I. OPENING

CALL TO ORDER: The Environmental Advisory Council meeting of Lower Saucon Township Council was called to order on Tuesday, September 5, at 7:04 P.M., at 3700 Old Philadelphia Pike, Bethlehem, PA, with Tom Maxfield, Chairman, presiding.

ROLL CALL: Present – Tom Maxfield - Chairman, Sandra Yerger, Hazem Hijazi, Laura Ray, Allan Johnson and Glenn Clouser.

Absent - Rett Oren, Michaelann Berger, Ted Beardsley, Tom Conlon, Rick Tralies, and Mike McKenna.

PLEDGE OF ALLEGIANCE

II. NEW BUSINESS

A. ALLIANCE FOR SUSTAINABLE COMMUNITIES – JORIS ROSSE

Mr. Maxfield introduced Mr. Rosse and Joann Jones from Alliance for Sustainable Communities. Mr. Rosse said this is a proposed energy center that they have been working on since March 2006. The Lehigh Valley needs to help us all survive the rapid breakdown of the global ecology. The climate instability caused by excess burning our fossil fuels has set in motion huge changes that are most visible, especially in the North Pole and Antarctica, where hundreds of millions of acres of sea ice have melted in a matter of days. The conclusion is these changes are not in the works, and there's no plan to deal with the consequences. They are proposing that local communities do something like this. This would be something like an agricultural extension service, but big enough to cope with the situation of converting the Lehigh Valley to be self sufficient in energy use. The energy has to be of a non-polluting quality – no carbon dioxide generation. That's a tall order, but it is doable. The country of Sweden has announced by 2020 the entire nation will be self sufficient in energy. Holland is building the dikes higher, they are getting ready. It's in the works and they are spending billions of dollars to get ready. The United States is not doing anything, but we each have to be doing things. The three Mayor's recently announced that they are committed to energy efficiency and climate stability. This energy center is a theoretical site and it might be on the South side of Bethlehem. The gambling people said they are willing to cooperate with some scheme like this in their own buildings, and possibly on the remaining part of the site that hasn't been committed yet. An eco complex, part of Rutgers University, showed the one acre greenhouse that they use as a start up for local businesses that want to start agricultural under cover on a year round basis. It's successful and running. It's a very experimental situation. They have a composting system, aqua culture, hydroponics, all kinds of interesting things. We need something like this in the Lehigh Valley to show local people already involved in agriculture or new businesses want to start up, what all can be done in one of these greenhouses. In addition to the greenhouse, there will be some land on a small scale to grow your own food. Talking about RR tracks, we need to cut down in driving cars and use high speed commuter trains. There will be a trolley system, railroad system, trees, solar rooms to capture the heat, green roofs – different principals that can be in a mix of energy saving concepts and approaches. The cost savings are to be the main financial driving force behind all of this and the desire to be alive ten or twenty years after the main impact of the global heating takes hold. If we do good enough and are role modeling this as successful, other areas and regions will be doing the same thing. Some places like Wisconsin and San Francisco have decided years ago already to start going down this route.

Mr. Hijazi said should this be proposed to developers instead of the township? Mr. Rosse said there has to be codes and ordinances in place so that when the developers come, they know what to do.

This is the first time this model has been shown to anybody. Mr. Rosse said the windmills might not be suitable here, but they might be suitable for South Mountain. It would be great if we could have something like this.

Mr. Rosse read the list of principals. They need to have enough of these features to make the building self sufficient from an energy standpoint. You might only need five or six of these things to do that:

Super Installation of these structures
Triple Glazing
Thermal Panes
Building Eyebrows
Exterior Shaded
Sealed Operable Parabolic Bounce Light Shades
Tall Shade Trees in Strategic Locations - Reduce Heat Load and Provide Wind Breaks

Mr. Beardsley arrived. The time was 7:20 PM.

Photovoltaic Shingles or Panels
Wind Power
Hydro Power
Solar Heating
Geo Thermal Horizontal and Vertical Heat Pumps
Greenhouses
Growing vines along the sides of the buildings at some locations as they insulate and add bird habitat, bug habitat
Energy Efficient Appliances
Efficiency Pipe Insulation
Effective separating of hot and cold flows within the building
Southeast Facings for best use of solar
On Site Waste Water Treatment
Compost Toilets
Composting Sewage
Ventilation for Radon and minimized gassing of building materials
Minimize Building Edge
Green Roofs help because they insulate the building
Task Lighting instead of putting lights all over the building, there would be one here and one here, just enough lights to get around
Bounce Lighting – Less light intensity
Rain Water Harvesting – Large tanks of 20,000 gallons that hold rain water for gardening, and so forth
The roofs should be white or very light colored to reflect the light
Light Ceilings

They recommend a lot of changes to transportation as gas will go up to $10 to $20 a gallon. So we can spend this money to get ready for what we need to do instead of making Route 22 wider and having more lanes. Mrs. Yerger said PennDOT just released its figures, which is $2-1/2 billion to

bring all the roads up to standard in Pennsylvania alone. They are trying to figure out how to pay for it – raising gas tax, raising tolls, etc.

Mr. Rosse said they'd love to have the EAC's input. They need to start this now. Ten years from now is too late. The quicker they do it, the better.

Mr. Beardsley asked about geothermal heating. You are taking the heat out of the earth. What is the long term effect of that on the environment? Are we not going to be able to grow crops because of that? Mr. Rosse said there are bound to be some changes. When you go down deep enough, it's very hot down there. There's a lot of molten rock and metals down there. There will be an effect if the higher temperatures stay higher for prolonged periods. For sewage plants, they are talking about Stage 1, 2 and 3. Most plants do Stage 1 and 2- very few do the 3rd stage. Some places do 3rd stage like in Florida, where the ground water is very limited. In those areas they do water treatment and that is recycled right back to the consumers for general public water. If it's in your mind that it went down the toilet and now I'm drinking it, you can go to the store and pay $5 a gallon for drinking water which may be made out of the same stuff anyway. It's cleaner and healthier water than you buy anyway.

Ms. Jones said the water is causing the problem now as the ice caps are melting. Talking about the model, she said in the buildings there will be manufacturing for new technology business. There will be research and greenhouses. The greenhouses at Rutgers run on landfill gas. We have the space available. We can attract existing groups and then we would have those things available to make the Lehigh Valley sustainable plus it would be generating some business. It is not going to be cost effective to be commuting back and forth to Philadelphia and New York, so what kind of jobs can we provide for people here? It's our job to figure out that we need to be self sufficient. There are conference centers to help plumbers and contractors to learn how to use this new technology. By having the center as not only a model, but providing local people the opportunity to come up to speed on the new technology, we're creating a whole new economy here. We need to do this now while energy costs are still moderate.

Mr. Rosse said their meetings are always open to anyone.

II. DEVELOPER ITEMS

A. DRAVITZ MAJOR SUBDIVISON – MAJOR SUB 02-06 RESUBMISSION

Mr. Maxfield said we've seen this one before. They did more of a cluster. EAC looked at the map and discussed many items. The EAC came up with the following recommendations:

1. Reduce cart way width to 24 feet as its only four (4) units
2. Provide more information on contiguous properties for open space for future connections
3. Explore reducing lot size to make it a true cluster
4. Place an easement on open space as well as deed restriction
5. Clarify multi party easement
6. The EAC is pleased with the public access - please clarify the use
7. Review of easement terms concerning use of open space

MOTION BY: Mrs. Yerger moved for approval of the above recommendations.
SECOND BY: Mr. Hijazi
ROLL CALL: All in Favor: Yes
Opposed: None

B. MCCLOSKEY AVENUE MINOR – 03-05 REVISED PLANS

Mr. Maxfield said the history of this – there was a street that the township vacated and they basically combined lots and they wanted to do a subdivision there of two lots. The Township was earlier recommended on the road a cul-de-sac and it was going to cut into the slope. It pushed them over the border in the area where they would need a variance. They revisited it at Council level and said forget the big turn-around. It would push them over the impervious. They made some recommendations before and they were that storm water be re-looked at. From an environmental perspective, it's gotten better and not worse.

EAC said there are no recommendations or comments at this time.

C. REDINGTON ESTATES

Mr. Maxfield said this is a nine (9) lot proposed subdivision for Redington Road. The really important part of this that is marked open space has some wooded areas, but the important part is that there are seven (7) of the units that are proposed for community septic system and two (2) proposed for regular system - the reason being that the seven lots to the east are on top of old PennDOT fill area. They took soil from there to do I78 and put stuff there. It looks like construction debris all over the place. DEP won't allow them to put septic systems in the seven sites. Mrs. Yerger said this is not a true cluster, so it kicks in to the old ordinances.

Mrs. Yerger said they have a copy of HEA's August 9 letter. On page 1, comment 4, it says "the property may have been substantially altered during the earthmoving operations associated with cutting and filling for I78 and Route 33. The soil configurations for "on lot sewer facilities, building foundations, and storm water recharge" may be substantially, adversely affected by any cutting or filling that may have been done. Proper soil investigation for all these proposed improvements should be provided." She said we need to reinforce what Hanover has been saying.

Mr. Maxfield said that he's remembering for community septic system, Council kept upping the numbers. It was something like 80 units before it could have a community septic system. He doesn't know what we would do if DEP said it was okay to do. In the HEA letter, comment 9, on page 4, "Also, the designer should note that ordinance section 130-14K limits the flow application t one (1) EDU per three (3) acres if the primary or backup area drain fields are proposed to be elevated sand mounds or elevated sand mound trenches. This would require an "open space" lot area of 21 acres for seven (7) homes, only 12.62 acres are proposed." He said it sounds like they are a little short on the open space for what they are proposing. Mrs. Yerger said we need to make sure the open space calculations are correct. Mr. Maxfield said when you are talking about accessing the open space, it's like a series of bowling alleys all lined up. The design isn't contusive to the area. Mr. Johnson said a big development is going to go in across the street and going to be dedicating a lot of open space.

Mrs. Yerger said on page 5 of the letter from HEA, "The plan proposes to concentrate storm water toward the steep slopes of the open space in swales along the shared boundaries of Lot 7/8, Lots 5/6, Lots ¾ and Lots 2/3. Similarly a swale is proposed on Lot 9 near Route 78. Erosion of the open space is are result of these concentrations is not addressed and no drainage easements have been provided on the lots or within the open space." That's not open space. They need to address that issue also. Mr. Maxfield said we don't know if it is a swale.

Mrs. Yerger said on page 2, No. 7, they are talking about just covering it with topsoil over the existing gravel - "If topsoil is to be placed over the existing gravel and other Route 78 construction waste, this should be noted on the plans. While the construction waste covers a large portion of the entire track, the areas containing only gravel should be noted on the Site Analysis Plan. The

Township should determine whether a plan note or covenant is necessary with regard to proposing homes, sewage facilities, wells and plans on top of the construction waste material." Maybe if this does fly, we need to be environmentally responsible enough to the potential future owners to make sure they know what's underneath them. Mr. Maxfield said a fill like that, we don't know what's there and they probably don't know what's there. He said they should provide us documentation and do environmental testing on the site.

Mr. Maxfield said the recommendations are as follows:

1. Consider interlocking open space areas, recreation spaces, and the rural character with the proposed development across the street.
2. Address issue of drainage into open space – Hanover comment – 18-G from their August 9 letter and the associated drainage easements.
3. Swales should not be the access to the open space
4. Open space should be eased and maintenance provided for
5. Maintain existing street trees as much as possible. Select out the good trees and save them.
6. Community septic system should be on private property and should be maintained by the people that it serves
7. Provide documentation from PennDOT on the fill, if possible. We have concerns about the water quality for future homeowners, and do environmental testing of the site for pollutants.

MOTION BY: Mr. Beardsley moved for approval of the above recommendations.
SECOND BY: Mr. Hijazi
ROLL CALL: All in Favor: Yes
Opposed: None

D. <u>PENN'S VIEW</u>

Mrs. Yerger said they did some changes on Penn's View. There is no map. Boucher & James letter for August 9, 2006, two things jumped out at her. One was No. 4, Environmental Protection standards. The areas of slope graded 25% is proposed to be disturbed, however, the amount in the total impact area is 0. Apparently there are some calculations that are not jiving here on the amount of environmentally sensitive areas that are being encroached upon. The protective fencing and the septic system are all within the wooded areas which they aren't supposed to be on Lot 4. Lot 4 on the plans has a septic area as well as tree protection and testing, within the wooded areas. Mr. Maxfield said that is on top of the recommendations made before that they have incorporated like the 100% infiltration and things like that.

Recommendations:

1. We echo the recommendation that they check the natural resource calculations per Boucher & James letter of August 9, No. 4, item A.
2. Lot 4 encroachment into wooded areas should be eliminated.

MOTION BY: Mrs. Yerger moved for above recommendations.
SECOND BY: Mr. Johnson
ROLL CALL: All in Favor: Yes
Opposed: None

E. HIDDEN MEADOWS ESTATES MAJOR SUBDIVISION

Mr. Maxfield said he's going to rely on Allan for recommendations. He walked the site. There were already some recommendations made. We had questions on proximity of certain facilities to the wetlands and had discussed we found some infiltration trenches. Mr. Maxfield was reading on the Boucher & James letter, page 2, 1B, it's talking about the street trees. He's remembering it was a year or two ago that they removed two big oaks or ashes. He's considering the site is also elevated and those houses will be visible from the road and we should recommend they do street tree planting there. The waiver not be granted for that. We shouldn't give up the ability to buffer whatever possible. Mr. Johnson said part of the frontage on Lower Saucon Road is heavily wooded. While he was there today, they had it marked on the street where the access road will be and that looked pretty good to him. Down at the southern end of the property, it's not so steep as on the north side, so the location of the access road looks pretty good to him. There's a lot of big trees in the southern area close to the road. As you go east from there, the number of big trees increases. He's talking trees that are 12" to 18" in diameter. They are not very close together like in a forest. Some are in a tree line, some are scattered around. As you get closer to the southern border of the property, large trees become denser. At that point, it would be considered woodland. All those trees should be saved.

Mr. Johnson said the southern area seems to be an area that was not a regularly planted field, so that would indicate that something having to do with that area that's not used normally for planting. That should be investigated. As little grading and disturbance of the soil as possible should be done as to save the woodland characteristics of the area, especially along the southern part. The stream you are talking about – that actually flows through this property on the southern border on the property. He didn't walk the southern boundary as he couldn't get to it. It was pretty dense undergrowth and he didn't want to fight his way through it. We should go up there and walk the southern border to see exactly what's over there as far as environmental type resources that we might want to save. There's a north – south line across the property which may or may not be an old rock line or something and then westward of that line the property slopes much more severely. That rock line is probably 150 – 200 feet from the road. Mr. Maxfield said is it a farmer fence row or something? Mr. Johnson said the vegetation is pretty deep there and it's hard to see. It's a definite change in the slope.

The recommendations are as follows:

1. Recommend no variance for the street trees. They should be there for visual buffering and for this elevated site as needed.
2. Retain as much of the woodlands/major trees on the southern part of the site. Major trees should be notated on the plan. Disturbance in this area should be severely limited
3. Ask them to provide more information about what kind of rock, fence row in the interior of the site if not already notated on plans.
4. Reserve the right for future recommendations pursuant to site visit.

Mr. Maxfield said Mr. Tralies did some investigation after the last meeting and the wetland buffer is 25 feet, so they are outside the buffer like they should be. We thought it was 100 for wetlands, but it's 25. For the creek though, it's 100 feet.

MOTION BY: Mrs. Yerger moved for approval of the above recommendations.
SECOND BY: Mr. Johnson
ROLL CALL: All in Favor: Yes
Opposed: None

F. CHURCH HILL ESTATES

Mrs. Yerger said we reviewed it. We changed it and it should be ready to go. Mr. Maxfield said the last time this came by us, there were no comments, so we'll just say "no comments".

G. GREEN LINDEN/OBERKOTTER

Mr. Maxfield said he was told that we don't need to make any comments on this one.

H. WTVE-TV CONDITIONAL USE

Mr. Maxfield said this is a co-location on an existing tower on Sherry Hill Road. No comment on this one.

III. OLD/MISCELLANEOUS BUSINESS

A. OPEN SPACE PLAN DRAFT

Mr. Maxfield said this is a supporting document for the open space referendum. Last time they talked about it and they would discuss it a little bit more this meeting. If you have any recommendations, email them to Rick and copy everybody else. Mrs. Yerger said we need to have an open public meeting about this. So, please, please take a look at it. We can approve it at next month's meeting and then the Council can approve it and then have an open meeting in mid-October and put it all in place and let the public know about it. Mrs. Yerger said we can advertise the open space public meeting. Do we want to pick a date when we want to get this done? We would have to recommend approval. Everything would have to be done, all revisions would have to be done and have the final version here in October. There are just minor changes, nothing major.

B. COMMUNITY DAY RECAP

Mr. Beardsley will look into recycling day again and talk to Township Manager, Jack Cahalan.

C. OPEN SPACE REFERENDUM

Mr. Maxfield said we have a sign up sheet for signs. We're going to be asking some of our contributing consultants for some money to get the signs printed. We are going to do a public information flyer and send that out. We got some good responses during Community Day. November is coming up fast. He wanted to get into the beauty of the open space, just the way it makes you feel. We are going to look at a company on the internet to do the signs. We are going to have it done real soon. We want the signs up the entire month of October. Mrs. Yerger said maybe someone can hand out papers saying "pull lever number for open space". Our job now is to make people know this is an investment for their future. Mr. Beardsley said there is a radio station that might be able to put something on their station where we can answer questions. Mr. Maxfield said maybe we could look into that, it's a good idea. Any ideas, contact Tom or Sandy.

Mr. Ted Beardsley and Mr. Hazem Hijazi left. The time was 9:25 PM

D. BETHLEHEM COMMERCE CENTER – ACT 2 NOTICE OF INTENT TO REMEDIATE

Mr. Maxfield said we looked at this one before. It's part of the Bethlehem Steel site and it was a notice we got for intent to remediate from Majestic Realty. They were kind enough to come and speak to Township and staff. They are filing for this intent to remediate, but we're not really sure of the status of the property at this point in time. The entire property being sold changed hands a few times, and we're not really sure, and Majestic really isn't sure of their continued status on the site. They are taking the steps to remediate the property, or at least put in plans to DEP, to remediate the property in hopes that it will just move ahead. They are not really sure. It's a chunk of land behind Connectiv and has some road they can access the site from Ringhoffer Road. We had earlier agreements that the road wasn't to be used at all, and all access in the future would be internal. They were going to do big box warehousing and major coverage of the site with concrete and pads to put these boxes on. The drawings they saw were just big warehouses lined up. They are avoiding the stream, and are north of the stream. Their intention is for warehousing.

E. LEHIGH VALLEY WATERSHED CONF. SPONSORSHIP

Mr. Maxfield said there was a letter from Kate Brandis. Are they asking for the township to help sponsor it? Mrs. Yerger said they are asking for $100, $250, $500 or $1,000. For $500, we get listings and catalogs. If you want to go to the conference, send it in to Leslie and ask her to register you. It's $25 to go.

MOTION BY: Mrs. Yerger moved that the township make a $500 contribution to the LV Watershed Conf. Sponsorship in the EAC's name.
SECOND BY: Mr. Clouser
ROLL CALL: All in Favor: Yes
Opposed: None

F. PREPARATION OF GENERAL MAINTENANCE PACKAGE/HIDDEN MEADOWS ESTATES 2

Mr. Maxfield said this is a suggestion that we made as an EAC and they are just giving it a general maintenance kind of name. We were talking about putting together a package that we could give to homeowners with data on how to care for streams, how to care for woodlands, how to not to touch things, and then we were going to put together a data base so that whatever property it applied to, we could pull from and say okay, this one has woods, this one has a stream. Mrs. Yerger said we already have the Homeowner's Stream, so that can be included in it. Mr. Maxfield said the data base would be specific enough so you could tailor it to the specific site. For instance, we talked about Hidden Meadows, they've got a stream, they'd got woodlands, they've got an easement on the property, they've got wetlands, what to do, what not to do - just some general ecological principals. If you have ideas, give them to Tom or Sandy. It would be an environmental welcoming package to your easement. This is for the people buying the property. We hand this out to everyone who enters into some type of preservation agreement. Mrs. Yerger said it should go to every homeowner. If there's any kind of development that has either some kind of preserved property or natural features that are close, adjacent or are on their property, next to an NRI area, that would be appropriate. We can make it available to people who are coming into a property like that in a subdivision and start thinking about doing targeted areas. When they get their occupancy permit, then just hand it to them. There are plenty of people now who should be getting one of these. Mrs. Yerger will look for other publications to add to the packet. We can even put a piece in there as what the EAC is and what the EAC does. We'll call it "environmental package for homeowners". Also, we can put source water protection information into it and lists a couple of resources.

G. REVIEW AND APPROVAL OF MAY 2, 2006 AND AUGUST 1, 2006 MINUTES

Mrs. Yerger said the name of the development for August 1, 2006 minutes – page 2 of 11, section 1, Redington Estates at Lower Saucon, add (Jack Mandelbaum). Mr. Johnson said page 2, line 13, add unnamed "creek" before the period. Page 6, DCR should be DCNR.

MOTION BY: Mr. Johnson moved for approval of the May 2 and August 1, 2006 minutes, with corrections.
SECOND BY: Mrs. Yerger
ROLL CALL: All in Favor: Yes
Opposed: None

IV. UPDATES/REPORT

A. HELLERTOWN REPORT

Nothing to report

VI. ADJOURNMENT

MOTION BY: Mrs. Yerger moved to adjourn. The time was 9:50 PM.
SECOND BY: Mr. Johnson
ROLL CALL: All in Favor: Yes
Opposed: None