

Town of Lyme
LYME ZONING BOARD OF ADJUSTMENT
Minutes – November 20, 2008

Board members: Present - Alan Greatorex, Chair; Ross McIntyre, Vice Chair; Walter Swift, George Hartmann, Frank Bowles.

Alternate members: Present - Margot Maddock,

Absent: Jane Fant

Staff: Francesca Latawicz, Planning and Zoning Administrator, Adair Mulligan, Recorder

Public: Matthew Low, Chris Cole, Erin Darrow, Travis Callahan, David Roby, Rod Finley, John Billings, Brian Rich, Jodie Rich, Tyler Rich, Jamie Taylor, Wayne Pike, Michael Woodard, Barbara Woodard, Elizabeth Kilmarx

Minutes of October 16, 2008 were corrected and approved on a motion by Ross seconded by Walt. Francesca reported that the Budget Committee had asked that members pick up their packets to save mailing costs. Walter asked that the board receive the packets at least 5 days in advance. Some members are unable to receive materials electronically because of dial-up connections. Members agreed with Frank's suggestion that Francesca notify members when packets are ready, and if they cannot pick them up by 5 days before the meeting, she will mail them.

Alan stepped aside for the first hearing and Ross appointed Margot to sit as a regular member.

Application # 2008-ZB-009, Joan Granlund (Tax Map 408, Lot 22) 12 Baker Hill Road. Continued rehearing on special exception granted to replace an existing stone culvert with a precast concrete arch bridge within the Wetlands, Shoreland and Flood Prone Area Conservation Districts. Ross reviewed the conditions set by the board for the rehearing, including that both parties be represented by an engineer. He noted that at the September meeting Ms. Granlund's engineer was not present. Ms. Granlund's attorney, Chris Cole, said that Ms. Darrow (engineer representing David Roby) is not a structural engineer as is Ms. Granlund's engineer, Mr. Low, and that Mr. Callahan's drawings are not engineering drawings. He said there is no firm cost estimate for the project from Roby and Callahan whereas Ms. Granlund has a price quote from Pathways Engineering, so he does not think that David Roby has fulfilled the pre-conditions for the rehearing. Matt Low summarized his findings, saying that he did a site visit and evaluated prior information collected. He said he thought that the culvert is unsafe and very deteriorated, and thought that the structure proposed by Pathways is viable and the smallest prefabricated size (12') available. He said he thought that reconstruction of the existing structure would not be economical and that the 10" granite slabs proposed by Callahan would not provide adequate structural support for access by emergency and service vehicles. He stated that a 10" granite slab is rated to support no more than an 8 ton load and recommended that if granite slabs were used they should be at least 15 inches thick. In the discussion that followed the axle loading of various vehicles that might use the driveway was discussed.

Low said that he is not a hydrologist but thought the 5' span appears to be a constriction of the stream, although he said it is hard to tell because the channel is very rough, and he had not viewed the culvert under storm conditions. He thought that reconstruction may interfere with historic value since it he felt that it would necessarily introduce a large amount of new material into the structure. He recommends replacement.

Frank said that there is a way to make use of historic stone, by redoing the abutments with it and then building a wooden deck over it with treated lumber. He asked if this is a viable solution, noting that this was done in Woods Hole, Massachusetts at the insistence of the community. Low said he thought that option would be completely viable as long as the timber would be at grade and not buried. The span could also be longer.

Ross asked Mr. Cole to comment on the issue of whether an historic structure is being replaced. Mr. Cole said that the stone culvert is not memorialized by the town or on any list of historic structures, so he does not think it is an historical structure. He felt that any meritable historic value is outweighed by the expected increased cost of reconstruction. He added that the minutes of the previous meeting indicate some consideration of cost to the owner and that she could afford to pay for reconstruction and said he did not think that a test of personal financial means was appropriate for the Board to consider.

David Roby said that the culvert is indeed an historic structure worthy of preservation if it can be preserved on a reasonable basis, giving safe access and at a cost that is not disproportionate. He displayed large photographs of the stone culvert, noting that it is one of only three surviving in Lyme and is the largest. He added that the Division of Historic Resources has published a paper on such structures, and that the Lyme Historians' cellar hole survey committee had written a statement identifying the culvert in question as an historic structure; these materials were provided to the board previously and again at the current meeting. He added that the people of Lyme had voted to approve language in the town's master plan supporting preservation of historic structures. He noted that Mr. Low's

employer, Hoyle Tanner, carries a statement supporting preservation of historic structures. Regarding safety, since it is only a 5' span, he thought that the culvert could be made safe with stone decking, although he said he thought Frank's solution was also a good one and that the culvert's primary value is in its massive stone abutments. He said he is confident that the total cost is not out of line with the cost of a precast concrete structure.

Travis Callahan said that many organizations are dedicated to preserving and rebuilding such historic stone structures, and that it could easily be rebuilt in a dry stone manner without mortar, which he said would actually be a hindrance. He said he thought that taking the culvert apart and rebuilding it would be a relatively simple task and cost-effective, and would use photographic evidence to document the original materials in the reconstruction. He said that the cracked decking is a safety concern but the walls of the abutments are in good shape. He said that his drawings are not plans. He proposed using a technique of interweaving stones on the decking for strength. His approach would not disturb settled ground or direct the flow of water. He noted that because the structure has been there for so long, that the abutments are sound. Walter asked if he is willing to stand by his statement regarding cost. Travis replied that the major cost involved is in granite decking, since that would require a crane, but even with that, the cost would be comparable. He added that there are many other alternatives, including a wood deck, which would be much less cost. He could also provide stone decking which would be less than granite. He concluded that the cost would be less than installing a precast concrete structure or comparable.

Ross asked why Travis did not recommend creating 4' footings beneath grade as Matt Low had advised. Travis said he did not think that Mr. Low had much experience with dry stone work and that disturbing the ground beneath the abutment would allow it to settle improperly and would be asking for trouble. He said that the abutment stones are large and stable, and that there is compaction strength there. The stones have been in place for many years and have already settled and compacted the substrate. Ross asked about stones that Pathways claimed had collapsed. Travis said that the span decking has been compromised, and that stones may have fallen when repair was attempted. He repeated that the abutments are stable and the decking is the only concern. There are some small voids, but he considers these to be more aesthetic than structural issues. George said that fallen concrete had caught his attention on the site visit. Travis said that his organization tries to educate about mistakes made in repairing drylaid stone structures, which are designed to move, heave, and settle. Adding concrete removes such a structure's capacity and creates a weakness. He thought the concrete had fallen with freezing and thawing cycles. Walter asked if there are any cracks in abutment stones. Travis said that some may be, but that it is not a weakness.

Erin Darrow distributed handouts, including a professional paper she has written on addressing stack stone culverts. She said that these represent an old art, and that there is little engineering code that goes along with them. She said that proper new replacement materials could be used without destroying the historic nature of the culvert, and that it appears to her that most stones are in good condition. She agrees that in its current condition, the culvert cannot handle vehicle loads. She said that reconstruction would still be considered preservation, and as proposed by Travis would meet the Secretary of the Interior's Standards for Historic Structures. She said she is licensed as a civil engineer but has much experience with stacked stone culverts, and described the longevity and continuing function of such a structure in Alexandria even under flood conditions. She concluded that the culvert under discussion is unique in character and can be restored.

Adair Mulligan noted that she had visited the culvert during a heavy storm on July 24 out of concern for its ability to pass a large flow, and observed that the culvert offered no constriction and no water was pooling behind it. She also said that on October 25 she had consulted Edna Feighner, an archeologist at the Division of Historic Resources, about why the stone culvert did not appear on the state's list of historic structures, and learned that it was because a detailed form would have to be filled out and submitted to the state. She distributed a copy of this form.

Chris Cole said that nobody has costed out the restoration alternative and that only conjecture has been offered. He said that the culvert is not an historical monument and that Ms. Granlund has fulfilled all requirements for a permit. Matt Low said he thought that voids are a structural issue and indicate loss of backfill. He said it is standard engineering practice to bury abutments 4-5 feet, and that if the abutments are rebuilt with a timber superstructure, it would change the appearance. George asked for the cost of replacing with a precast concrete structure. Chris Cole said \$33,750. David Roby said that after Ms. Granlund hired Steve Usle at Trumbull Nelson, Steve had told him that the cost would be over \$50,000. Chris contested this.

Alan Greatorex said that his wife had been an occupant of the house recently destroyed (raided) on the property. He referred to a series of deeds for the property that indicate it was first occupied by Major James Cook after his purchase in 1791. The road over this culvert is referred to in a deed to Amsden in the 1800s and was in place, intact, until the slab cracked for no apparent reason in the middle of the night when Alan's wife was 16 years old. The steel beams were put in place at that time, and afterward, fully laden logging trucks passed over it. Alan said that he had once done a test pit close by for a septic system, and found that the soil in the area is very coarse gravel with no fines, so that no sink holes would develop and the abutments would not move. He said that these are outwash deposits dumped behind an earthen dam behind Tannery Falls during the post-glacial period.

Deliberations: Ross said that the discussion has called attention to historic features and that the board must decide whether it wishes to change its mind about whether it is a sufficiently historic structure to overturn its July decision. George said the arguments were very strong on both sides, but the primary factor for him is what the owner wants, and he would vote to reaffirm the original decision. Walter agreed and said he was concerned about liability, and was not convinced that those advocating restoration would sign off on that. Margot said she agreed with those opinions with regret, and is concerned about liability. Frank said that Alan made valuable points, and he believes the footings are sound. He feels there is a compromise available with a wooden deck. He said it had been cogently argued that the structure has historic merit and virtue, but that a compromise had not been explored with Ms. Granlund. He said that stream flow is not a problem here, but the cost of restoration is not known. He thought the structure was quite preservable. Ross said that safety and economic issues are relevant but not as much as the right of the owner versus the historic nature of the structure. He said that the ZBA is not the place to design a bridge replacement, that both sides agree that the structure has failed, and the applicant deserves the right of access. He feels that the appeal should be denied but that the appellant should be encouraged to convey to the owner what might be done and how the project could be done better, leaving the board out of financial, safety, and other issues. George moved to reaffirm the July decision to grant a special exception. Margot seconded the motion and it was approved unanimously. The appeal was denied.

Application # 2008-ZB-069, Tyler Rich (Tax Map 421, Lot 18) 50 Old Dorchester Road.

Alan returned to chair this portion of the meeting and Margot stepped aside. Appeal of administrative decision to deny a zoning permit for construction of a house and driveway on a Class VI road. The applicant is requesting a special exception as a Vacant Lot under Section 8.31 of the zoning ordinance, for the lot to be used for a single dwelling. The applicant is obtaining an easement for access to a Class V road through Tax Map 421 Lots 7 and 10. Three letters have been received from abutters, two in support of the project and one expressing traffic and noise concerns. The applicant has been advised that the following will be required in order to issue a building permit:

1. A curb cut permit for the driveway;
2. Detailed plans for the house and any accessory structures, including dimensions and location, setbacks and square footage of the building footprint, gross floor area, lot coverage and the location of any conservation districts;
3. A plan showing location, length and a construction sequence for the driveway; and
4. Copies of recorded deeds showing ownership of Lot 18 and the access easement to Dorchester Road through Lot 10.

A GIS map from the Natural Resources Inventory was provided, showing the approximate location of steep slopes and hydric soils on the property. There are no agricultural soils shown on that map. The proposed house and driveway are outside of the areas shown as steep slopes and hydric soils.

George asked whether the applicant had brought in new information, and Francesca said that some has come in but that she was expecting a more detailed plan for the driveway. She also passed around a new map showing locally important agricultural soils on the property. Ross said that there are no issues with the grade of the driveway so he thought that no more information, such as an engineering plan, would be needed. Frank asked the age of the woods road that would be used for the driveway. Brian Rich said it has been there a long time, and well before zoning.

Ross asked about soils. Francesca said that the layers on the Natural Resources Inventory database on the computer upstairs in the library only include nationally significant agricultural soils, and that Lee Larson helped her find other Ag soils. He explained to her that he had not installed all the layers on that computer in an effort to avoid confusing the public who might be using it. She said that the map is not site-specific but just a general indicator of whether Ag soils might be present. Ross asked to compare the Mylar and NRI maps and found they are using the same information. Walter said that a soil scientist could find out whether there are actually Ag soils there. Francesca said that soils work would have to be done to site a septic system anyway. Jodie Rich asked why a new map appeared just today when Francesca had had the information packet 2 ½ weeks ago. Francesca answered that she only discovered today that the state and locally significant Ag soils were not on the GIS system in the library, when assisting another applicant. Walter said that the only issue is whether an easement has to be granted. Ross added that lot coverage could be decreased by Ag soils and if they are present, the board should know whether the house could be sited anywhere outside Ag soil. Since the woods road is already in place, no Ag soil issue exists there, just for the house and septic system.

Ross asked about the issue of a Class V road. Francesca said the selectmen had given no feedback but the Richs have said they do not want to use that route. Ross said that section 8.31C requires 50 feet of frontage on a road

or access shown on a subdivision plan approved by the Planning Board. That lot does not have either, so a variance is needed if a driveway is to serve the lot.

Walter said that the board needs to know how accurate the Ag soil map is, and asked why the house could not be built on the area shown as non-steep, non-hydric, and non- Ag. Tyler said that it is not near the access, and Brian added that the proposed site is a much better site for a house. Walter reviewed the list of requirements and found that the curb cut permit, plan with gross floor area, and deeds have all been collected, and that the only outstanding item is the soil information. Rod Finley said that if Old Dorchester Road is a Class V road, a variance is not required. Ross said that it would be easy to grant a variance under the circumstances. George moved to continue the hearing to December 18 at 7:40 pm. Frank seconded the motion and it passed unanimously.

Application # 2008-ZB-019, Michael and Barbara Woodard (Tax Map 410, Lot 46) 74 Bliss Lane. Hearing on a variance from Section 4.57 C of the Zoning Ordinance. Parcel boundaries for the merged lots have been changed due to eminent domain against the wishes of the landowners. A variance is requested.

Elizabeth Kilmarx said that the Woodards purchased their home on a 1.53 acre parcel in 1973 and then in 1984 purchased the larger surrounding lot. In 1989, with the passage of zoning, these lots were merged without the Woodards' knowledge. They are requesting a de-merger of the home lot from the rest. The proposal meets all the elements required except that the boundaries have changed because of a federal taking of 10 acres of their land, a taking that the Woodards actively opposed. The two original deeds remain. Michael Woodard said that Bliss Lane is a town road that ends at his barn. Elizabeth said that the proposal would not diminish property values because one lot is within the other lot, and that an injustice was done in the taking of property. Barbara said that she did not know the property was merged and did not receive a letter.

Deliberations: Walter asked when section 4.57 was added to the ordinance and why. Alan said it was added at town meeting in March, 2007 and was triggered by a court case. Walter noted that the applicant has 3 three years to address this. Even if there is no taking, he thought a variance would still be needed. Francesca said that because the lots had their original geometry before merger, the former non-conforming 1.53 acre lot could be reinstated. Ross said he saw no reason to go through with this application unless the applicant wants to set up a subdivision.

Walter moved to grant a variance to allow the de-merger of Map 410 lot 46 as shown on the drawing submitted by Elizabeth Kilmarx, into a 1.53 acre parcel and a 75.3 acre parcel. Findings of fact include:

- Section 4.57 of the ordinance permits a de-merger with three conditions
- Conditions A and B are met since the application was filed before April 2010 by the original landowner
- Condition C is not met, but through no fault of the owner, since the parcel boundaries changed as a result of federal action over the vigorous objection of the owner, so the owner cannot meet this condition.
- 10.49 acres were taken by eminent domain.
- This places an unnecessary burden upon the owner.
- The board concurs on all conditions of section 10.50, that:
- The proposed use will not diminish surrounding property values
- Granting the variance will not be contrary to the public interest
- The use will not be contrary to the spirit and intent of the ordinance
- By granting the variance substantial justice will be done
- Denial of the variance would result in unnecessary hardship to the owner.

George seconded the motion and it passed unanimously. Elizabeth pointed out that the tax map is inaccurate and has been for some time.

Meeting adjourned 10:05 pm.
Respectfully submitted,
Adair Mulligan, Recorder