# REGULAR MEETING CONSERVATION COMMISSION PORTSMOUTH, NEW HAMPSHIRE 1 JUNKINS AVENUE

#### Conference Room "A"

3:30 p.m. July 12, 2006

**MEMBERS PRESENT**: Chairman, Charles Cormier; Vice Chairman Steve Miller; Members,

Brian Wazlaw, Allison Tanner, Barbara McMillan, Skye Maher and

Alternate James Horrigan

**MEMBERS EXCUSED:** Eva Powers and Mary Ann Blanchard, Alternate

**ALSO PRESENT:** Peter Britz, Environmental Planner

.....

Chairman Cormier called the meeting to order at 3:35 p.m.

#### I. STATE WETLANDS PERMIT APPLICATIONS

A. Standard Dredge and Fill Application 200 West Road Assessor Map 267 Lot 22 Micronics Realty Trust, owner

He stated that the two items on the agenda were for the same project, just two different permits. He said that they would discuss the State Dredge and Fill Application first.

Adele Fiorillo of NHSC (New Hampshire Soil Consultants) spoke to the application. She stated that she works on behalf of PGW Real Estate and Micronics. Micronics is an industrial company on West Road, off of Peverly Hill Road in Portsmouth. She has filed a Dredge and Fill application for the Commission's review and support. Ms. Fiorillo presented a 1998 aerial photo of the site. She pointed out that the photo put the site in good context not only in terms of location but also with respect to wetlands. She also pointed out that the entire area has been a gravel pit for years. It has since been filled, back filled, moved around, and incorporated into the industrial buildings that are there today. All of the wetlands associated with the site are predominately manmade. As for hydrology, there is a wet swale that goes down one side of the property. All of that water flows through a narrow wetland and continues to flow hydrologically through another narrow swale and ends in the wetlands within that gravel pit area. Ms. Fiorillo stated that the area she is proposing to fill is a manmade excavation. Currently it is comprised of a dense stand of phragmites as well as other vegetation. There is a catch basin in the existing parking lot that has pipe outlets that empty directly into one of the wetland fingers. Ms. Fiorillo commented that she went to the site earlier that day and discovered that the only water flowing was out of that pipe. She pointed out that there would be very minimal treatment on

the site for storm water. She also pointed out that they met with City staff earlier in January. They also met with the Department of Environmental Services to go over the proposal. She stated that their main concern was dealing with storm water quality. She pointed out that based on staff comments gathered for the Conditional Use Permit they have provided a plan with the Dredge and Fill application. They will be rolling it into the Dredge and Fill Permit as well. Currently they are asking for a wetland fill. She stated that it is 3,845 square feet of manmade emergent wetland with phragmites in it. Their initial proposal was to provide storm water treatment with storm trenches and vegetative filter strips which would meet an access drive. She indicated that they have made some changes to the access drive. The revised plan shows a cross section of the filter strip. The revised plan includes a shrub planting and the specification that the access drive be a grasscrete pavers or some other pervious type of pavement so that as the storm trench overflows into the vegetative filter strip, it will pass through the access drive and then to the wetland. Ms. Fiorillo stated that there are some compelling reasons why they need to put the building in that location. She pointed out that this is a manufacturing company. Currently they have loading docks that bring in raw materials that go into the cutting room where the product is created and the finished product comes out. Currently, there is cross traffic that is hindering their getting the finished product out. She confirmed that their request is for 3,845 square feet of wetland impact. She stated that although they are below the mitigation threshold of 10,000 square feet, they do have storm water mitigation incorporated into the application.

Chairman Cormier asked if there were any questions or comments.

Ms. McMillian asked if the storm water was going to go over the access drive. Mr. Dennis Moulton of AMES MSC Architects and Engineers explained how the grasscrete pavers would work and referred them to the brochure that he provided them.

Mr. Britz asked about the size of the loading dock. Mr. Moulton replied it would be constructed four feet above the surface.

Mr. Horrigan asked if the access drive material would be appropriate for parking lots as well. Mr. Moulton said that it can be used for parking but would probably not be appropriate for this use. If you were to use the product with gravel or sand fill, it would be a permeable parking alternative. Mr. Britz asked about how the surface would be for plowing. Mr. Moulton replied that the plow blade would probably have to be lifted.

Chairman Cormier asked about the existing conditions as far as storm water was concerned. Mr. Moulton answered it is sheet flowing. He pointed that there is a catch basin that doesn't show up on the plans but it has an outlet pipe that he says goes out towards the ditch. Chairman Cormier asked if the storm water is collected and discharged. Mr. Moulton stated that he believes that most of the water goes off of the pavement and into the grass and flows in the wetland direction.

Chairman Cormier asked for a clarification as to what the improvement would be. Mr. Moulton said the improvement is an established area with a vegetative filter strip which they are planning to plant with wetland species.

Chairman Cormier asked if the runoff was being directed to that area. Mr. Moulton replied yes.

Ms. Maher stated that she does not have a problem interfering with the wetlands in that area. She felt this was probably a great place to learn more about how to handle the ground since it is an artificial construct. Ms. Maher mentioned that she visited the area a while ago, and at that time, she noted considerable saturation. She estimated that there was about 1/4 of an inch of standing water in that area. The standing water in it today, 18 hours after the last storm, was 2½ inches of rain. She stated that this is a wonderful opportunity to be learning about how much more we can be expect with a manmade saturation plot. She asked if Ms. Fiorillo and/or Mr. Moulton had figures of what planting wetland species on the proposed wetlands would do versus grass in terms of absorption, filter, and protection from other areas of runoff. Ms. Fiorillo stated that the stand of phragmites there today has a fairly rapid transpiration, particularly in the spring. During high growth periods, the transpiration rates are very high. It then comes to a point when it levels off. She stated that by putting in woody vegetation, there is going to be higher transpiration rates. She also mentioned their proposal includes the use of a seeding component that will have a herbaceous base. They plan to use a New England wet mix.

Ms. Maher pointed out that it isn't working out there now. She stated there is a wetland in the back and getting the filtration is probably all they can expect to slow the water down. She asked if the space is going to be enough. Ms. Fiorillo said that they are planning to put roof drainage as well as parking lot in that area. Mr. Moulton pointed out that they would be able to build a filter strip that is sufficient and meets the criteria for larger storms.

Ms. Maher asked about the swale that runs adjacent to the proposed building. She asked if it is going to be pitched towards the filtering area. Ms. Fiorillo mentioned that currently the water is running off of the site and into the wetland areas. Not much is going into the catch basins. She stated that there was no holding capacity. With the addition of the filter and a stone trench, they will increase capacity.

Ms. Maher wanted to know more about the plant species they propose to plant and what their capacity is. She also wanted to hear from staff as to their thoughts about the new plan versus the one that was presented earlier.

Mr. Britz stated that it was important to understand the improvements with the revised plan. He felt that the plan was an improvement over what is there now and that the addition of more woody vegetation and a variety of grasses was a big improvement.

Mr. Britz asked whether it made more sense to separate the roof drainage straight into the wetlands in the back for a better chance of getting a better result. Ms. Fiorillo and Mr. Moulton considered its impact.

Mr. Miller interjected a question while Mr. Britz's suggestion was being considered. He asked why they chose a vegetative filter strip. Mr. Moulton said that given the existing topography, it would lend itself very well. There is a very shallow slope to the property right now and is almost set up to be a filter strip as it is. Mr. Miller asked about elevation. Mr. Moulton pointed out the elevation heights from the plans.

Ms. Maher stated that the drainage in that area is not working now. She said that 3,800 square feet of roof would be added and she didn't see any place to drain the water from it. She did believe that draining the water in another direction would help. She mentioned that our ten year storms are coming every 3-4 years now. She questioned whether they should be building this. She stated that they cannot ask them to build for a regulation that doesn't exist or an expectation of what might happen in the future. She is asking for more ideas.

Mr. Horrigan mentioned that he had the same concern. He stated that the new addition is going to use up half of the current drainage area. He asked if anything could be done to modify the parking lot. He noticed in his numerous visits to the site that the parking lot is never full. He wondered if it would improve overall drainage if some of the parking lot was converted to porous surface. Mr. Peter Weeks, representative for Micronics, addressed Mr. Horrigan's question. He stated that the subdivision was created in 1992. He mentioned that the number of parking spaces required by the City is forty and they currently have forty-three. Mr. Horrigan clarified that he wasn't talking about eliminating parking, just changing the surface of the lot. Mr. Weeks said this will probably be one of the first access ways/driveways that will be constructed with this new type of material. He stated that the applicant is trying to work with DES and the Conservation Commission. It is a more expensive fix than a normal asphalt driveway would be. Mr. Weeks said they started dealing with the City on this project in September 2005. He stated that Micronics is expanding and doing very well. They have to make a decision to put an addition on this building or move elsewhere. They would like to stay in Portsmouth. They are willing to try to do what it takes to alleviate some of the situation that now exists. Mr. Weeks felt that the area has not been well managed over the years. Micronics is trying to alleviate it at least on their property.

Ms. McMillan asked why they proposed to use a vegetative filter strip instead of some sort of reconstructed wetland. Ms. Fiorillo said that it is going to be a wetland creation. Ms. McMillan asked if they would be digging down to the water table. Ms. Fiorillo said they would but not much.

Ms. McMillan stated that the site does not need much green space with the addition. She felt that Micronics has put a fair amount of time and money into the maintenance of the landscaping which will have to be taken out. She suggested that possibly some of that landscaping could be relocated and incorporated into the wetland. Ms. Fiorillo also suggested incorporating a rain garden that filters into the stone trench.

Mr. Miller stated that he is not sure that he agrees that the filter strip is essentially a wetland. He presented some data on filter strips and stated that they are usually used in agricultural situations. He mentioned that he liked the green space and water garden ideas. He made mention of the Storm Water Center at UNH. They are evaluating and testing a technology for storm water treatment. They have about a year and a half of data. He shared with the Commission, information about the data on gravel wetlands. Mr. Britz asked if a gravel wetland would be similar to what is being proposed. Mr. Miller said that what he is talking about is more of a basin than a slope. Mr. Miller pointed out that filter strips have not been evaluated at UNH so it is not an apples to apples comparison. Mr. Moulton stated that the difficulty in doing a gravel wetland is the elevation. He said that he does not think the proposed area has enough space physically or will provide enough volume to do a gravel wetland. Mr. Britz asked that if the slope was reduced a little bit it might it reduce the speed of the flow. Mr. Moulton stated that the slope is already pretty shallow, less than 1 percent.

Ms. Maher pointed out an area of 4-8 feet where the vegetative filter strip would be located and the edge of the pavement. She asked if anything would be put in that area. Mr. Moulton mentioned it would be a grass area. Ms. Maher said she would prefer it not be mowed.

Chairman Cormier asked Ms. Maher if she would summarize her suggestions. She said she would like to see the open area from the edge of the pavement to the edge of the building filled with wetland species. Chairman Cormier asked if the client was okay with that. Mr. Moulton said yes. Mr. Britz asked if they could stipulate that monitoring be in place to control swale and phragmites. Ms. Maher thought that was a good idea. She felt they should be talking about disposal of phragmites. Ms. Maher mentioned that the removal of phragmites must be done with caution so as not to impede on the City Yard. She would like to see them removed in black plastic bags. Since it is a relatively small area, she felt it was not hard to do. Ms. Fiorillo stated that it will be an uphill battle because they will be disturbing the soils. They plan to plant the area thickly to try to keep the phragmites out of the area the best they can.

Chairman Cormier asked if they had a consensus on the roof water. Ms. Fiorillo said that it was her understanding that they wanted the roof water separated from the pavement runoff. Mr. Moulton said he did not see a problem with separating that out. Mr. Miller asked, in terms of the vegetative strip, by removing the roof run off, would it increase the effectiveness of the vegetative strip. Mr. Moulton replied that when you reduce the volume of water it will increase the effectiveness of the filter strip.

Chairman Cormier asked for clarification on the bagging of phragmites. Ms. Maher stated that she would like to put that in as a stipulation. Chairman Cormier asked if the client was willing to do that. Mr. Moulton answered yes. Chairman Cormier then asked if there was consensus on the non mowing section. The Commissioners were in agreement. Chairman Cormier asked that with all of the suggestions, were they improving the storm water run off. Mr. Moulton felt they were. Ms. McMillan said she would like to add the rain garden. Ms. Fiorillo mentioned that they did something similar at Gerber Dental and didn't feel the cost would be too significant. Ms. Maher asked if a particular tree on the site plan would be lost. Mr. Weeks said they would try to save it if at all possible. Mr. Miller asked if it made sense to have the roof water go into the rain garden. Mr. Britz replied probably not all of it. Ms. Fiorillo stated that the remainder of it would have to go to the back of the property.

Ms. Maher said that this was a great place to trial these things, on an already disturbed site. Chairman Cormier felt they made some good suggestions. He asked if they were ready to vote on the proposal.

Mr. Wazlaw stated that due to his late arrival, he would like to yield his vote to one of the alternates. Alternate Horrigan was voting in place of Ms. Powers who was not in attendance so Mr. Wazlaw said he would abstain.

Chairman Cormier asked for a motion. Ms.Tanner made a motion to recommend approval of this wetlands permit to the state with the following stipulations:

1. Separate drainage of roof water from other storm water will be employed with at least part of the roof drainage to be used for irrigation of native landscaping and remainder outleting beyond storm water treatment area.

- 2. In landscaped areas outside of storm water drainage area, the applicant shall install native wetlands vegetation and where possible employ the use of a rain garden.
- 3. Before site disturbance, the applicant shall remove and bag phragmites in black plastic and dispose of in appropriate manner in order to eliminate the spreading of invasive species.

The motion was seconded by Ms. McMillan. After no discussion, the motion passed with six in favor and one abstention.

\*

#### II. CONDITIONAL USE PERMIT

A. 200 West Road Assessor May 267 Lot 22 Micronics Realty Trust, owner

Chairman Cormier moved to the Conditional Use Permit. Ms. Fiorillo stated that she had received a memo with comments on the Special Use permit application and she presented a letter in response to those comments. She said it would key back into the changes that they made in the revised plans. Ms. Fiorillo pointed out that they did provide as part of the Conditional Use Permit application, their wetland functions and values assessment and discussion regarding the impact prior to the site plan changes. They also looked at the wetlands in terms of functions and values by using the Army Corps of Engineers methodology. She stated that the wetlands on the site are not high functioning, although they are providing some storm water and habitat functions. She feels that by providing this vegetative filter strip, they are somewhat mimicking what the wetland is currently doing but doing it better by getting rid of and then controlling phragmites so that the plant vegetative can provide better habitat quality, storm water treatment, and filtration.

Mr. Moulton mentioned that the stipulations in the first application should be applied to the second application as well. Chairman Cormier agreed as did Ms. Maher.

Ms. Fiorillo pointed out the four criteria for the Conditional Use Permit. She stated that it is reasonably suited to the site since it is in the industrial area and has recently been disturbed, there is no adverse impact as it is in a previous altered and previously disturbed site, they are replacing with natural vegetation and it is a reasonable alternative because the growing business will be able to expand and maintain their place in the market.

Chairman Cormier asked if there were additional questions. Ms. McMillan asked a question in regards to a handout (page 2, last paragraph) where a line was missing from the document. Ms. Fiorillo said the completed line should read, "contains provisions for handling reports of the city so that a record can be maintained of the wetlands."

Ms. McMillan asked if they have a maintenance plan. Mr. Moulton said that many times during the site review process, he was required by the Planning Board to provide technical review. He stated a program to monitor invasive species would be important. Ms. McMillan asked about the guidelines

for the no mow policy. Mr. Moulton said it should be part of the maintenance document in order to maintain it properly as a no mow area.

Chairman Cormier asked if there were anymore questions. Mr. Horrigan asked for clarification about activities assuring the proper functions. He had a concern that a maintaining situation could wipe out all of the native species. Mr. Britz thought that would be a good stipulation to add.

Ms. McMillan asked if the Planning Board would have a problem with this. Mr. Britz answered no but advised her to determine how she would like the recommendation to read. He said that the Planning Board usually like monitoring or recording over time. Mr. Britz advised the Commissioners to clarify how they would like the stipulation to read. The Commissioners agreed on the following stipulation:

"The applicant shall report annually to the Department of Public Works the condition of the storm water treatment system including any monitoring of invasive species and including the maintenance of a no mow policy of the native plants in the treatment area."

Ms. Maher asked if there would be an on site engineer. Mr. Moulton replied yes.

Mr. Miller asked how the area on the back side of the building would be treated. Mr. Moulton replied that it would be graded sharply. Other than that, they hadn't planned on doing anything in that area. Mr. Moulton suggested that they could plant a wetland seed mix in that area. Mr. Miller said they should at least do that. The Commissioners added another stipulation to the proposal:

"The applicant shall apply wetland seed mix in the disturbed areas behind the new addition."

The Commissioners reviewed all of the stipulations:

- 1. Separate drainage of roof water from other storm water will be employed with at least part of the roof drainage to be used for irrigation of native landscaping and remainder outleting beyond storm water treatment area.
- 2. In landscaped areas outside of storm water drainage area, the applicant shall install native wetlands vegetation and where possible employ the use of a rain garden.
- 3. Before site disturbance, the applicant shall remove and bag phragmites in black plastic and dispose of in appropriate manner in order to eliminate the spreading of invasive species.
- 4. The applicant shall report annually to the Department of Public Works the condition of the storm water treatment system including any monitoring of invasive species and including the maintenance of a no mow policy of the native plants in the treatment area.
- 5. The applicant shall apply wetland seed mix in the disturbed areas behind the new addition.

Chairman Cormier asked for a motion. Ms. Tanner made a motion that they recommend approval of the Conditional Use Permit with the stipulations discussed. It was seconded by Mr. Miller. After no discussion, six voted in favor of the permit with one abstention.

### II. OTHER BUSINESS

Mr. Britz informed the Commissioners that Mark West was hoping to report back to the Commission in August.

## IV. ADJOURNMENT

Ms. Tanner made a motion to adjourn. It was seconded by Ms. McMillan. All voted in favor. The meeting was adjourned at 4:45 p.m.

Respectfully submitted,

Liz Good Conservation Commission Secretary

These minutes were approved at the Conservation Commission meeting on September 13, 2006.