

**Minutes**  
**Water Resource Management Utility Meeting**  
(Formerly Stormwater Utility)  
**August 11, 2009**

*Please note: Minutes are unofficial until approved by the Water Resource Management Utility (formerly Stormwater Committee) at their next regularly scheduled meeting.*

Present: Alderman Ken Harenda, Alderman Bill Moore, Alderman John Hopkins, Commissioner Jim Kern, Mayor Jack Chiovatero

Others Present: Nicole Hewitt (Division Engineer), Cathy Schwalbach (Project Engineer) & Sue Hanley (Administrative Supervisor Utilities & Streets)

Meeting called to order at 4:49 pm by Alderman Harenda. Roll call and declared a quorum with all members present.

**Old Business**

**SW 01-09                      Minutes from May 12, 2009 Meeting**

Motion by Alderman Hopkins to approve the minutes from the May 11th Water Resource Management Committee meeting. Seconded by Commissioner Kern and upon voting the motion passed unanimously.

**NEW BUSINESS**

**Communication                      District 1 - June Flooding Report**

Hewitt: A copy of the presentation from Alderman Hopkin's July neighborhood meeting is in your packet.

Hopkins: You put some information on the website of what you are doing and what you are looking into. I encourage you to keep adding to that for the citizens.

Harenda: Last month we didn't have our regularly scheduled meeting. In place of that was the Town Hall meeting that Alderman Hopkins and staff put together. I encouraged the rest of the aldermen to meet with staff about any stormwater issues in last year's June flood and this year's June flood and floods in June and if they would like to hold a meeting, they are welcome.

**SW    09-09                      WE Energies Request for Re-determination of Storm Water fee**

Schwalbach: WE energies approached Utility staff on how their stormwater fees are calculated. They had Giles Engineering do a series of testing on their substation sites and found the type of surfaces that they installed in certain areas of their substations where their vehicles are not driving over, they are not impervious. Representatives from WE Energies are in attendance if there are any questions. Staff reviewed the maps from the 4 substations, the calculations of the impervious and pervious areas and the City code and determined what they are showing as pervious should be considered pervious because the water soaks through. The code dictates how this is measured and charged and they have done the work according to how we would measure and calculate a non-residential property and staff agrees with the test data.

Kern: How did we originally determine it to be impervious?

Schwalbach: Impervious surfaces defined in the code are a horizontal surface that has been compacted or covered with material so that it is highly resistant to infiltration by rainwater, which includes compacted clay, streets, roofs, parking lots and similar surfaces. Originally when the utility was formed, I believe aerial photos were taken and computer programs were used to measure those areas where there were buildings and parking lots. When staff does a review where there is a question or there is a newly installed business or nonresidential property, staff measures the area by hand to determine the square.

Hewitt: Gravel surfaces have always been considered impervious when there are driving surfaces or parking and in the past the DNR has required that these substations be looked at as impervious, but they have changed that determination because of the data that WE Energies has supplied showing that it is acting as a pervious surface.

Moore: This is a gravel road and there is clay underneath. Clay does allow some water to come through, but I have been told by staff that it is impervious itself.

Hewitt: Typically. It does have a rate of infiltration like other soils, but it is a very low rate.

Moore: Now you have put compacted gravel on a roadway on top of that and you are calling it pervious?

Hewitt: In the areas that they are requesting to be removed and pervious, they are not compacted. It is a surface that people can walk on and check out equipment. They have highlighted the areas that are driven and parked on as compacted which would be considered impervious. Only the areas walked on and have gravel are pervious.

Harenda: You received the Giles engineering reports and you concur with the findings?

Schwalbach: We do. We are looking for the Committee to approve the adjustment to their stormwater utility fee based upon the submitted information. This would go into effect with the next billing cycle which would be the October 1<sup>st</sup> bill.

Motion by Commissioner Kern to approve the re-determination of stormwater fees for 4 WE Energies properties based upon site testing and measured impervious area that will decrease the stormwater revenue \$1404.00 per year and take effect the next billing cycle of October 1, 2009. Seconded by Mayor Chiovatero and upon motion passed unanimously.

**SW 10-09 Award of Construction Contract for U-349 Drainage List Concrete Invert Project**

Schwalbach: The Committee has discussed using the funds reimbursed by FEMA from the storm event of 2008 to try to catch up on the drainage list by contracting out a portion of the list. The majority are concrete invert installations and asphalt upgrades to concrete. There are 27 projects on the list. Every resident on the list has been notified and understands the project. It includes 2215 lineal feet of invert to be installed. In some cases it is repair of sections that are cracked and some is brand new installation where the resident will be paying for part of the invert. All of the asphalt invert projects have a cost share involved according to the policy that was approved by this committee.

Harenda: Before we put it out for bid, what was the engineer's estimate? Can we add anything to the project?

Schwalbach: The engineer's estimate was \$105,000 and it came in at just under \$100,000. We grouped the similar projects to get a better price. These type of projects take our crews a lot of time because of the forming and the concrete work and the grading work. There were a few cases where they were on the list originally but some residents decided not to have the work done. There were about 4 that were not included because the contractor can't match up to culverts that are falling apart because elevations are off. All of the rest were on the original list. The contingencies are for something extra that comes up, such as an extra section of concrete or a culvert that was very damaged and not foreseen. Our staff will be doing the inspection.

Hopkins: I compared the addresses to an older list and saw that some have been on the list a very long time.

Moore: We had discussion last time about decreasing the number of inverts that we install. Is this the same discussion as SW 03-09?

Hewitt: Yes.

Moore: There are 3 new inverts to install on Rustic Ridge and 1 on Racine Court. Why are we adding new?

Schwalbach: The ones on Rustic Ridge are immediately upstream of existing concrete inverts and they should have probably been done when the other sections were completed. The one on Racine Court is an area upstream of an existing concrete invert, part is being repaired, part is old asphalt that is falling apart and will be upgraded to concrete.

Moore: Why do the areas require the invert instead of grass swale?

Schwalbach: The areas qualify according to our policy and are very flat areas and were requested by the property owners. There was discussion about changing the policy in these flat areas so that we can start using some more naturalized sections.

Moore: Grass inverts would soak the water up instead of sending it downstream where someone else would take the brunt of it.

Schwalbach: These residents have been on the list for about 4 years and according to the policy qualified.

Moore: When can we expect to see a new policy?

Schwalbach: We can start working on one if you direct us to do that?

Moore: I would like to see it.

Harenda: The reason we are putting in concrete inverts is that the water doesn't move and it pools. We are not putting in inverts into areas that we can go with natural materials, but in some cases it doesn't work out.

Moore: The pooling can be stopped by natural materials. You are just shoving it downstream.

Schwalbach: It will take us a little bit of time to ramp up and do a good job the natural way. I don't know that staff would recommend doing a quick shift away from concrete just for the ease and ability of residents dealing with it and maintain their ditchline because our crews are not familiar with that type of installation. We want to do it right and perhaps try to do a few experimental ones then work our way toward that. In the meantime concrete is acceptable and helps residents where there is a very wet situation.

Moore: We have bioretention swales and rain gardens being recommended by planning and we are not taking advantage of those.

Harenda: On Marquette Drive we had residents that wanted to put concrete inverts in and we went with a barrier perforated pipe which created drainage and didn't just move the problem from point A to point B and that was a test project that worked out. I agree that we should look at that, in some situations it does work and some it doesn't. In my backyard right now, along National and Racine Avenue, they pulled out a lot of the large concrete inverts along a county highway and during the June floods because the inverts were not there, the majority of the material washed downstream and created problems because of the erosion problems. Are we looking at the policy?

Hewitt: It is part of the Comp Plan update. We are incorporating different language into the areas which require the concrete invert to allow natural measures to be used if the soils are such that you can use natural planting to help the infiltration. We are opening the door of not requiring concrete inverts in those installations.

Chiovero: Are these items on the A list?

Schwalbach: These are on the A2 list. The A1 are the flooding issues. A2 is where the system is not functioning as well as it should and the B are nuisance type of things.

Chiovero: The construction contract is \$99,000. We have \$111,000. Will the extra funds be diverted toward ditch projects if we don't need the contingency.

Schwalbach: There are some small projects that have been waiting that we may use the money for.

Chiovero: The properties being done will be contributing to the project. Won't that reduce our share?

Schwalbach: Correct. Those additional funds plus whatever is leftover. The project will go to Council 2 weeks from tonight and we will give the contract the go ahead at the end of August. Their final completion date is November 1<sup>st</sup>. Besides the \$111,000 we have the \$50,000 that was put into the budget this year so there is a total of \$161,000 available. This money will stay in the Utility and as soon as this project is completed we can look at what is left and group them out for bidding early next year.

Kern: We will not be doing any additional projects on the ditching list this year?

Hewitt: The crews are working on drainage list projects. These are just projects that we chose to bid out.

Kern: Do you know how many of the A2 projects will be remaining after these projects are completed this year?

Schwalbach: The crews are starting on the A1 projects after the storms they had in June and we had another dozen added to that added to the category because of the storm. We hope the crews will be able to complete that list this year and then they will start on the A2 priority list besides these contracted out.

Kern: This Committee wants to make progress and keep the list and waiting time from growing.

Chiovero: I would rather see the \$161,000 used. It would be nice to have some alternate projects ready.

Harenda: By our next meeting, can you add to the list some potential options if the money does become available before the end of the year?

Schwalbach: Knowing that this project will be \$114,000 if the contingency is used, we have \$45,000 left. We can find some additional projects and possibly bring this to you in September to bid out and award it.

Chiovero: I think that would take some of the projects out of the way and continue working on the list.

Harenda: The list keeps growing. The extra money that we received from FEMA is helping target some of these numbers. The Mayor, aldermen, staff and I are working on some alternate funding sources to target some of the larger projects within the master plan and the drainage list to keep it down to where we can manage it as a maintenance related item every year. If we utilize some of the funds this year that would help.

Moore: I will vote for this because it is our policy, but this is the last year that I want to vote for inverts, that we have a better option in the future.

Harenda: When will the Comp Plan be available?

Hewitt: I hope to have a draft document in September

Motion by Alderman Hopkins to recommend that the Common Council approve the awarding of the Construction Contract for the U-349 Concrete Invert Project, to the lowest responsive responsible bidder, *Willkomm Excavating & Grading, Inc.* in the amount of \$99,876.25 with contingency of \$14,981.44 for a total project cost not to exceed \$114,857.69. SOURCE OF FUNDS: WRM Utility Drainage Account 70710710 59060 \$50,000.00 and WRM Utility Account FEMA Reimbursement 70710701 59060 \$111,000.00. Seconded by Commissioner Kern and upon voting the motion passed unanimously.

**SW 11-09 Alderman Seidl's Request for 1700 S. 171<sup>st</sup> St. Drainage Project to be Moved up**

Schwalbach: Alderman Seidl forwarded this request to us. This has been on the drainage list for awhile. In summer 2004 the Buena Park Stormwater improvement contract was done. In summer of 2006 the Transportation Division of Engineering did a road resurfacing project there, but the resurfacing did not include stormwater work. About half of the subdivision had work done in front of their property and half did not, but they still benefitted from the work and water was rerouted and flows were improved. That is the case for Mr. Hein's property.

Kern: Why did some have work done and some not?

Schwalbach: Looking at the plans and design, the purpose of the project was to alleviate flooding. One of the problems was because all of the water was coming down to a point on Roosevelt Avenue and heading to the creek in the park. When the project was looked at, the water was rerouted and storm sewered over to the park and spread it out. The engineer that designed it, knew the standards, did survey work and looked at the ditches to see if they met our standards. The areas where work was completed was where work could be done to improve flooding and needed to be done to improve elevations. The other areas were fine, ditches work was not needed. The survey of the ditchline of the above property was shown to flow. The project was #49 in July 2008 after the storm. Almost nothing was done on the drainage list last year by our crews because of storm damage.

Chiovero: Looking at the photos, I don't see a problem.

Schwalbach: When I met with Mr. Hein and inspected the ditchline, I saw it as a nuisance issue and moved it to a B level priority. He did not tell me he had any flooding issues and the ditchline is functioning. He was upset it was not included in the Buena Park project and he believed it was uneven and difficult to mow.

Harenda: I have worse ditches in my area.

Kern: We can defend why it was not included. We don't agree it should have been included.

Schwalbach: Correct.

Moore: I have people in my area with ditches that are steep on the sides and difficult to mow and this looks better than my lawn as far as smoothness. If he wants to do some work on his lawn himself, but it doesn't look any more significant than any of the projects in front of him. You have to do this on a scientific basis and have the order.

Schwalbach: Staff believe there is not a good reason to move him ahead and the way the system is set up it would not be appropriate to move him up on the list.

Kern: I think we need to stick with the list.

Hopkins: There are no photos taken when there has been any flooding or heavy rains or damage.

Harenda: Looking at the photos, if you go to the south there is a traditional concrete invert and if you go to the north it looks like Beres Road and is relatively flat and no ditches.

Schwalbach: It is not as flat. There is a decent pitch and there is an elevation that water can flow and the survey work shows there is enough elevation for water to flow in a grass ditchline.

Moore: Why is on the list at all? I don't see a problem.

Harenda: We are looking at alternate additional funding to try to work on the drainage list, but there are a lot more people that have significant flooding and problems worse than this.

Moore: I would vote for another staff member to accomplish the work. I don't think we have enough staff.

Motion by Mayor Chiovero to deny his request to be moved up on the list. Seconded by Alderman Moore and upon voting the motion passed unanimously.

Schwalbach: Staff will communicate the decision to the resident.

## **SW 12-09 Sun Valley/Clearwater Place Resident Drainage Request**

Schwalbach: Water comes through cross culverts, runs through a drainage easement through several backyard areas into a wetland/conservation area on the Eisenhower High School property then drains into Deer Creek. This issue is listed in the storm water list for Neighborhood F and will be listed in the update to the Storm Water Management Plan as a regional issue. A group of residents has written a letter and submitted photos to make the Committee aware of the issue of flooding and water standing issues.

Harenda: Is that a City drainage easement?

Schwalbach: It does have flat elevations and we believe there are some issues and that natural land area causes it to slow down. It is a larger regional issue that is complicated by the wetlands and natural areas and downstream problems in Deer Creek with water flow.

Harenda: Is the back up within the forested area or further down?

Schwalbach: Both areas and into some of the Deer Creek and forces it to back up into some of the yards.

Moore: Is there anything man-made that has created additional back up?

Hewitt: There is a lot of debris falling down and the area in the forest is not maintained on the Eisenhower property and there is a fence at the end of the easement where stuff gets lodged.

Harenda: Is that Eisenhower's property and is it a navigable waterway?

Hewitt: It is Eisenhower property but I don't think it is a navigable waterway but it is wetland.

Kern: Is Eisenhower responsible for that wetland area?

Hewitt: If we could show they are blocking drainage it would fall under a code, but it is a regional problem with the general maintenance of the channels into the Eisenhower properties and along Deer Creek. It is maintenance of these areas and getting DNR approval.

Moore: Is there anything downstream on the Eisenhower property that is unnatural that is blocking.

Chiovero: Is there negligence of maintenance on the Eisenhower part?

Hewitt: We don't have easement over any of those areas or jurisdiction from the DNR.

Moore: It is wetland and the DNR jurisdiction and it is school property. The neighbor's would need to contact the DNR and school district since we don't have jurisdiction.

Hewitt: We plan on putting it in the Stormwater Management Plan Update as a regional issue that will be coordinated with the school and the golf courses and the other residents. If it is silted in, they allow you to clean it out if you get the permits and show you won't disturb the natural site.

Hewitt: It is on our list of projects, but I can't tell them it will be done next year, until we do the update.

Harenda: When did you start seeing problems? If you are using the photos from June floods, that is worse case scenario, we had 2 bad years and 500 year storms in a row.

Nellita Lee 4516 S Clearwater Place: The easement is on the other side of the house next to them at 4520, but now it is beginning to drain between 4520 and 4516 in the backyard. During the last storm we had water in our basement because the sump pump could not handle the overflow of the water and sits there and doesn't drain down. There are trees and silt. The problem has been going on for about 10 years and slowly increased built up each year. The sump pump is overwhelmed. The water is not draining but now it is also pooling. When the snow and rain comes in spring and the ground is saturated, there will be more pooling and you can't go back there will your mower. I would be ready to clear things to make it flow.

Judy Cook 4520 S Clearwater Place: If we have a regular thunderstorm with heavy rain, the drainage ditch next to my property can go from dry to 3 feet across in just a matter of hours because there is nowhere for it to go. It takes days to dry out and there is standing water and I can't mow.

Harenda: Our city's drainage easement is clear and wide open?

Schwalbach: It is about 10 foot wide easement and pretty clear. There are some trees back there and it is shallow. It is uneven.

Hopkins: I realize the woods is the bigger problem but the ditch that restricts the water, can the city or school clear it out?

Hewitt: You can cut trees and plants but can't disturb the ground without a Chapter 30 permit.

Moore: Our water resource management rules in the last few years have been improved so that we have better stormwater drainage and there is a possibility that either their land would have had to have greater fill or drainage or not even build if it is that close to a wetland without significant work. Your construction may have been in an area it is going to be that be because it is too low.

Hewitt: It is a forested wetland so you don't see the same effects that you see with your regular emergence and more plants growing in there when it is a wooded area it is more of the soils and you have a bigger issue with the silting. It is not an official line. It is a line that SEWPRC put on their maps saying this is wetland. There could be a delineation done in the area to reroute it around the wetland.

Moore: Back when their houses were put in there may have been a different kind of wetland.

Hopkins: What is staff's recommendation?

Hewitt: It is something on our list that we are looking at but I don't believe it will be done next year because there are a lot of situations where existing drainage lines have silted in and haven't been maintained and when it causes flooding it moves up on the drainage lit.

Harenda: Can you communicate with the school district to see if there is any way for them to open up some of the forest areas?

Hewitt: I had talked to them in the past and they had conversations with the DNR and the DNR said absolutely not on different areas that flood. I don't believe they applied for an actual permit.

Moore: Can they do that before it comes up on our list?

Hewitt: The residents couldn't apply for it but the school district would have to because it is on their property, for the permit to do the work.

Harenda: Can you put together a communication to the school district to look at this and ask what they did in the past and if there is a possibility that they can do some clearing so that the water doesn't pool?

Hopkins: Let them know that it is causing flooding in homes.

Harenda: It depends on what the DNR allows them to do. We had a similar problem in our district and had WE Energies clear some trees that were causing problems.

Schwalbach: That is a good start on this project. It will take some time to work with the school district and work with them on getting the permit and do what the DNR requires. If it is opened up downstream heading north, we believe there are other issues and we will work with the school district, but Eisenhower has some other situations with wetlands and navigable waterways further downstream where this drains to. That is why we looked at it as a larger issue. On all of the private properties it may take some more coordination farther upstream and may be a lengthy issue but we need to be aware it is a bigger issue.

Kern: The properties on the golf course are part of this?

Hewitt: Yes, they are experiencing the same thing. The ditches have filled in with debris and plants over time and the water is coming up further into their backyards.

Harenda: These are navigable waterways?

Hewitt: In the Deer Creek area yes. I don't know if they have done a survey.

Harenda: Is that a public or private drainage area to the north?

Hewitt: We have easements in that area on the properties along Regal Drive but not through the Eisenhower property.

Harenda: Please contact the school district to get the ball rolling and to see if they have had discussion with the DNR already. You will put this in the Stormwater Master Plan as a regional issue.

Hewitt: Yes. The golf course hasn't complained. They are at the point where the problem begins.

Chiovero: It may be just some cleaning up along the other side of the fenceline to allow water to flow.

Hewitt: There is debris in there, but there is no defined flow area and it is going randomly, hits a blockage and backs up in their yards. There is no clear path.

Moore: Since it is wetland you can't do it without DNR approval.

Chiovatero: They said there was a ditch there years ago.

Hewitt: If you look at your map that is possibly with that dark green forested wetland if you follow that straight through it lines up.

Moore: The question was if the ditch was natural or man-made. If it was man-made, that may have been why the residents thought it was a drier area than it is now so now they are finding out the wetland has become more natural and it is back to where it was before the houses were built.

Harenda: We are aware of the problem and it is in the Stormwater Master Plan which will be coming forth. We will communicate with the school district to see if they have had discussion with the DNR.

The residents asked where it was on the ditching list.

Harenda: It is a regional project and not on the ditching list.

Judy Cook: Culverts have been replaced and have caused increased flow from the concrete inverts. What does that mean for us?

Moore: That is my point in relation to putting concrete in inverts. Somebody downstream will get it.

Harenda: We are in the process of doing a Comp Plan Update and Stormwater Master Plan that was done 6-7 years ago and it will list the projects and rank them. There will be Open Houses on the Comp Plan and ask questions and you can check with staff on the Stormwater Master Plan. The first Open house is August 31<sup>st</sup>. Are the stormwater issues going to be presented at the open houses?

Hewitt: We will be there to talk to people about their concerns. We won't have the Stormwater Master Plan there but as far as the natural resources and environmental part of the Comp Plan, we will be there.

Harenda: You are welcome to attend the open houses, check with your aldermen or staff on the Stormwater Master Plan and staff. As events do occur you can take photos and collect information to convey to staff. We are updating the Stormwater Master Plan in conjunction with the Comp Plan which is scheduled to be approved at the end of this year.

## **SW 13-09 Approval of 2010 Operating Budget for Water Resource Management Utility**

Hewitt: This is a draft of the operating budget. There is one new item added on page 16 which is Spoils Disposal, which is a new budget number. This is for spoils from ditching projects and also for street sweeping which I combined into one account number. We had not been charged before, but they started charging us this year \$25 per load for single axle trucks and \$40 per load for double axle for spoils. We were taking them to Johnson Sand and Gravel and Kohler Pit. Street sweepings are taken to Waste Management. \$10,000 was from the previous year and \$7,500 for the new charges but the number may be revised.

Harenda: Are there any other avenues to dispose of this?

Hewitt: We have stockpiled as much as we can at the Recycling Center, but there is no room to store this and less and less places need fill.

Chiovatero: The dirt isn't the problem, it is the broken up rock and concrete. We have used as much as we can, but we have to pay for it now instead of dumping it for free as in year's past.

Moore: Street sweepings have oil and other things in it.

Hewitt: Street sweeping is currently under the drainage account number 59060, but because I was putting in a new budget item for spoils disposal I combined these 2 items, although it is too separate disposals. Street sweeping is taken to a special disposal site at a certified landfill through Waste Management. The street sweeping had been \$10,000 and the new item of spoils disposal is \$7500.

Schwalbach: The sweepings are landfilled right now. We haven't found a better way to dispose of that and is handled as a non-hazardous waste because of the contaminants in the landfill.

Harenda: It is a regulated facility versus a quarry facility.

Hewitt: In the 59060 I added in a \$100,000 contracted drainage list item. My thought was that we would work from oldest drainage list project forward by date instead of the priority that we do now with the new contract.

Moore: Do you sometimes say when you get a complaint, no we aren't going to do something because it is not that bad.

Schwalbach: There have been times when we looked at a ditch with a resident that we said I don't think there is anything we can do to improve the ditchline. It does not make sense for us to expend resources if we can't do anything to improve it, but may make it worse.

Moore: I have seen complaints where they get standing water for a few days. There is nothing wrong with that.

Schwalbach: 3-5 days of standing water is not an issue, sometimes it takes that long to soak into the clay.

Harenda: If you have an issue you can contact staff, but sometimes there is nothing we can do.

Moore: With regard to the inadequate funding on page 5, if you say we need another staff member, I would support it.

Harenda: We are looking at alternative funding sources too.

**SW 14-09 Approval of 2010 CIP Budget for Water Resource Management Utility**

Hewitt: I will be bringing forth several proposals for CIP projects for regional projects.

Harenda: We haven't had any CIP projects for a few years, but as we pay down our debt, we have some funds available and staff will be ranking the items and it will be for us to decide on what to bring to Council.

Motion to adjourn at 6:18 p.m. by Commissioner Kern . Seconded by Alderman Moore and upon voting the motion passed unanimously

*Please Note: Minutes are not official until approved by the Committee  
Respectfully submitted by Sue Hanley, Administrative Supervisor Utilities & Streets*