

**This set of minutes was approved at the August 13, 2008 Planning Board meeting**

**DURHAM PLANNING BOARD  
WEDNESDAY, JUNE 25, 2008  
TOWN COUNCIL CHAMBERS, DURHAM TOWN HALL  
7:00 P.M.**

**REGULAR MEMBERS PRESENT:** Vice Chair Lorne Parnell; Secretary Susan Fuller; Richard Ozenich; Steve Roberts; Richard Kelley; Councilor Jerry Needell

**ALTERNATES PRESENT:** Kevin Gardner, Wayne Lewis

**MEMBERS ABSENT:** Chair Bill McGowan; Councilor Julian Smith

**I. Call to Order**

The meeting came to order at 7:06 pm

**II. Approval of Agenda**

Mr. Lewis replaced Chair McGowan as a voting member.

Mr. Kelley explained that the in-stream flow study draft for the Lamprey River was out, and said a Water Management Planning Area Advisory Committee had been established to take things from there, including completing the in-stream flow studies, and developing a water management plan. He noted that he had been involved for about 10 years with Lamprey River management issues, and said he would like to serve on that committee.

It was agreed that this would be addressed, under New Business.

***Steve Roberts MOVED to approve the Agenda as amended. Richard Ozenich SECONDED the motion, and it PASSED unanimously 6-0.***

**III. Report of the Planner**

**IV. Continued Public Hearing on a Conservation Subdivision Application** submitted by Joseph Caldarola, Portsmouth, New Hampshire for subdivision of one lot into 9 lots. The property involved is shown on Tax Map 10, Lot 7-0, is located at the corner of Bagdad Road and Canney Road and is in the Residential B Zoning District.

Mr. Ozenich and Ms. Fuller recused themselves for this application, and Mr. Gardner replaced Mr. Ozenich.

***Richard Kelley MOVED to continue the public hearing on a Conservation Subdivision Application submitted by Joseph Caldarola, Portsmouth, New Hampshire for subdivision of one lot into 9 lots, at the property located at the corner of Bagdad Road and Canney Road, in the***

***Residential B Zoning District. Wayne Lewis SECONDED the motion, and it PASSED unanimously 5-0.***

Mr. Caldarola said engineer Rubin Hull was present, along with Dr. Rob Roseen of the UNH Stormwater Center. He said it was believed that the plans submitted were complete and final, but said he was interested in any further input there might be from the Planning Board. He asked Mr. Hull to provide a summary of the stormwater management design.

Mr. Hull spoke before the Board. He first noted that he had reorganized the applicant's plans to fit the conservation subdivision regulations, in terms of what needed to be on the site analysis map, inventory plan, etc. He said they had gone through many iterations over time to get the lots on the site the way they currently were, but said since October, when he had last been before the Board, there had been no change to the physical layout of the lots.

He said since that time, further work had been done on the drainage plan, working with the UNH Stormwater Center. He said there was now a plan that it was felt met the intent of the Town's regulations. He said it addressed abutters' concerns, and what the Town Engineer was looking for in terms of groundwater recharge.

He said the previous stormwater plan had included chambers located behind or between houses. But he said that based on discussions, they were now coming forward with a porous pavement design for the Sophie Lane roadway. He provided details on the design, noting that it had been slightly modified for site-specific reasons, including the fact that there was ledge close to the surface, and extensive fill in some other areas.

Mr. Hull said there would be conventional pavement for the driveways for each lot, for logistical reasons, but said there would be stone trench adjacent to these driveways that would tie into the base courses of the porous pavement. He also said the front portion of house roofs would collect water through gutters and downspouts, which would then be piped to the porous pavement area.

He said the porous pavement, along with manipulating the grading, would allow water falling on it to pass through it and into a detention system, and said the idea was to replicate hydrologically the original drainage conditions on the site. He said with this design, they had been able to take the majority of runoff, keep it in the ground, and to reduce flow and volume rates at all of six analysis points, for both 25 year and 100 year storms. He noted that five of these points were low points at the back of the property, and the sixth was next to the Day property along the eastern property line.

He said there was nothing in Dr. Roseen's review that would require the applicant to change the design, and said some clarifications and additional details would be provided as requested. He also noted that the Planning Board had been instrumental in the development of the stormwater design. He said the applicant would like to put up signage at each end of Sophie lane stating that there was a special maintenance area, which would provide environmental benefits. He said this design represented a cooperative effort between the developer, himself, the Town and the Stormwater Center. But he said before Mr. Caldarola did this, he would like the Town to give its approval for this signage.

Dr. Rob Roseen of the UNH Stormwater Center next spoke before the Board. He reviewed the process he had gone through, working with the applicant and his engineer, at the recommendation of the Town Engineer, over the course of past several months. He said the stormwater design had changed substantially over time, and now incorporated a low impact design. He said with some minor revisions at this point, it would be a very effective low impact design. He said the amount of disturbance of cover would be minimized, and that undisturbed cover would be 68% for the entire project.

He said the design met the draft DES stormwater requirements that would come into play in July or fall of this year. He said the challenge on this site had been the soils, noting that there was very little infiltration occurring there. He said this had presented a problem with the previous design, and said the use of pervious pavement would also involve the bringing in of a large amount of fill for construction of the pavement system. He said the site was currently predominantly in the hydrological D soil group, but said with this porous pavement system, the soil beneath it would have improved infiltration capacity.

Dr. Roseen said one of the concerns people had about pervious pavement was long-term maintenance of the system. He said since he had last spoken before the board, the State had introduced new regulations that required inspection and a maintenance plan.

He reviewed what he called some fairly small items that would need to be addressed, which were included in his letter to Mr. Campbell. These items included:

- The need for details on constructions phasing for the recharge bed, reservoir base, and sub base preparation for the porous asphalt roadway.
- Summary specifications for installation and production of porous asphalt
- Qualified engineering oversight as needed for approval of asphalt design mix, and installation of pavement
- Specific questions on the Hydrocad model, regarding void space ratio; infiltration rate used for the bottom of the porous roadway; etc.
- Clarification needed to verify impervious cover calculations provided by the applicant in Table 3. Need for clarification about what effective impervious cover meant, and also whether it included lawns.
- Information that should be provided concerning the proposed signage for porous pavement, regarding no sanding of pavements; reduced salt application, at 50%; no seal-coating; and pavement vacuuming to be performed 4 times per year

There was discussion with Dr. Roseen about the fact that the technical specifications for the system included the sub base materials to be installed beneath the asphalt, and that these materials were locally available. It was determined that information on this would be shared with the applicant, and Mr. Roseen noted that this information was available online.

Mr. Kelley asked if there were many companies in NH that could produce it, and Mr. Roseen said yes, noting that Continental and Pike were doing a lot of it these days. He said the cost of this material was coming down. Mr. Kelley asked if most road and utility contractors would be qualified to place the sub base, and Mr. Roseen said yes. He noted that there was the same level of technical requirements for this as there was for the construction of a leachfield.

There was discussion between Mr. Kelley and Mr. Roseen about the comment that the void space ratio appeared to be too high for the sub base, at 40%, and that it should be 30%, based on NHDES requirements. Mr. Roseen explained that this 30% was an average across the whole soil column.

There was also detailed discussion on Dr. Roseen's comments concerning the infiltration rate used by the applicant in the analysis.

Mr. Kelley asked Mr. Roseen if there were any concerns about the fact that this was going to be a phased subdivision plan, in terms of how this might impact the porous pavement system. He noted among other things that the batch of asphalt used would be smaller, and also that the effects of future construction on the site might clog the existing porous pavement on the site.

Dr. Roseen said manufacturers had to get used to doing small asphalt batches. He also said that with the changes to the State's Shoreland Protection Act, there would be a lot of porous pavement driveways. He said manufacturers understood that they would be held accountable for the materials. He said if a bad batch was installed, it was recycled, and a new batch was put down.

There was detailed discussion about how to minimize impacts to the pavement system, as the various phases of the project were put in. Mr. Kelley asked if the porous pavement held up under heavy trucks, etc. Mr. Roseen said yes, but noted that the asphalt itself was not that strong, and requires the sub base for strength. He said this system would have a greater load bearing capacity than a standard road, and provided details on this.

There was further detailed discussion between Mr. Kelley, Dr. Roseen, and Mr. Hull concerning the hydrocad model questions in Dr. Roseen's letter.

Mr. Kelley asked how the pavement would respond to high intensity, short duration storms, and whether it would accept all the flow. Dr. Roseen provided details on how the system would be able to accept this flow.

Mr. Roberts asked how the roof drainage system could be maintained, especially during leaf season. Dr. Roseen provide details on this, and said the system could be maintained fairly easily. He also described how the porous pavement system was tested after it was poured.

There was discussion about the Town Engineer's involvement in reviewing the stormwater management design.

Mr. Hull said there was nothing he and the applicant took exception to in Dr. Roseen's letter

He noted Dr. Roseen's comments about the infiltration rate. He said the 3 inches per hour would be high if they were laying the asphalt on the Hydrologic Soil Group D soil. But he said a sub-reservoir soil layer was being installed to receive the water, so the number was appropriate.

He said he had no problem changing the void space ratio to 30% (discussed in 2 a of Dr. Roseen's letter, but he said changing 2 d regarding time of concentration would change things in the other direction. He said once the adjustments were made to both 2 a and 2 d, he believed it would be to the applicant's benefit.

He said the remainder of things to be changed would be further clarification or additional details to be added to the plan.

Mr. Kelley asked how the applicant proposed to do 2 d. Mr. Hull provided details on this.

Mr. Parnell asked Mr. Hull to comment on the scheduling of the development of the site.

Mr. Hull said construction phasing would be added to the existing plans. He said development of lot 1 would involve no roadway work. He said when lots 2 and 3 were developed, enough roadway to serve those two lots would be constructed. He said sewer and water would be provided, and summarized that a great deal of offsite work would need to be done as part of phase I.

In response to a question from Mr. Kelley, Mr. Hull said the design for the placement of utilities would be the same as for a conventional design.

Vice Chair Parnell asked if there were any members of the public who wished to speak at the public hearing.

**Denise Day, 89 Bagdad Road,** asked if there could be any toxic material that could get into the groundwater as a result of this stormwater management system.

Mr. Hull said any materials coming off of the driveways would get caught up in the layers of the porous pavement system.

Dr. Roseen noted that porous pavement wasn't used in locations where the handling of toxic materials could be a problem, such as loading zones, locations where fertilizers were used, etc. He said that porous pavement itself reduced the need for salt on roadways, and also said that oil and grease residues and metals were filtered out in the top soils horizon of a porous pavement system. He said the biggest concern would be a large volume spill, but said there was no more risk from this for a porous pavement system than there would be if there was a catch basin draining out to a stream. He also noted that contaminated soil materials could be removed.

Mr. Campbell asked for some detail on what would be happening with the former Pam Bradley residence.

Mr. Hull said anything that happened on the Caldarola property would not change what happened at Lot 6-2 on Map 10. But he said what was proposed was that the Bradlee property would be allowed to hook into the sewer system, and noted that the Bradlee property septic system would be removed. He said the intent would then be to have two interceptor swales intercept any runoff. He said in the area where the septic system now was, a perimeter swale would be constructed to intercept water before it got to the Bradlee house. He said there would also be a second perimeter swale.

Mr. Campbell noted that this scenario would only happen if the owner of this property decided to tie into the proposed sewer.

Mr. Hull said the specifics on this would be between Mr. Caldarola and the new owner of the Bradlee property. He said the plan was to intercept as much water as possible, before it got to the built portion of the lot.

Mr. Kelley asked whether, if the present or future owner of the property chose not to hook up to the sewer, there was concern that the underdrain would be too close to the leachfield for the house

Mr. Caldarola said he wasn't sure whether this had been written down, but said his conception had always been that the backyard couldn't be touched unless the owners of the Bradlee property hooked to sewer, because the effluent would otherwise break out in the ditch because of the conditions there.

He said he felt specifications needed to be written up, that at such time the property owner did hook up to the sewer, and as long as this was before he finished the project, he would do the work. He said there needed to be some kind of time limit established for this. He said it would be a health hazard to open up a ditch now.

Mr. Kelley said he wasn't quite sure what drainage agreement he should be looking at, and which of the versions of the covenants he should be looking at. He suggested that Mr. Campbell pull this together.

Mr. Campbell said he was in the process of going through the most recent submissions from the applicant, and would summarize for the Board the things that it would still need to look at concerning the application.

Mr. Kelley asked if there were any outstanding issues that would preclude closing the public hearing.

Mr. Campbell said the utility easement language was still being looked at, and he provided details on this. He also said some minor changes were needed to the association covenants and bylaws. He spoke about other details that needed to be addressed, including making sure that there would be a plan that would be recordable and stamped by professionals.

Mr. Hull noted that Atlantic Survey was still the surveyor of record, and said they would prepare the final subdivision plans. He said none of the plans provided that evening were intended to be recorded.

Mr. Roberts said his understanding was that the sewer hookup to the Bradlee house would be done by the developer. He provided details on this, and said he would want to make the connection to the sewer, and the underdrain, conditions of approval.

Mr. Kelley said he had checked the Nov 10, 2007 Minutes, and they said nothing about who would pay for this.

Mr. Roberts said to lay a \$30,000-40,000 bill on someone was unreasonable.

Mr. Hull said the plans represented that the easement would be provided, but that the owners would be responsible for making the connection to the main on Mr. Caldarola's lot. He said the timing of

this would coincide with the timing of the construction of the sewer. He said this was how it had been represented on the plans, from the first time this issue had come up.

There was discussion about the amount of sewer pipe that would be involved. Mr. Caldarola suggested that he and Mr. Hull could perhaps come up with a ballpark estimate of what the cost would be, and said he was thinking it would be between \$6,000-8,000.

Mr. Campbell said in some of his last discussions with Pam Bradley, there wasn't the impression that Mr. Caldarola would pay their part of the sewer. He said there was the impression that he would grant the easement, and that they would hook into it. He said there was nothing in writing about this.

Mr. Hull clarified that the distance was 350 to 400 ft on the property, plus what it would take to get from the septic system to the easement on the lot line. He said a 500 ft length would be a fair assessment.

Mr. Kelley clarified that Mr. Caldarola was willing to carry the force mains from where it went gravity back to the sewer pump chamber for lot 1. There was further discussion with Mr. Caldarola on this.

Mr. Roberts said that approach seemed reasonable, but said going the full distance had not seemed reasonable.

Mr. Campbell said another thing the Planning Board had to decide on was the issue of the waiver from section 3.28 of the Subdivision Regulations, regarding the primary and secondary open space.

There was discussion on the switch proposed concerning this by the applicant.

Mr. Campbell said the Board had discussed this at a September 2007 meeting, and most of the people on the Board were behind granting the waiver. But he noted that Councilor Needell had not been ready to move forward with a motion on this at that point.

Mr. Kelley noted that the Board had heard from the public regarding this matter, on both sides of the issue.

There was discussion that this should be one of the first things for the Board to deliberate on and vote on after the public hearing was closed.

Mr. Campbell suggested keeping the public hearing open, until a few remaining issues to were resolved.

Mr. Roberts asked if there was anything further needed from the Conservation Commission regarding their opinion on this issue. He noted that the Commission was meeting the following evening, and said this was the time to get clarification if it was needed.

Mr. Campbell said that for the most part, the Commission was in agreement with the conservation priorities laid out by the applicant. Memos from Commission members Cynthia Belowski and Beryl Harper were noted.

Mr. Roberts asked Mr. Campbell to take one last look at this, concerning the Conservation Commission. He said he personally didn't have any issues.

***Richard Kelley MOVED to close the Public Hearing on a Conservation Subdivision Application submitted by Joseph Caldarola, Portsmouth, New Hampshire for subdivision of one lot into 9 lots, for the property located at the corner of Bagdad Road and Canney Road, in the Residential B Zoning District. Steve Roberts SECONDED the motion, and it PASSED unanimously 7-0.***

Recess from 8:37 to 8:56 pm

- V. Discussion on setting a public hearing date for two Council-initiated changes to the Zoning Ordinance based on the work of the ad-hoc Housing Task Force Group. The first is a change to the definition of "Habitable Floor Area," and the second is a change to the Minimum Lot Area Per Dwelling Unit in the Central Business (CB) and the Church Hill (CH) Zoning Districts.

Mr. Campbell provided a detailed history of these proposed changes. He said the Ad Hoc Housing Taskforce came into being in 2006, and after a series of meetings, reached consensus that encouraging increased density in multiunit dwellings in the downtown area, as well as in limited other districts where it currently existed and was allowed, would be a way to increase taxable value in certain zoning districts as well as a way to promote redevelopment of existing properties.

He said in April of 2007, the Council discussed the draft ordinance proposed by the Taskforce, and then sent it back to the Taskforce for further discussion. He said the Taskforce was unable to reach consensus on the issue of providing bonus density associated with "professional property management". He said Administrator Selig ultimately sunsetted the group, and recommended that the EDC take up the charge on this issue.

Mr. Campbell said in the fall of 2007, the EDC took up the discussion on the work done by the Taskforce. He said at its May 9, 2008, the EDC recommended that the Council move forward with the amendments that were now proposed. He said the rationale for the changes was:

- Revising the definition of habitable floor area would remove the cloud perceived by landlords over their multi-unit buildings. Mr. Campbell noted that a number of landlords had letters from previous code enforcement officers that differed from the rules the current Code Enforcement Officer had to go by.
- Allowing greater density in the downtown area. He said this idea was all through the Master Plan, and said the EDC agreed that allowing another apartment in existing and future multiunit apartments there, as opposed to squeezing more tenants in each unit, was the better route to take. He said the proposed change for the Central Business District was to go from 1200 sf to 900 sf of minimum lot area per dwelling unit, and down from 4200 sf to 3000 sf. in the Church Hill District.

Mr. Kelley said he was ready to move to public hearing. But he said the Town Council Minutes from June 2, 2008 appeared to indicate that a motion by Councilor Stanhope to include stairways, hallways and corridors as habitable floor area had failed. He provided details on this.



There was detailed discussion. Mr. Campbell insisted that the Council had voted to include stairways, hallways and corridors as part of habitable floor area. Mr. Kelley continued to question this, and the Minutes taker said her recollection was that the Minutes were correct.

There was further discussion.

***Richard Kelley MOVED to send the proposed change to the definition of “Habitable Floor Area,” to public hearing on July 9, 2008, subject to the changes to be made by Mr. Campbell. Susan Fuller SECONDED the motion, and it PASSED unanimously 7-0.***

***Susan Fuller MOVED to send the proposed change to the Minimum Lot Area Per Dwelling Unit in the Central Business (CB) and the Church Hill (CH) Zoning Districts to public hearing on July 6, 2008. Richard Kelley SECONDED the motion.***

There was discussion as to whether there should be a separate public hearing for each of these proposed changes.

***The motion PASSED unanimously 6-0.***

VI. Discussion on whether to submit an application to New Hampshire Housing’s Inclusionary Zoning Implementation Grant Program.

Mr. Campbell said this was the second and final round of the grant program. He said there was a pool of qualified consultants to choose from, and said this process presented the Town with the opportunity to have one of them go through Durham’s Zoning Ordinance to determine whether or not it was inclusionary concerning providing housing. He noted the discussion on this issue at the Board’s recent quarterly planning meeting, and the recent adoption of RSA 342. He provided details on what some of the work of a consultant working in Durham would involve.

Mr. Ozenich questioned how much a consultant would be able to accomplish, given the amount of analysis needed on this subject.

Mr. Roberts said Durham was far outside model ordinances concerning minimum lot sizes, to the point of being almost exclusionary. He asked how that related to the issue of inclusionary zoning approaches, and whether it presented a conflict.

There was discussion on this.

***Richard Kelley MOVED to have Town planning staff prepare the NH Housing Inclusionary Zoning Implementation Grant application. Susan Fuller SECONDED the motion, and it PASSED unanimously 6-0.***

VII. Other Business

- A. Old Business: Request for a waiver from Section 9.03 of the Site Plan Regulations, Stormwater, for the proposed building at 12 Jenkins Court, Map 4, Lot 9-0.

Mr. Campbell said the applicant had asked that this be moved to the next Agenda, and that it be heard earlier on the Agenda at that meeting.

**B. New Business:**

Mr. Kelley said he would like the Planning Board to appoint him to serve on the Lamprey River Water Management Planning Area Advisory Committee.

*Susan Fuller MOVED to recommend to the Town Council that Richard Kelley serve on the Lamprey River Water Management Planning Area Advisory Committee. Wayne Lewis SECONDED the motion, and it PASSED unanimously 7-0.*

C. Next meeting of the Board: August 13, 2008

**VIII. Approval of Minutes –April 23, 2008 May 14, 2008**

April 23, 2008 Minutes

*Susan Fuller MOVED to approve the April 23, 2008 Minutes. Richard Kelley SECONDED the motion, and it PASSED 3-0-3, with Richard Ozenich and Wayne Lewis abstaining because of their absence from that meeting.*

May 14, 2008 Minutes.

Page Numbers needed throughout

Spell Roseen correctly throughout. Also, refer to him throughout as Dr. Roseen of the UNH Stormwater Center.

Please correct the fact that there are two Agenda Item IX's in the Minutes.

Page 15, 2<sup>nd</sup> paragraph from the bottom, should say "... alignment, sight distances, etc, there..."

Page 19, 4<sup>th</sup> paragraph from bottom, should read "...the Town couldn't compel him..."

Also, spell Madbury Road correctly in bottom paragraph.

Page 20, 8<sup>th</sup> paragraph from the bottom, should read "...Traffic and Safety Advisory Committee."

Also, 4<sup>th</sup> paragraph from bottom, second sentence, should read: "He said he would see what terms would be recommended by the Durham Conservation Commission."

*Richard Kelley MOVED to approve the May 14, 2008 Minutes as amended. Susan Fuller SECONDED the motion, and it PASSED 4-0-3, with Lorne Parnell, Richard Ozenich and Wayne Lewis abstaining because of their absence from this meeting.*

Mr. Roberts said the Conservation Commission had not read the final plan from Mr. Caldarola. There was discussion that the drainage plan was the only thing that had changed in recent months. Mr. Campbell said he would check on this.

There was discussion that the plans the Conservation Commission had seen were for two houses on Canney Road, and 6 on Bagdad Road. Mr. Campbell noted that there was now only one house planned for Canney Road, and that this layout would provide more protection for the vernal pool in that area.

There was further detailed discussion on the idea of the Conservation Commission, including the idea of the Commission reviewing the most recent drainage plan. There was also further discussion on the Commission's perspective concerning the waiver regarding the land swap. Vice Chair Parnell asked if the Commission had commented on the applicant's stewardship plan, and there was additional discussion.

Mr. Ozenich said quite some time ago, the Planning Board had said there should be no more private roads in Durham. He said he thought this issue needed to be addressed, and said he didn't think it was good policy to have private roads.

Board members agreed that this should be on the to-do list, if it wasn't already.

There was detailed discussion on the recent Court decision concerning the Stonemark case, and about how the Planning Board was supposed to apply the density bonus, based on that decision.

Mr. Kelley said this would be another thing to put on the Zoning Rewrite committee's list. He noted that the Zoning Rewrite committee's intention had been for the density bonus to apply to all units, and said he had told the ZBA this when he had spoken before them concerning the Stonemark case.

## **IX. Adjournment**

***Richard Ozenich MOVED to adjourn the meeting. Susan Fuller SECONDED the motion, and it PASSED unanimously 6-0.***

Adjournment at 10:00 pm.

Victoria Parmele, Minutes taker