

CHARTER TOWNSHIP OF MERIDIAN
TOWNSHIP BOARD SPECIAL MEETING - **APPROVED** -
5151 Marsh Road, Okemos, MI 48864-1198
853-4000, Town Hall Room
TUESDAY, SEPTEMBER 29, 2015 **6:00 P.M.**

PRESENT: Clerk Dreyfus, Treasurer Brixie, Trustees Scales, Styka, Veenstra, Wilson
ABSENT: Supervisor LeGoff
STAFF: Township Manager Frank Walsh, Assistant Township Manager/Director of Public Works and Engineering Derek Perry

1. CALL MEETING TO ORDER
Clerk Dreyfus called the meeting to order at 6:00 P.M.
2. PLEDGE OF ALLEGIANCE/INTRODUCTIONS
Clerk Dreyfus led the Pledge of Allegiance.

Trustee Scales moved to appoint Treasurer Brixie as Supervisor Pro Tem for the purpose of conducting tonight's meeting. Seconded by Trustee Wilson.

VOICE VOTE: Motion carried 6-0.

3. DISCUSSION OF POTENTIAL IMPROVEMENT TO THE DANIELS DRAIN
Assistant Township Manager/Director of Public Works Derek Perry explained the purpose of tonight's meeting as outlined in staff memorandum dated September 25, 2015.

Charles Barbieri, Foster Swift, 313 S. Washington Square, Lansing, legal counsel for The Ponds Cooperative Homes, Inc., offered a Powerpoint presentation on the condition of the Daniels Drain Drainage District which was created approximately 45 years ago. He noted this Chapter 20 drainage district was formed through the jurisdictions which would have surface water runoff as part of the drainage; i.e., Michigan Department of Transportation (MDOT), the Ingham County Road Department (ICRD) and Meridian Township.

Mr. Barbieri offered the following information on the drain:

- The Daniels Drain drainage district is part of the Red Cedar Watershed
- Until 2009, the 2.8 acre pond, created in 1989, had fish and attracted wildlife
- Pond structure originally had one inlet
- Currently, two inlets come from the south into the pond due to development
- More surface water and stormwater is received by the pond than originally anticipated when constructed
- The Daniels Drain has collapsed pipes, one of which is under Grand River Avenue (M-43)
- Sink holes have developed on the Ponds property
- Collapsed pipe in the drain was a significant contributing factor in the flooding of some condominiums (eight units during the August, 2015 rainstorm)
- Periodic flooding has damaged walkways
- Boardwalk has had to be rebuilt due to flooding
- 75 trees have died around the pond because of flooding
- Electrical wiring around the pond has shorted out due to flooding
- Disproportionate share of water containing phosphorous coming from neighborhoods to the south
- Sandbags have been placed at the outlet near the pipe which was constructed under Grand River in an effort to prevent water from washing out other areas
- Algal bloom is prevalent in the pond as a result of the phosphorous discharged
- Condominium units have not used phosphorous in their fertilizer for many years as the cooperative followed Michigan State University recommended guidelines
- It is believed the phosphorous that has washed into the pond is a result of run off from neighborhoods to the south which feeds into the drainage district and the detention pond

- Chlorides detected are a factor from use of road salt largely from M-43 and neighborhoods to the south
- Sedimentation which contains phosphorous and chlorides are factors in the current condition of the pond

Scott Dierks, Branch Manager, GEI Consultants, 940 N. Main Street, Ann Arbor, offered a review of urban hydrology through a Powerpoint presentation which demonstrated the impacts of man-made landscape changes. He indicated the movement in stormwater management in the 21st century is to recover some of the natural resource functions. Mr. Dierks noted the stormwater runoff analysis was conducted using computer modeling simulation which provided estimates of phosphorous and chloride and where they originated.

Mr. Dierks offered the following information:

- Water and sediment samples showed the pond is phosphorous and chloride enriched, all of which comes from outside of The Ponds property
- Fish kill has occurred since the pond was stocked
- In the computer model, the outlet pipe under Grand River Avenue is the limiting factor in water leaving the pond, irrespective of the failure of the pipe
- Pipe was set at an extremely shallow slope which minimizes the amount of water which can come out of the pond
- Pond water depth averages approximately five (5) feet
- During a 100 year flood event, there would be six (6) feet on top of the five (5) foot pond depth
- When the pond was originally designed, it was to be eight (8) feet in depth
- According to GEI, many areas are only three (3) feet, resulting in less drainage capacity than originally intended when flooding occurs
- Primary objective is to find solutions which would fix the infrastructure problems and recover a cleaner pond
- One set of alternatives is to work exclusively on The Ponds property:
 - Two major inlets on the southeast (36" pipe) and southwest (48" pipe) sides of the pond
 - Creation of two features on the northwest side of the pond which capture runoff from The Ponds Cooperative parking lots
 - Creation of dry wells to capture water from the inlets off Grand River Avenue
 - New outlet from the pond, which could potentially be an MDOT project
- Runoff which comes off the landscape and the associated pollutants are proportionate to the size of the area that it drains
- A second set of alternatives is to mitigate some of the physical improvements by moving to a non-phosphorous fertilizer in the area and managing the amount of salt used on roads
 - Creation of a living filter on The Ponds property using native plants which would address all of the runoff from the nearby areas which drain from the south, west and east prior to it reaching the pond
 - What is already in the pond must be addressed as a critical component of cleanup in the watershed
- Two (2) ways to address sediment in the pond: dredge the pond at a cost of approximately \$300,000-\$350,000 or inactivate the sediments through use of alum which makes it unavailable for biological growth in the pond
 - Each inlet is approximately ½ acre in size
 - East side natural swale on the westside – capture runoff from the parking lots of the cooperative
- Very rough estimate to inactivate the sediment, create wetlands for the inlets and exclude the drywells and pipe under Grand River Avenue is approximately \$700,000-\$1 million
- MDOT excluded from Alternative #1 as maintenance of drain under Grand River Avenue after project completion is the responsibility of MDOT
- Assumption that MDOT will pay for the correction of the collapsed pipe under Grand River Avenue
- Alternative #2 is less costly, but requires significant behavioral changes to eliminate the use of phosphorous containing fertilizer throughout the watershed
- We are all "implicated" in the water quality issues our rivers and lakes sustain today

- The Ponds Cooperative wants to be an active participant in the solution and could offer a certain amount of property to be used for restorative wetlands
- Non-toxic sediments from the pond could be used as a subsurface foundation as part of a later improvement (i.e., community center for residents of The Ponds)

Ingham County Drain Commissioner (ICDC) Pat Lindemann offered an overview of the Chapter 20 Drain petition process used in and around primarily commercial areas. He stressed there is no way to determine costs of this project until a full engineering and environmental investigation is conducted. Commissioner Lindemann addressed the four (4) foundations of infrastructure to establish a community as: a place to flush toilets, a place to put stormwater, a clean, consistent source of drinking water and a transportation system. He stressed the maintenance cost through tax assessment from the ICDC's office (\$440,000) is one hundredth of one percent of the true property value of the Township's real estate.

ICDC Lindemann noted the process for a Chapter 20 Drain begins with the Township acknowledging there are maintenance and improvement issues which must be addressed while recognizing land use changes which have happened over time with the Daniels Drain which may require modification. He stated his office is willing to attack the problem and solve it once a petition is received by his office. Commissioner Lindemann indicated the process of watershed management and reduction in pollution loading adds longevity to the system.

4. PUBLIC REMARKS

Supervisor Pro Tem Brixie opened Public Remarks.

Quenda Story, 4526 Marlborough, Okemos, inquired as to her cost for a solution to this man-made drainage issue. She questioned where a community center would be located within The Ponds Cooperative. Ms. Story expressed concern the Daniels Drain project would facilitate further development in the area.

Assistant Township Manager/Director of Public Works and Engineering responded approximately 340 parcels are located within the watershed which would share the cost, but not on a proportionate basis.

Manager Walsh added this proposed correction has nothing to do with future development in the area. He stressed the Township will openly communicate with residents as this issue moves through the process.

Richard Baderstadt, 4560 Oakwood, Okemos, believed The Ponds is located in a low lying area. He recalled that 30 years ago the original soil was removed and different soil was brought to the site in order for buildings to be constructed. He inquired what percentage the owners of The Ponds Cooperative would be paying. Mr. Baderstadt believed he receives an indirect benefit as his back yard drains into the Daniels Drain. He believed that part of a "feature" for The Ponds is maintaining the pond and it is not being maintained.

Kevin Hilliker, 4554 Dobie Road, Okemos, asked the Board to look at the parcels on Dobie Road if the proposal moves forward, as all water on his property simply drains into the ground and not into the Daniels Drain.

Tom Maleck, President, The Ponds Cooperative Homes, Inc., 1457 E. Pond Drive, Unit 22, Okemos gave a brief history of the area as follows:

- In 1970, an investigative aerial photograph showed there was not a single structure in the area
- In 1972, the pond was built
- In 1972, Grand River Avenue was a two (2) lane road
- Grand River Avenue is now a five (5) lane road with curb, gutter and storm sewers
- Statement that MDOT uses 40 tons of salt per mile per year, which calculates to 100 tons of salt every year which makes it way into the pond
- Water table of the pond is three (3) feet higher than originally designed
- When storms occur, the pond floods six (6) additional feet

- Corrugated metal sewer pipe, which was placed under Grand River Avenue 50 years ago, has collapsed
- Sewer to the southwest also houses a corrugated metal pipe and believed there will be a collapse in the near future
- Sewer to the southeast is a corrugated metal pipe with failing joints which have created major sinkholes
- Property over the sewer is regularly used by pedestrians and bicyclists and there is a safety concern

Cecilia Kramer, 4560 Oakwood, Okemos, and President, Forest Hills Homeowners Association, questioned if this is a public hearing to change a Chapter 20 Drain to a Chapter 8. She stated many homes in Forest Hills have indirect linkage to this watershed as backyards drain to the north and east to reach The Ponds overland. Ms. Kramer reiterated the property behind Forest Hills is an open space associated with the Paddock Farms apartment complex. She voiced appreciation there will be continued conversation with the Township in its efforts to seek a solution.

Ody Norkin, 3803 Sandlewood, Okemos, spoke to what may create a conflict of interest by Township officials and the perception of a conflict of interest. He indicated the previous Township attorney pointed out a conflict of interest did not mean a Township Board member had to personally gain something (financially or otherwise). Mr. Norkin believed that when a CATA Board member is also a Township Board member voting on a CATA contract, it is a conflict to advocate for both fiduciary duties at the same time.

Jessi Adler, 1580 Hillside Drive, Okemos stated she is a co-owner of a home which backs up to the Forest Hills nature area by The Ponds development. She indicated she is on a well and does not hook up to the Township's water system, voicing concern how the Daniels Drain extension behind her home may affect properties with wells. Ms. Adler also expressed apprehension about added run off in the area due to increased impervious surface in the proposed development at the corner of Powell Road and Grand River Avenue. While acknowledging little understanding of the Chapter 20 Drain process, she articulated her desire to obtain potential costs for her property before the project moves forward.

TOWNSHIP ATTORNEY COMMENT: Drain projects are somewhat confusing in the way they are administered through the Drain Code because it is different than how other public utility projects move forward. Even more so with Chapter 20 drains. In drains we speak about chapters, so with a Chapter 20 Drain project (or any drain project), there has to be a determination of necessity of whether a project moves forward before final engineering takes place. So while the information provided is very helpful in getting a very "rough, rough, rough" estimate of costs, under the statute there is no way the Drain Commissioner can provide a specific cost amount to property owners until all the work is actually performed in putting together the bids. While I am sure the Drain Commissioner would love to be able to do that for you, it would take an act of the Legislature to make that change. There are no hard costs available to you with regard to that in terms of the Township being able to tell you exactly what percentage of what the ultimate cost would be. That would also be very difficult because MDOT pays for a portion of that, due to benefit to state highways and until the final scope of that project is ultimately determined, we don't know what percentage MDOT would pay. The county also would pay a percentage of that cost based on benefit to county roads and, again, until that project is ultimately finalized, we don't know what percentage that is. The Township has, depending on the specific scope of this project, some leeway in determining what the costs are apportioned between each of the property owners.

Supervisor Pro Tem Brixie added that the Township is between a rock and a hard place, as it must commit to the project before it can obtain a commitment about how much it will cost each affected property owner.

TOWNSHIP ATTORNEY COMMENT: Even if the Township wanted to, and even if the Drain Commissioner wanted to, that is simply not possible the way the statute is written.

Michael Kerns, 1332 Ivywood, Okemos, asked whether a resident would be charged for an assessment all at once or over a period of years and what that number of years would be. He stated in the 23 years he has lived in Cornell Woods, he has not used salt as a deicer nor has he ever witnessed his neighbors using salt. Mr. Kerns stated that nearly all the salt comes from the snowplow during the winter season. He indicated the state legislature passed a law approximately ten (10) years ago which prohibited residents, unless they are farmers, from purchasing fertilizer containing phosphorous.

TOWNSHIP ATTORNEY COMMENT: Length of payment for the assessment would be a determination by the Drain Commissioner. After the final costs are calculated, the Drainage Board, chaired by the Drain Commissioner, would work with a financial advisor. It can be from one (1) year up to 30 years, depending upon the situation.

Ingham County Drain Commissioner (ICDC) Lindemann clarified that all responsible entities within the Chapter 20 Drain (i.e., Meridian Township, ICRD and the state highway department) would receive a determination of percentage from the Drain Board. He indicated the Township would then hold a hearing to levy the tax on its affected residents, with the Board ultimately making a decision how much of the Township's percentage would be assessed. Drain Commissioner Lindemann offered that Township's typically pay between 5% and 50% of a project cost, dependent upon the nature of the project. He stated that after final costs are calculated, they are spread out based on the concept of benefit derived (determined by how much of an individual's runoff contributed to the drain). Drain Commissioner Lindemann noted projects of this type are typically bonded over a 15-20 year period. He stressed the ICDC Office works diligently to ensure the improvements have longevity which well exceeds the life of the payment, typically 50-70 years. Drain Commissioner Lindemann noted the life of a maintained concrete underground pipe is 60-80 years.

Supervisor Pro Tem Brixie closed Public Remarks.

Board, Township attorney, The Ponds presentative and ICDC discussion:

- One (1) of the eight (8) units which flooded in August, 2015 was included in the 40 repossessed units
- The Ponds ceased using phosphorous over 20 years ago
- Two of the buildings have a storm sewer which travels from the buildings to the pond
- First floor of the three (3) story units are on concrete slabs and had six (6) inches of standing water after the August, 2015 rainstorm
- All residents of The Ponds Cooperative support this project
- By Board request, staff prepared a dummy roll based on a \$2 million project for discussion purposes only and cannot be "tied" to any component of this proposal
- Township Board has no idea of the cost for this project at this point in time
- Cost will be determined by the ICDC once a petition is filed
- Importance of communication throughout the process
- Rationale for holding this meeting was to elicit thoughts from property owners on the proposed project
- Board suggestion to use a base number for residents to scale their estimated costs
- Assessment is not based on taxable value or state equalized value (SEV)
- Assessment calculations take into account acreage, land use and pervious surface
- Drainage Board will make the determination as to the percentage each of the three (3) entities would pay (Ingham County, MDOT and the Township) after the scope of the problem is researched and a solution is ascertained
- ICDC computer program has run-off factors attached to properties
- Argument can be made that MDOT's benefit has increased based on the widening of Grand River Avenue and ICRD's benefit has increased based on road improvements and the widening of intersections
- ICDC can run various scenarios through computer programs using hypotheticals if the Board desires him to do so
- Two Township parcels comprise The Ponds
- The Ponds Cooperative is 18.5 acres out of 200 acres, approximately 9% of the project
- Individual condo owners would divide the assessment to The Ponds Cooperative

- Analysis of benefit derived will determine the cost
- The pond is a repository for a lot of water which does not come off of the land belonging to The Ponds Cooperative
- Shopping center drains run along through the area and “dump” through the pond and across Grand River Avenue
- Variety of other contributing factors to the functionality of the pond
- Argument can be made that special benefit is derived by residents of The Ponds if landscaping was part of the solution to eliminate some of the immediate runoff pollution
- ICDC suggestion that if any resident feels their benefit is too high, they need to speak out at the public hearing and can set up a meeting with the ICDC to discuss the benefit
- Need for the ICDC to apprise the Board of the extent of the problem through an investigation
- In order for a thorough investigation to be initiated, the Board will make a determination if it wishes to move forward with filing a petition
- Board member preference for the steps of this process to be a shared and joint partnership with affected residents
- Step 7 of the Chapter 20 Drain petition process involves a vote by the Board to file a petition to improve a drain
- Next step is for the Township Board to place this item on for discussion at a regular meeting
- Clerk’s office maintains a list of homeowner association and neighborhood groups (with contact information) to assist in reaching out to property owners

5. ADJOURNMENT

Trustee Wilson moved to adjourn. Seconded by Clerk Dreyfus.

VOICE VOTE: Motion carried 6-0.

Supervisor Pro Tem Brixie adjourned the meeting at 7:55 P.M.

JULIE BRIXIE
TOWNSHIP SUPERVISOR PRO TEM

BRETT DREYFUS, CMMC
TOWNSHIP CLERK

Sandra K. Otto, Secretary