

BOARD OF PUBLIC WORKS

Vision

The Board of Public Works exists to improve the quality of life of the customers we serve.

Mission

We are dedicated to providing our current and future customers with utility and other value added services in a safe, reliable, and economical manner consistent with sustainable growth, community involvement, and environmental stewardship.

Regular Meeting of the Board of Public Works was held in Lewes City Hall, Council Chambers, 114 East Third Street, Lewes, Delaware on Wednesday, September 25, 2013 at 12:00 PM.

Board Members

C. Wendell Alfred
D. Preston Lee, P.E.
Jack Leshner
James N. Richmann
A. Thomas Owen

Ex-Officio Members

James L. Ford III, Mayor
Heidi Wagner, Assistant General Manager
Darrin Gordon, General Manager
Glenn C. Mandalas, Legal Council

Others Present:

Candace Vessella, 53 Devries
Dennis Reardon, City Council

1. Welcome, Call Meeting to Order, and Pledge of Allegiance.

At 12:00 PM, President Alfred welcomed everyone, called the September meeting to order and led Pledge of Allegiance. A moment of silence was observed for our troops serving our country.

2. Roll Call.

President Alfred stated that all Board members, Assistant General Manager Heidi Wagner, Mayor James Ford, and are present.

3. Revisions and/or Deletions to the Agenda.

No revisions and/or deletions.

President Alfred said the reason this meeting is being held at 12:00 PM today is because the annual meeting with DEMEC is being held this evening, for which Darrin Gordon must be in attendance.

4. Consent Agenda.

- a) Receive the General Manager Monthly Report*
- b) Receive Severn Trent Report for August*
- c) Receive President Report*
- d) Receive Vice-President Report*
- e) Receive Secretary Report*
 - 1.) Approval of Regular Minutes dated July 25, 2013.*
- f) Receive Treasurer Report*
- g) Receive Asst. Treasurer Report*

Jack Leshner motioned to approve the Consent Agenda, Preston Lee seconded, and motion carried unanimously.

OLD BUSINESS

5. Open forum/general discussion on 2013/14 Capital Projects review and update of summer projects. (D. Gordon) INFORMATION:

Darrin Gordon showed a Power Point presentation with pictures to show what has been done with the Capital Projects and the summer projects. Regarding the Water Treatment Plant, we are currently injecting the caustic soda, which is the pH adjustment. We have all of our water coming through the plant today. We adjust three items: the caustic soda, the chlorine, and the fluoride. The caustic soda is working, the chlorine is being worked on to be made perfect, and the fluoride injection has not yet begun and

which needs to be very precise. The proposed date for the final tie-in, which will isolate our two transmission lines, is on the last day of September and the first of October. There could be up to an eight hour shut off of water. We have a jumper line that has already been designed with the engineers, so we think we can do it with zero interruption to water, but we have contingencies. The next item is the Blue Ocean SAP in-house financial management system. It has been a nightmare. We have done the billing with this system and 90% of customers have not realized that there have been issues if they have paid the exact bill amount. People who are on budget billing and people who do not pay the exact amount on their bill have had problems. There have also been some glitches in the reporting that are not up to our standards or to the standards of our auditors. People are unhappy they do not have the graphs on the bills. The graphs can be seen online, but you have my commitment that the graphs will be put back on the bills as soon as we have everything else ironed out. The problems happened because the two lead people who were helping with the integration quit which set us back at least four to six weeks.

Jack Leshner asked if there is even a guess as to when it will be online.

Darrin Gordon said it is online. There were some major problems that have been fixed. Handling the unhappy customers while trying to fix the system set us back a lot. We are still online but the extra work because of the billing errors and the accounting side of it have slowed us down and forced the employees to spend time fixing problems instead of improving the system. Looking at the big picture it was still a good move.

Tom Owen asked if the primary reason for the graphs not being on the bill the fact that we are having trouble with the system.

Darrin Gordon answered yes. But putting the graphs back on the bills is not our first priority.

President Alfred said there was a petition circulated with sixty signatures of people who were very unhappy that graphs were not on the bills. I have received calls about it and I am sure all of us were approached about it at some point. I wish the person who started that petition was here today to hear us talk about the issue.

Tom Owen said he got a call from Marsha and she was planning to be here but could not be, but she dropped off the petition.

President Alfred asked to hold off on the petition until the appropriate time in meeting.

Darrin Gordon continued with the PowerPoint Presentation. We are moving forward on Madison Avenue Railroad in conjunction with the City repaving the roads. Our 12 inch transmission line had to be rerouted so that a new manhole could be put in the road. The connection of that pipe will be done on Thursday night. They will be knocking on doors or leaving notices because there is a possibility of an outage for two to three hours as well as some noise. The customer outreach is an absolute must on this. The next item is Canal Crossing which is where we had the archaeological dig. We have the final report in front us on the findings which is 178 pages. This has been sent to the State Historical Preservation Organization. They then have to write a letter to the Court of Engineers to tell them they have received it, that what we have done is adequate, and that we can move forward. It will probably be another thirty to sixty days before we receive any response from them. All of these artifacts have been collected and catalogued. The owner is the University of Delaware. If they don't want it, we then give it to the State, which will cost us money. My request is that if they don't want it, will they still accept it, and then we can give it to the Lewes Historical Society.

Jim Richmann said, because he wrote the policy for the Historical Society, it will be difficult for them to accept these materials. The first reason is because they are soon to be an accredited museum, they are not able to access things that are outside of their mission statement and archaeological artifacts are specifically outside. The second reason is that there are severe regulations, including federal regulations, on Native American artifacts. It is a very difficult thing to access. There will probably be a cost associated with it. This is just informal guidance, not an official statement in any way.

Darrin Gordon continues with the next item, which is Canary Creek. It is finishing up, and it is my understanding that every single home lot has been sold except for one. The townhouses are under construction. Phase 1, 2, and 3 of the utilities being installed are completed. They will be coming to us and asking us to release the bond to them except for the ten percent retainer which we will hold for twelve months until the certificate of authenticity is completed. Angler's Nest has just begun and has seventeen lots that they are working on. We have accepted the main sewer line that was installed. Upon survey, it was found that it was flowing backward, but the installers are fixing it at their own cost. Jim Smith inspected it and Caswell was the contractor. Oyster Cove is a dozen duplexes that are being built. They are going to have a pressure line that will come right down the railroad tracks and will be connected to our system at the nearest manhole. We are discussing with our legal counsel with them about what type of payback. They are putting that line in at their cost, but if anyone else along this corridor wants to tie in and use that pressure line for their sewage, we want to be able to reimburse that value to Oyster Cove. We are working on that language now.

Jim Richmann asked if we have the franchise for that ground.

Darrin Gordon said yes.

Jim Richmann asked Glenn Mandalas if he recalls if our charter extends one mile beyond the city limits.

Glenn Mandalas answered that he does not have it with him but he recalls the same thing. The BPW does have some regulatory authority outside the corporate city limits.

Jim Richmann asked what our cost is.

Darrin Gordon answered that the cost to us is nothing. Our policy is that all of this is done at their expense.

Darrin Gordon continues with Highland Heights, which is moving forward. We have not had discussions with them yet. I am hiring GMB to do the preliminary work. The biggest question will be the storm water. The water will be going into the Highland Acres Tax Ditch and that will cause some questions. The Tax Ditch pipe and the way it flows and where it ends up could be a point of contention. We do not have authority over that. I leave that issue to the Tax Ditch, the developers, and the Pilot Town HOA.

Preston Lee said the Manager of the Tax Ditch really trashed us at the Highland Heights hearing. It is not our problem. **Darrin Gordon** said our policy is that as Highlands Heights creates that subdivision, all storm drain questions have to meet the Sussex County Conservation District specifications, which are our specifications as well.

Preston Lee asked if we will be taking this over eventually.

Darrin Gordon said no. This is still on private property. Neither the BPW nor the City has any easement on that property.

Preston Lee asked so we will be serving people but not responsible for where the water is going?

Darrin Gordon said yes. I don't know how we can take over that responsibility.

Preston Lee said I think we should get it done correctly and be responsible for it.

Darrin Gordon said I agree. But what authority do we have to enforce the Tax Ditch pipe?

Jim Richmann said I don't want to take over responsibility from the Tax Ditch. They are independent.

Preston Lee said we have already done it and Pilot Town Village.

Jim Richmann said I do believe we have a voice in this through the Planning Commission. Jack Leshner is our liaison to the Planning Commission. As part of the subdivision process which is documented in City Code, as well as in the Certificate of Utilities Adequacy, that there is a requirement as part of the subdivision plan that they have to present an approved document relating to the storm water drainage to the Planning Commission. It has been our practice to use the Sussex County Soil Conservation District. That plan has been presented to the Planning Commission, and therefore we have a voice as to how this is done.

Dennis Reardon (attending in the audience) said that the thirty inch pipe goes into the Tax Ditch behind the houses, and that does not go into the pond, but into Canary Creek.

Preston Lee asked if we normally accept systems that end up in someone else's system.

Darrin Gordon said the way I see it is the only authority I have is to look at Highland Heights and is it being made appropriately.

Preston Lee said I believe the County would require a working design and require them to rebuild this thirty inch pipe. I would feel better if our engineer reviewed it and if it was done properly then we take it over.

Jim Richmann said I believe there is a provision in City Code whereby the developer has to come to us and pay us to hire our engineer to do that.

Preston Lee said the other thing that concerns me about this project is that the storm water ponds are adjacent to the wetlands. They have to build storage above the high water table in the land next to the wetlands. That water table is going to pretty close to the surface. Any storage has to be above the seasonal high water level in the ground. There is not much room for storage.

President Alfred said he has heard people ask how this is going to affect the neighbors. The water table over there is already high. Where do we go from here? What steps do we take to make sure things are done correctly, and who is responsible?

Darrin Gordon said we will continue to work very closely with the City and the Tax Ditch.

Preston Lee said I would like GMB to do a thorough review of the County's work to make sure that everything is covered and to make sure it was designed properly.

Jim Richmann said he would like our legal counsel to review the current City Code and determine exactly what our authority is in relation to the subdivision approval process.

Glenn Mandalas said I am bringing it up right now. The subdivision code has been reworked. Many of the requirements have not changed, but they have been restructured so that the process is more direct. The one thing that has come out of that is the provision used to require a developer's agreement after the subdivision approval. Those elements that we thought were critical are being addressed before rather than after the subdivision is approved. It gave more transparency to the developers so that they knew it was coming, but also gave me more satisfaction that the process was legal.

Jim Richmann said I don't need anything written, but just guidance so that we can make sure this gets done correctly.

Glenn Mandalas said the first line of defense is our engineer's oversight.

Mayor Ford said the entire process will have public hearing and public input. The Board can consider yourself part of the communication network that occurs there and have commentary on concerns and send a letter of sign-off that it has been reviewed and you are granting your approval on whatever conditions are agreed upon and incorporate that as part of the final acceptance. If I was a developer I would want to see that, as well as from the Mayor's standpoint.

Darrin Gordon continues with the presentation. The next item is the Cedar Ditch. This summer we purposefully worked on improving the storm drainage along the ditch banks and concentrated on a couple of areas. On the bay side, we have another ditch between Cedar Ditch and the canal that allows tidewater to come in and out. I have made a proposal for three changes on this ditch. Mosquito Control has also come in and done their cleaning. We had one objection from a homeowner to Mosquito Control cleaning out the ditches. We have been working with DNREC with the proper permitting to get these ditches cleaned out and if there is any damage to the trees we will replace them at our expense. We have also had our fire hydrants painted which cost about \$10 per hydrant, for a total cost of \$3,500.00. We had one person very upset that we cleared out the vegetation surrounding one hydrant. State Fire Marshal Code states that we are keep a four foot clearing around all hydrants for access for firefighters. We have a storm water master plan that was started several months ago with Duffield Engineering. They have given us a list of about six critical problems, so we will be working on those priorities. We estimated that we had about 600 structures in the ground but they have some more. It is estimated that we are going to be about \$20,000.00 short. We have looked at all the elevations of our catch basins using our own men and GPS equipment, but the problem is our base station has gone foul and our equipment is old. We are purchasing a new GPS unit that will operate off of a different base station. We are going to apply for an additional grant to get some assistance to get the remainder of that \$20,000 to be split with the State. We have a Sewer Master Plan that we are updating. The mapping of it is complete. They look at the where the growth areas are, where the lift stations are needed, verifying that the dollar amounts that impact these are accurate, where the current limitations are, and what we need to

look for and consider for future projects for increasing capacity. Next is the SPI Pharma service line. Their service line goes into the road from the Pharma. We stop service at that edge. They hit a ten inch service line doing some work. Mosquito control made a couple of dams in the canal and we are started pumping out like crazy. We helped to replace that line and get them back into service. We did lose pressure; our system dropped so we knew something had been hit. We did not charge them for our work. Point Farm is a subdivision of 69 homes and is the area that is just north of Canary Creek. They are discussing annexation with the City. We have stubbed out water, sewer, and electrical lines and we are in a very good position to provide all utilities to them and they are in our service area. They have signed the pre-annexation agreement. The lift station is sized and ready for them. Regarding Showfield, we have only had preliminary discussions. They are determining whether they want to go with the County or with us. There is no doubt we will serve the City property. The County property is the question. They have not made a decision.

Tom Owen asked if we could still be the service provider if they go with the County.

Darrin Gordon answered yes, if they build it according to County standards and we accept it. They are absolutely coming to us for us water; they are in our CPCN. If we are providing water, we have a resolution that they have to sign a pre-annexation agreement. I believe the County has reasons for wanting them to come to us for sewer, so ultimately I believe they will become our customers. The current proposal is for 407 to 482 homes, with a possible addition of 75 more. We have had a meeting with Highland Acres to talk about their annexation. The bottom line is that they need to create an HOA, a single legal entity, for us to deal with.

Jim Richmann asked if we are talking about a proper annexation for Highland Acres or just taking over utilities.

Darrin Gordon said I was talking about what is required for them to get utilities from us. We have a resolution that they would need to sign a pre-annexation agreement. Finally, I received a letter from DEMEC saying that they are purchasing from the University the Renewable Energy Credits (RECs) for the wind mill. It will be presented to them at Coastal Day. We figure the University will be making about \$35,000.00 per year off of that. Each megawatt of power creates a single REC and they are purchasing it for \$8.00 per REC. Most of that money will be going to a scholarship for a University student. It's good for us, the University, and the environment. The RECs are what we purchase to meet the requirements of our portfolio to meet the 20/20 demand. One percent of our portfolio has to be solar RECs. This is DEMEC going out and creating our portfolio of renewable energy that fits all of our generation needs.

Preston Lee said it's not that much money but asked if it goes into overhead when they sell us electricity, so we end up paying for it in some way.

Jim Richmann said it is not overhead, but we do pay for it, but all other DEMEC customers do as well. Because DEMEC is a regulating utility, they are required to have a certain percentage of their total generating plant come from renewable sources. Most of the utilities don't actually have the renewable sources, but they buy the RECs. It is a Cost of Good Soul, so it is an operating expense.

Darrin Gordon said when we buy our kilowatts, which we pay \$80 per kilowatt. This will be added to that portfolio. That \$80 helps us pay for coal, nuclear, gas generation, wind generation, and solar. This is just another little drop in our solar or wind bucket that then goes towards us meeting the requirements for renewable energy.

Tom Owen said he attended the meetings before this was built, and they said that even though they were generating their own power, they would offset it for BPW and the City so that we would not lose the revenue. How does this affect that?

Darrin Gordon said that contract remains the same. They are not selling power. We are buying all of the power that they generate. They are also getting a Renewable Energy Credit. DEMEC provides us our power, and as a member of DEMEC, we have to prove that we are using a certain amount of renewable energy by state law.

Tom Owen said it says that DEMEC is the buyer. They are buying the credits. What about our revenue that comes from UofD?

Darrin Gordon said it is still there.

Jim Richmann said it was sort of unfortunate that the wind turbine is in our community, but we were never purchasing the credits for the renewable energy.

Darrin Gordon said in the contract we never sought to get those RECs because that would be coming from our supplier. We are still buying the electricity. These RECs are a measurement created by government law.

NEW BUSINESS

6. Open forum/general discussion on efforts and direction meeting the 2012-16 NPDES permit requirement of nutrient offsets. (D. Gordon)

INFORMATION:

Darrin Gordon said I need to clarify the efforts for our nutrient trade. This nutrient trade comes directly from our NPDES permit, which is a federal permit that allows us to take our wastewater effluent and put it into the Lewes-Rehoboth Canal. 2.5% of that water goes into the inland bays and because of that, we have to remove any kind of nutrient and remove it from the environment somewhere else. The important part highlighted on the second page says that "within 24 months of the permit effective date, the permittees shall begin negotiating with the Sussex County Conservation District or other appropriate agency, for agriculture to librarian forest conversions, agriculture to grass buffer conversion, and/or wetland restoration of land previously converted to agriculture use for the purpose of obtaining offset credits unless an alternate plan has been approved by the Division of Water. Offsets shall be credited on a two to one basis." January 1, 2012 is the beginning of this permit. January 1, 2014 we need to have that alternate plan and have those discussions going forward. The next item is the outlet of nutrient offset from the waste water treatment plant. The first items of that permit said that we could move chicken manure out of the Lewes-Rehoboth Watershed. We have done that. This shows that I have removed enough chicken manure to cover the offset at a two to one basis for the next 93 years. It cost us \$4,000.00.

Tom Owen asks many questions.

Darrin Gordon answers. There is a stake nutrient counsel in Dover. They know where all the chicken farms and manure are and we pay for them to remove it. We are defined as a point source polluter because we have a single pipe going into the canal. The manure comes from ground water, storm water, and other places. The inland bay is polluted and they want to clean it up. Our NPDES permit is tied directly to our wastewater treatment plant.

The permit says we have to move from a temporary fix to a more permanent fix which is called your grassland or wetland agriculture conversion. Duffield had done a report a couple of years ago. He figured out the amount of nitrogen and phosphate using our conversion types. The second page of that report on the right shows the annual cost. The second line shows the phosphate removal. If we were going to use the wetland conversion, the minimum number of acres that we would have to find is 61 acres inside the Lewes-Rehoboth and/or the Indian River watershed. This is based on us leasing. We don't have any idea of what that cost would be. If you look at the wetland conversion over here, it would be approximately \$600,000.00 to take care of that. We have also been looking at other ways of handling this. This is a nutrient management report that we looked at and had URS look at and a possibility is building a water tank down by the treatment plant and taking that effluent and flush it out to the canal on the outgoing tide into the bay so that zero of our effluent goes into the inland bays. That cost would be \$1.5 million. The other they looked at was running our outfall out the Roosevelt inlet so that we would know 100% of it was going out to the bay as well. That cost would be \$1 million. There is another option, which comes to our oysters.

Tom Owen asks if this permit gives us five years to do something permanent in regards to ground water.

Darrin Gordon answers that we need to do something permanent. The NPDES permit is only a five year permit. The permit allows us to start with the manure, but by the end of the five years you have to do what DNREC considers a permanent fix which is defined as these other options. If you look at the third page and the fourth bullet point, this is the inland bays document. It says that one acre of leased bottom is said to remove 689 pounds of nitrogen and 89 pounds of phosphorus from the bays per year. That is almost exactly what we need to remove each year for our current usage. Our plant will ultimately clean 1.5 million gallons per day which means that 2 acres of oysters will take care of our needs. I plan on moving forward with oyster growing to meet our nutrient trade. I believe we can probably purchase the equipment to manage an acre of oysters that would be growing somewhere in the inland bays for between \$30,000.00 and \$60,000.00 per acre. I would propose that we lease three to four acres because they seem to add that two to one requirement for everything we do. We would make a business plan where we would purchase the infrastructure. Then we would hire an oysterman who knows what he is doing and they would give us ten year pay back on that investment, so at the end of the ten years it is a wash. DNREC would then give us credits for that production. That is my proposed plan and I am looking for your approval.

Jim Richmann said I am for this, but I would suggest we do the business plan first before we do anything else.

President Alfred said I agree but I would like a vote today to allow the General Manager to pursue this option.

ACTION:

Jim Richmann motioned that whereas the General Manager has presented a plan which appears to meet our nutrient offset requirements and simultaneously significantly improve the water quality of the inland bays, and whereas our nutrient offset requirements are required by the State of Delaware in consideration of the nutrients which we are placing from our waste water treatment plant into the canal, that we authorize the General Manager to conduct a study for the purpose of determining whether or not oyster cultivation in the inland bays or an equivalent inland waterway would be appropriate and cost effective for the Board of Public Works. Tom Owen seconded the motion. The motion passed unanimously.

7. Open forum/general discussion on the completion of the water treatment plant and direction for the naming and proposed open house October 19, 2013. (D. Gordon)

President Alfred said we are just at the proposal stage and making sure this date works for everyone. Candace Vessella, our former Board member is going to assist the staff with publicity for this. We hope to invite the ROTC to do the presentation of colors, and possibly hire a jazz band, have some guest speakers, do the unveiling of the plaque, have some refreshments, and do the tour.

Darrin Gordon suggested naming the plant "The Lewes Board of Public Works Water Treatment Plant".

President Alfred declared the date worked for all Board members and directed Darrin Gordon to proceed.

Jim Richmann said he would like to extend a special invitation to the restaurant owners/operators in town because it was to prevent disruption to their business that we got this started several years ago. We changed water supervisors several years ago and as a result of that we found out that there were some conditions in the water plant that were substandard. Before we could act upon that, we had a water outage and it occurred on a weekend where we had 7,500 people in town and every restaurant was packed. The state does not permit restaurants to stay in operation if they do not have running water. We were out for about 35 minutes, but the water pressure stayed down so conditions were substandard for longer than that. That started the process of planning for a new plant. I think it is important to include in our publicity that this was not done simply because we had some money laying around, but because it was meeting a critical need in the community. Tourism is so important to our community.

8. Meetings Attended by Board Members or Staff.

Preston Lee attended the progress meetings for the water treatment plant, Madison Avenue/Highland Acres, and DNREC regarding the Cedar Ditch.

Jack Leshner attended the DEMEC nuclear power plant tour, the Lewes Planning Commission meeting, and had a meeting with the Highland Acre neighborhood

9. Board or Staff Requests for Agenda Item(s).

Request for discussion of Property/Casualty insurance renewal and leave/sick leave policies at the October meeting.
Request to reschedule the Workshop.

10. Call to the Public.

Tom Owen said he spoke to Marsha Davis and she could not attend the meeting and asked Tom to deliver the petition.
President Alfred states that the petition has been taken into the official record of this Board meeting.

11. Call to the Press.

No questions or comments.

12. Adjournment.

President Alfred adjourned the meeting at 1:38 PM.

Respectfully Submitted,
Stephanie Moyer