MINUTES OF THE PUBLIC HEARING SUDBURY BOARD OF APPEALS

Tuesday, October 18, 2011

The Board consisted of:

Elizabeth T. Quirk, Chair; Benjamin D. Stevenson, Clerk; Jonathan G. Gossels; Jeffrey P. Klofft; Jonathan F.X. O'Brien; and Stephen A. Garanin, Associate

Also:

Jody Kablack, Director of Planning and Community Development Paul Haverty, Attorney, Regnante, Sterio & Osborne LLP Ed Marchant, Consultant

For the Applicant:
Bob Moss
Peter Tamm, Goulston & Storrs
Steven Schwartz, Goulston & Storrs
Bob Daylor, Tetra Tech
Glenn Dougherty, Tetra Tech
Paul McManus, Ecotech

Ms. Elizabeth Quirk, Chair of the Zoning Board of Appeals, opened the hearing and made a statement about the meeting procedure. She then read the list of documents received for the October 18, 2011 Meeting:

- 9/21/2011 Letter from Attorney Paul Haverty, Regnante, Sterio & Osborne LLP to the ZBA
- 9/29/2011 e-mail from Sudbury Resident James Gennari, 3 Patricia Road, to the ZBA
- 10/6/2011 e-mail from Jon Danielson, 37 Landham Road, to the ZBA
- 10/6/2011 Revised site development plans dated October 4, 2011
- 10/12/2011 e-mail from Sudbury Resident Peter Anderson, 113 Landham Road, to the ZBA
- 10/12/2011- Front and side building elevations, VMY Vitols Architects, Inc. dated 9/29/2011
- 10/13/11 email from Steve Garanin, ZBA member, to Jody Kablack and the ZBA
- 10/14/2011 e-mail from Sudbury Resident Josh Cheron, 30 Robert Frost Road
- 10/17/2011 Memo on Supplemental Stormwater Information from Robert Daylor, Tetra Tech, to Jody Kablack
- 10/18/2011 e-mail from Sudbury Residents Paul and Kristen Bisson, 55 Highland Avenue to the ZBA
- 10/18/2011 memo from Johnson Farm Project Team to the ZBA and Jody Kablack
- 10/18/2011- memo from Jody Kablack, Director of Planning and Community Development to the ZBA
- 10/18/2011- memo from Joseph Peznola, Hancock Associates to the ZBA

Introductions were made to inform the applicant and residents about the experts hired to assist the ZBA throughout the application review process. Consultants include Ed Marchant as 40B advisor, Paul Haverty, Regnante, Sterio and Osborne LLC, serving as attorney, Fred King, Shofield Brothers of New England, as a civil and wetlands engineer, Joe Peznola, Hancock Associates, as peer review civil engineer, and Howard Muise and Don Cooke with VHB traffic review.

Ms. Quirk then asked Director of Planning and Community Development Jody Kablack to discuss her memorandum dated October 18, 2011. Ms. Kablack noted that since she had written her memo some revised materials have been submitted by the applicant, including revised elevations, site plans, a Stormwater Management Plan, and supplemental stormwater information.

She noted that consultant review fees have been submitted by the applicant in the amount of \$28,000.

Ms. Kablack said that items still lacking from the application included:

- a. Information on construction within the flood plain and filling without flood storage compensation;
- b. soils data in the locations for wastewater treatment;
- c. earth removal and fill calculations;
- d. information addressing protection of the watershed, wetlands, vernal pools, wildlife habitats and conservation areas;
- e. evidence of compliance with the MEPA requirements and determination thresholds for MEPA review:
- f. supporting information for requests for waivers from local bylaws and regulations;
- g. a determination of the applicability of Executive Order #193 of the General Laws of the Commonwealth governing the use of agricultural land from the Massachusetts Department of Food and Agriculture;
- h. a single sheet site plan showing the relationship of all proposed buildings to all adjacent properties. The distances between proposed and existing buildings should be dimensioned;
- i. a graphic presentation explaining the scale and visual relationship between existing single family homes and the proposed multifamily buildings;
- j. a narrative description explaining the anticipated degree of clearance of existing vegetation/trees along all property lines; and
- k. a list of any similarly designed apartment buildings that could be viewed by the Board for a sense of comparison to Johnson Farm.

Ms. Kablack also said that in order to assess the fiscal and traffic impact of this development the Department of Planning and Community Development requests that the ZBA require the developer to supply data from at least two other comparable rental developments, including:

- a. size and characteristics of the development;
- b. tax revenue paid by the development;
- c. number of students per site and number of students per unit;
- d. number of persons by unit size;
- e. actual traffic counts from the development;
- f. a market rate unit waiting list to show demand; and
- g. length of occupancy for units.

Ms. Kablack also recommended that the ZBA participate in a site visit of the property after it has been staked by the developer to show the locations of proposed buildings and the centerline of the road.

Joe Peznola, of Hancock Associates, then presented comments as expressed in an October 18, 2011 memo. He said that Hancock Associates had put together a request for additional information about the existing watershed. He said that it is a very large watershed that is being analyzed within their existing drainage calculations, measuring about 150 acres, including two streams on the site. Mr. Peznola would

like to see more details of the analysis in order to corroborate the applicant's findings. He is also looking for some backup information on porous pavement which is a fairly new technology and Mr. Peznola said that he would like to see some comparisons between porous pavement and other systems that are currently being used. He noted that there was a reduction in the number of parking spaces per unit which would total 1.5 spaces per unit instead of two. He said the applicant provided information for the justification using projects in Framingham and Marlborough as examples. Mr. Peznola said that there is an enormous amount of fill that would be needed for this project. He explained that the applicant would be removing topsoil and then would be bringing the ground up five, seven, or even ten feet, and with that quantity of fill he wanted to know the number of trucks anticipated for bringing in fill and the truck routes and time frame for this work. He said that a construction sequence was provided for the porous pavement however the literature from the University of New Hampshire said that the soil beneath the pavement cannot be over-compacted so he wanted to know what would be put down to prevent this overcompaction during construction as the trucks move over it. He said that more details of the construction process should be made known. The last details that should be provided have to do with available water during construction. He said that Ms. Kablack had already mentioned the soil testing that was needed. Additionally he would ask for what is the applicant's preliminary hydrogeological assessment of the receiving area of the 40,000 gallons per day for wastewater.

Ms. Quirk then asked Mr. Moss for any response to the requests and a sense of the timing for completing any reports.

Mr. Moss said that he was seeing Mr. Peznola's memo for the first time at this meeting. Bob Daylor of Tetra-Tech Rizzo, said that the applicant has information for many of the items listed including watershed, porous pavement, and fill information. He said that he could have most of the information that was requested prepared within two weeks of the meeting.

In regard to Ms. Kablack's memo, Mr. Moss said that there would be no fill in the flood plain area.

Mr. Klofft asked whether the road would be going through a flood plain area. Mr. Moss said that the road did not go through the floodplain but rather would go through a wetland area.

In regard to soils characteristics Mr. Moss said that he is very close to submitting the hydrological study to DEP and probably could have the complete report in one or two weeks. He wants to give the Board a comprehensive report to be reviewed by the Board's consultants, probably by October 28.

Earth removal and fill calculations are included in the stormwater plan and can be assembled into a report probably by October 28.

Mr. Moss said that a Notice of Intent has been filed with the Conservation Commission. A bound copy will be given to Jody Kablack in the Planning Office from Tetra Tech. The MEPA report is being filed Friday, October 21. Ms. Quirk said that given that the ZBA is waiting for several important pieces of information perhaps an overview of the wetlands issues could be given during the remainder of the hearing. Mr. Moss suggested that the Board take a look at the MEPA report to discern whether any pieces haven't been covered in there because it has much more information.

Steven Schwartz, Attorney with Goulston and Storrs, was present and could perhaps address the waiver issue and executive order which pertains to the agricultural land status. Attorney Schwartz said about the executive order with regard to the use of agricultural land, that this was discussed at the last hearing and Attorney Paul Haverty agreed, that when dealing with private agricultural land that the state's policy or

procedure is that the State will comment or not comment through MEPA process. And that is the mechanism through which that is addressed. With regard to the waivers he said that he wants to sit down with Attorney Haverty and with Ms. Kablack and go through the list. He said that the applicant was overinclusive in order to hit everything. It was not his understanding that the applicant needed to justify every waiver, but the applicant would be happy to provide more information. Ms. Quirk felt that was a good plan so that the list could be closely edited.

In regard to a plan showing the relationship of the proposed buildings to the abutting properties, he said that his landscape architects had those graphics to show at the hearing. He said that he could have copies available for distribution to the Board. The graphic shows cross sections of the project and shows how tall trees are in relation to the buildings. However, he said that he needs more guidance from the Board on what is actually wanted for visuals. Ms. Quirk said that it might be too premature to create those until the Board has further questions answered about the site. However what the Board ultimately would want is something that illustrates the impact of the buildings on the surroundings. She said the Board would want to see what the project would look like from the abutters' sides and cross-sections showing buffers and roof lines.

Mr. Klofft suggested that the applicant conduct a balloon test to show the height of the buildings.

Mr. Moss said that he would measure tree heights and building heights.

The tree clearance plan would be made available by October 28.

Mr. Moss suggested that the Board visit 900 Madison Place (or 640 Boston Turnpike) in Shrewsbury, which is a site that is most similar to what he is proposing for Sudbury in regard to materials, building height, interiors, windows, and landscaping. He said that the Shrewsbury project has ninety-six units with forty-eight one bedroom units and forty-eight two-bedroom units.

Ms. Quirk asked Mr. Moss to explain whether or not he had data on potential impacts to area schools. Mr. Moss said that he would gather school district data from comparable developments. Acton, Bedford, Wayland, and Lexington were discussed as towns having the most similar school districts to Sudbury.

Mr. Moss said that a report on traffic counts could be available by November 15.

Ms. Kablack suggested that the Board conduct a site visit to 189 Landham Road and said that she would facilitate setting it up. Mr. Moss said that the parcel would be staked to mark the location of proposed buildings. Mr. Moss requested that he be given at least forty-eight hours' notice of any site walk for official business so that he knows who is visiting the site and he could perhaps send an engineer to guide the tour and answer questions.

Ms. Quirk then recapped the materials that would be discussed throughout the coming months, including the physical constraints of the site, which include hydrology, stormwater, and wetlands and uplands resource areas. She said that the Board should have that information in hand for the next hearing.

After that she said that the Board would review building massing, setbacks, site plan, and fire protection and access review. Other site impacts to review after that would be traffic and fiscal impact for schools. Following that would be design and landscaping and then affordability compliance, local preference and the lottery process. Lastly there would be discussion on mitigation.

Ms. Quirk then steered the discussion to stormwater. Mr. Moss said that there had not been many changes to the original plan, but instead there were a few adjustments due to the stormwater management design and wetlands filing.

Paul McManus, wetlands scientist and principal with Eco Tech in Worcester. He reported that in 2008 EcoTech conducted a survey of the property and the wetlands were delineated and instrument survey plans were filed in 2009 with the Sudbury Conservation Commission, through the Abbreviated Notice of Resource Area Delineation (ANRAD). The purpose of ANRAD is to seek formal review of the wetland delineation and designation under both the Sudbury wetlands bylaws and the State's wetlands protections regulations. Essentially this pins down the wetlands jurisdiction on the property. The outcome of this study is to discern the Order of Resource Area Delineation (ORAD). ORAD references specific plans and lays out the wetlands flags. The ZBA, therefore, should have those ORAD wetlands boundaries before them in the plans. He then described on a plan the various features of what was found on the property. The dominant feature on the site is a perennial stream that flows year-round. An intermittent stream joins it. There are old cart paths that traverse the site and there are pipes that guide that intermittent stream. Vegetated wetlands are situated throughout. The Sudbury Valley Trustees property is at the rear of the parcel and part of it has been surveyed. He said that there were several vernal pools within those areas. There is also a 200 foot riverfront area that emanates off of both perennial streams. The majority of the site consists of relatively young second growth forest with pines, oaks, maples, and sandy soil. The project is mostly congregated in the front of the property.

Fred King, the ZBA's consultant with Schofield Brothers, had not had time to review the information yet but said that since the wetlands delineation had gone through the ANRAD process he would be confirming that the plans match.

He questioned whether the filing with the Conservation Commission mentions conformance with the bylaws. Mr. McManus said that the filing does discuss some of the wetlands jurisdictional issues, however only under the state regulations.

Mr. McManus then described the layout of the development. He noted the perennial stream, cart paths, and pointed out culverts. He said that there is a road proposed from Landham Road across from the Brookside Farm subdivision. He said that the road crosses a vegetated wetland and a very small area that is referred to as islands, not uplands. The roadway is designed to falls on top of an existing cart road that has been filled with soil previously. It will need more fill as it is currently a wetland. Much of the proposed area of wetlands alteration is already somewhat filled. Proposed wetlands impacts are to border the vegetated wetlands and the riverfront area which would be altered and converted to road. He pointed out the loop road and parking around the proposed buildings. He then showed where the wetlands replication area would be located.

Mr. Klofft asked how a site is selected. Mr. McManus said that the area proposed for alteration is along the stream. He said it was in a localized watershed. What is there now is young second growth trees and woods with low elevations. Mr. Klofft wanted to know whether the woods that had been used for screening purposes and if they are turned into wetlands would the trees die. Mr. McManus said that a number of the trees would be removed and replaced. He said new red maples would be added which is a species similar to what is found in swamps in the area. In answer to Mr. Klofft's question he said that some parts of the area would be opened up.

Ms. Quirk wanted to know whether there would be any impact off-site when the wetlands were altered. Mr. McManus said that he did not anticipate any impacts. There would be a box culvert and pipes under the road. The plan complies with state and federal government regulations.

Mr. O'Brien asked about the farmer's ditch in-fill for the interior loop area. He asked whether the fill would create a drastic change for the area. Mr. McManus said that it would still be a wetland. He said that the ditch was put in years ago and was probably deeper than it is today but its intent was to dry out the wetland for farming. Mr. O'Brien then pointed out that the maps supplied by the developer showed an endangered species habitat immediately adjacent to the proposed site and asked whether any of the studies had identified any National Heritage Endangered Species at the site, and second, how would development on the site impact protected species that are on properties adjacent to the developed site. Mr. McManus said that the changes should not impact them because the wetlands area is proposed to be moving from an upland to a wetland area and would not be developed. He said that the work is being done outside of the Heritage site. He did not recall what species were known to be there. He said that because they are working outside of the heritage area the regulatory Presumption is that under the Massachusetts Protection Act and Massachusetts Endangered Species Act is that the project would have no impact. He said that those habitat areas were mapped thoroughly.

Mr. Klofft asked about the farmers drainage ditch that is essentially moving water out of area. If that had been cut off it would have continued to fill and the wetlands could have expanded. He wanted to know if it could expand into areas where buildings are proposed. Mr. McManus said perhaps a little.

Ms. Quirk then explained the Conservation Commission's review process, including review of the Notice of Intent. She said that the Commission review would be a parallel process to the ZBA's review. She said that the ZBA would have to decide whether to grant a waiver of Sudbury Conservation bylaws which are more restrictive than the State's regulations. The Conservation Commission will speak to the ZBA about issues relating to the state environmental protection laws. She said under the law the ZBA does not have a lot of control over wetlands impacts however the Conservation Commission does have more.

Conservation Coordinator Debbie Dineen requested that the ZBA look at buffer zone, or the adjacent upland resource area. Under the Notice of Intent under the Wetlands Protection Act the Conservation Commission will be looking at the 100 foot buffer zone and at whether or not work within that buffer zone will impact the wetlands. What the ZBA has to work on for waivers of the local wetlands bylaw is that the Buffer zone itself is being altered. So what are the values and functions of that buffer zone in and of itself. She used as an example the wetlands replication area that they are proposing to install in an uplands resource area. To do so would essentially destroy another resource under the local wetlands bylaw. She then talked about the value of the interface between the uplands resource area and the wetlands where there is the most diversity and ecological functions. However the Conservation Commission is being told that they can only look at the wetlands areas alone and the buffer to the extent that they may alter them.

Ms. Dineen said, therefore, that the ZBA will have jurisdiction into buffer area. Ms. Dineen asked that the applicant provide an overlay with the buffer zone marked so that everyone can see what is being planned within the buffer zone. The upland resource area is important. The buffer zone plays a large role in protecting the water supply. She then suggested that the ZBA hold a working session with members of the Conservation Commission and their consultant.

Ms. Quirk then suggested that further discussion of wetlands will be held until the Board's consultants have had an opportunity to study the material further and provide reports. She said that if anyone has questions they could still be addressed at the meeting, however.

Bob Daylor then led an explanation of the hydrology of the property and how the site worked in regard to stormwater movement. The surface hydrology has water infiltrating into ground water and flows into the wetlands and that flow added to the base flow of the streams is what keeps the streams perennial. The flow is from the south to the north to Hop Brook. There is a system of culverts that allows some of the water to cross Coolidge Lane and wetlands flank the streams.

Mr. Daylor said that the design for drainage at the site is complete use of porous pavement which differs from the traditional paving system that uses catch basins and pipes. With porous pavement the water immediately infiltrates into the road which has a different level of porosity than regular soils so it captures all of the rainfall that lands on the site. He said that his firm had studied numerous case studies and is modeling this plan off of a case study created through the University of New Hampshire's test at a large surface-area location at a Loews parking lot.

Mr. Daylor then provided a detailed explanation on how porous pavement works and how their drainage calculations and studies of the soils determined feasibility for this site. He then noted that from the data gathered Eco Tech was able to hypothesize about the impacts to the site and the wildlife and vegetation in the area. He also predicted that the use of porous pavement would have a significant reduction in downstream impacts.

Mr. Klofft asked about whether the pavement testing area at the Loews parking lot was built upon fill or existing grade and whether the existing conditions were similar to the Johnson Farm site. Mr. Daylor said that it was built largely upon fill.

Ms. Quirk then asked whether anyone from the public wished to speak. She reminded the audience that if there was not time to answer all questions at this hearing there would be future hearings at which residents would be given an opportunity to speak. And, as always, any questions or comments would be welcomed by the ZBA in writing at any time either by mail or e-mail, or letters could also be dropped off at the Office of Planning and Community Development in the Flynn Building.

Matt Murphy, 111 Horse Pond Road, asked who had oversight into the accuracy of the wetlands delineation. Debbie Dineen said that the Conservation Commission had a great deal of oversight regarding the wetlands delineation. She said that the Conservation Commission has personally spent two or three weeks at the site checking the soils. They have hired a wetlands consultant who is very thorough in checking every wetlands flag on the site and she is comfortable with the wetland line. She said that the the project is at the edge of the allowable boundaries, but it does comply with regulations. She also noted that the measurements are good for three years.

Joan Karol, 20 Stagecoach Drive, said that she is an abutter to the wetlands replication area. She said that she had concerns about water in the area of replication and the disturbed area. She asked that the ZBA be sensitive to abutters when making any decision. She said that the applicant would be taking an area that is currently just fine and would be messing around with it. She reported that there are big turtles in the area. She said that alterations to that area make her extremely nervous and she respectfully requests that other areas be explored. She does not want water ending up in her yard.

Brian Cain, 33 Victoria Road, asked questions about the buffer zone. There have not been many studies done on the impact to the buffer zone and he asked what will happen with runoff outside the property boundaries. For example he referenced past flooding at Brookside Farm during the development process there. Ms. Quirk said that consultant Fred King should be able to report on his findings about impacts within the buffer zone at the next hearing. She also noted that stormwater would also be looked at by the ZBA as part of this process.

Mario Mummolo, 71 Stock Farm Road, questioned whether there could potentially be water supply problems for the longer term. He was concerned about water pollution given the porous pavement and asked what would be the developer's responsibility in the future should there be issues of that nature. Ms. Quirk said that she appreciated Mr. Mummolo bringing this to the ZBA's attention and said that the consultants would definitely be looking at the longer term impacts for water quality and stormwater management.

Mr. Klofft added that it would also be important to look at groundwater discharge from the waste water treatment plant. He said that he has not yet heard enough about the impacts of this increased discharge. Consultant Joe Peznola will be looking into this.

Peter Anderson, 113 Landham Road, suggested that porous pavement could be a mixed blessing. Besides road salt he questioned what might happen with vehicular traffic leaks and oil spills. He wondered whether toxic chemicals could potentially leach into the groundwater faster. Ms. Quirk noted that this is also something that would be analyzed.

Josh Liberman, 17 Hopestill Brown Road, noted that recent work at Hop Brook determined that Hop Brook was designated as a cold water stream and that Brook Trout had been found in Hop Brook. He questioned what would happen with runoff that goes into Hop Brook. He noted that bituminous asphalt flakes as it breaks down and questioned whether asphalt could also filter into the water. He asked how outside influences would be do you mitigated. Ms. Quirk thanked him for his questions.

Mike Goulet, 27 Middle Road, asked if there had been any study on the population that is going to be at the 40B about what impacts the population would have on the habitat in that area. Ms. Dineen said that the vernal pools are within the existing wetlands areas and so the Conservation Commission will look at whether there are any vernal pools that are not in the wetlands resource area. The Conservation Commission will then advise the ZBA. Mr. Goulet said that in his mind the development would be bringing a population of people into the area and what would be the impact. He also asked about whether there would be any removal of invasive species in the area. Mr. Moss said that he is looking at those as had been identified from the site walk and there are plans to get rid of some of them. Ms. Dineen said that the Conservation Commission would also be looking at that very carefully to determine what invasive species were in the area and noting what was in the jurisdiction of the Wetlands Protection Act and what was in the ZBA's jurisdiction.

George Maier, 64 Shadow Oak Drive, said asked how a porous surface would react to icing and freezing. Bob Daylor said that because water drains through the pavement so quickly it does not lie on the top of the surface to freeze and therefore requires less plowing and less salting. He said that there is less black ice as well because the snow melts and goes through. He said that underneath the pavement layer is a seven foot water storage capacity.

There being no further questions from the Board or residents, a motion was made to continue the hearing.

The hearing was continued to Thursday, November 17, 2011 at 7:30 p.m. in the Town Hall.

Elizabeth T. Quirk, Chair	Jeffrey P. Klofft
Benjamin D. Stevenson, Clerk	Jonathan F.X. O'Brien
Jonathan G. Gossels	Stephen A. Garanin, Associate