow of water. This in turn allows the water to build up and overflow into the adjacent grass areas, saturating these areas and making them difficult to maintain.***

***The HOA needs to address the maintenance of the low flow concrete gutters as soon as possible. This includes the removal of sediment and vegetation that has built up over the last few years, since the Village completed the reconstruction project. As some of the built-up sediment has expanded outside of the low flow gutters, it may be necessary to expand outward with the removal***

***of the sediment, into some of the adjacent grassy areas. Once this has been accomplished and the areas reseeded, this work should allow these areas to drain properly and allow proper continued maintenance.***

***The Village has met with the Homer Township Highway Department on November 19th regarding the Oak Valley detention pond grate for the inlet pipe. They are going to look at the end section to make sure it is not damaged and determine if a grate can be installed on it. If it is not damaged and can accept a grate, they might have one available in the yard. If it is damaged, we would have to see if we can adapt a grate to fit on the end section or replace the end section. This would be more complicated, as that is a large diameter pipe, and therefore a large (heavy) end section. With regard to the outlet pipe, the Village is concerned about installing a grate on this pipe, as it could cause debris to build up and block the outlet.***

***The Highway Department and Village staff also talked about the sediment build up in the pond. There will always be some degree of sediment coming off of every property. That cannot be avoided. However, the drainage making its way through the subdivision also flows through numerous areas, including ravines, between and behind the homes. We believe this is a big source of the sediment that gets into the pond. Also, it has been observed several of the homeowners dump quite a bit of debris into these areas, including branches, grass, landscaping and other debris. Another issue is the access to these ravines. In one instance the homeowner at 12817 White Oak Court installed a brick wall, which blocks access.***

17. The construction on 159 seems to not have an end in sight. Is there some way we can pressure the powers at IDOT to get this moving faster and ultimately completed? Perhaps, we will need to organize a delegation to go to Springfield.

***The Mayor, members of the Village Board and staff have been in contact with IDOT as well as various governmental representatives to try to get the project completed as quickly as possible. Although slower than anticipated, the construction along 159111 Street is getting closer to completion. At this time, it is anticipated that construction of the roadway will be completed by the end of this year, with restoration to be completed by the end of spring of 2020.***