CLASS V ROADS STUDY COMMITTEE TUESDAY, May 15th, 2018 4 PM TOWN OFFICE CONFERENCE ROOM

Present: Sue MacKenzie, Karen Henry, Frank Bowles, Bret Ryan, Mike Smith, Bill Malcolm (arrived 406), Ernst Kling, Kevin Sahr (consultant), Carola Lea (citizen)

Agenda

- Minutes from 5-1-2018
- River Bank South of North Thetford Road
- Gravel Road Project for 2018
- Hewes Brook Bridge update
- 10 year plan process

Sue called the meeting to order at 3:59 PM.

Minutes – The minutes from the 5-1-2018 were unanimously approved as presented.

<u>Announcement</u> – Geotechnical site investigation on the closed portion of River Road will be starting about 8 am May 16th. The borings will be located on the Northbound lane of the existing road and to the East of that line.

River Road South of N. Thetford Road-imminent bank failure —Sue reported that the US Army Corps of Engineers (USACE) is about to make a public announcement that they will do the project. Construction would be the end of 2019 or the beginning of 2020. They will pay 65% of the costs. On the other hand, if the Town directed this project, we would need a Warrant Article and the timing for construction would be approximately the same, and we would pay the full costs of design and construction of the project. Mike expressed concerned that the USACE will be overly conservative and therefore expensive. Sue reassured the Committee that they will perform a repair very similar to that done at the Berway Farm riverbank. The USACE will likely have to move the road in order to construct a stable slope, because they may not be allowed to construct a slope toe in the River. Thus, we will thus likely lose the portion of River Road at this location. The USACE is currently out of funding and will have to wait for the next funding cycle in order to begin this project

Karen asked where the USACE designers associated with this project were located. Sue answered that Chris Hatfield, the engineer with whom she has been communicating, is located in Waltham, Massachusetts.

Sue asked what the Town should do, if anything, in the meantime, with the potentially unstable section of River Road at this location. Karen proposed that the Committee and landowners near the slope monitor the movement of the bank via two stakes one each anchored in the stable and moving soil. The stakes will initially meet at a point. Frank explained further how this could work and then offered to help Karen install a monitoring device. Sue thinks that soil is settling vs. sliding and does not know how much soil might be eroded from below the current bank and road

shoulder. Sue also shared that the bottom part of Carola Lea's dock is starting to separate from the rest of the dock related to this soil movement. Karen pointed out that we should be ready to make a decision if significant downslope movement of soil occurs. Sue summarized that the general sense of the Committee was to monitor the situation and close the road should significant movement occur.

<u>Somewhat related topic on monitoring the River level fluctuations</u> – Frank said that he has a pressure sensor and datalogger ready to mount at a fixed point in the Connecticut River in order to record the changes in the water level over time. Frank said that a non-floating dock with a fixed post would be the best option for mounting this device.

<u>Gravel Road Project for 2018 –</u> Sue said that she would like to identify an expensive-to-fix (every spring) mile of gravel road in Town perform repairs such that it does not need extensive attention during next spring's mud season. Discussion followed in which the following roads were identified as potential candidates due to significant rut formation during mud season:

- Dorchester Road
- Grafton Turnpike
- Acorn Hill Road (between Franklin Hill Road and Hardscrabble)
- Baker Hill Road
- Franklin Hill Road
- Orfordville Road

There was also some discussion about selecting a road where most of the users would be Lyme taxpayers. Sue proposed to make a choice based on what section of road is costing the Town the most money to fix. Sue said that the fix will include tree trimming and ditch clearing.

Sue assigned the Committee the task of selecting the section of road to be improved this summer within the next couple of weeks. Mike said that he thinks that there some sections of roads that have never been repaired properly, and that he hopes that the "fix" is done properly.

Bill asked Sue to get information from the Highway Department about where they spread the most gravel during mud season. Bret said that if enough gravel is brought in, it eventually fixes the problem areas of the road during mud season.

Sue pointed out that Karen will give a presentation on The Muddy Roads Project on Wednesday, May 23rd, at 4PM. Karen described that the project (Muddy Roads) focused on mud season fixes that can be implemented by small towns, and that she will also cover describing conditions that lead to frost heave.

<u>Project Report</u> - <u>River Road over Hewes Brook bridge</u>. Frank reported that we are waiting for contract documents approval (from the Select Board) for issue. The Town counsel reviewed the document and several changes were made at their suggestion. The wording of the contract is such that if you haven't built a timber frame bridge, you should provide evidence to the Town that you are qualified to do so. Ernst has contacted landowner John Emery and Emery texted to Ernst that he would get to the Town of Lyme this week.

Frank asked the Committee members for their thoughts on having abutments constructed that can hold a concrete bridge at some future time (over and above that required for the currently to be designed timber frame bridge). Bret thinks that there should be foundations that are capable

of holding a concrete bridge. Karen said she would like to see the price difference before making a decision. We discussed how we might obtain an estimate of the additional cost of a foundation that could hold a concrete deck bridge.

There was some discussion about timber frame vs. concrete deck bridges. Frank said that the reason that a timber frame bridge was selected for Hewes Brook is that the construction equipment access was better suited to placing lighter structural members.

Sue said that if we don't obtain landowner permission to construct soon, the project will have to be delayed until September because no trees can be cut down between June 1st and September 1st.

Other business-

Dan asked about the status of the culvert inventory to be conducted in Lyme. Sue said that it's being held up because of extra training now required due to a change in regulations. Dan said that he will be in contact with Steve Schneider on this.

Carola asked about whether the earthen dock in front of Tom Kent's old house could be used for monitoring water levels. Sue told her that it would be too vulnerable to damage and vandalism at this location.

Karen asked that we discuss the Project Manager assignments at the next meeting. She is not comfortable with how this is working on the Dorchester Road project.

Carola asked when the agenda goes out. Sue said that it's usually the Saturday before a Tuesday meeting. Sue also told her that we will likely be discussing the road section in front of her property at most every meeting.

10 year plan process (Step 2) – Kevin explained that Mike Smith and the past Roads Committee developed a spreadsheet that was used to plan and manage Lyme's paved roads – maintenance and repair projects. He asked us whether we wanted to do something like that for the gravel roads in Lyme. This sparked considerable dialog – Kevin asked whether we can use this same format for unpaved roads. Frank said that a database won't likely work, and that a spreadsheet would work well. Mike is concerned about using a spreadsheet because there are so many more named unpaved roads and miles of unpaved roads than paved roads. We might not be able to apply the same level of detail to the gravel roads.

Kevin gave an example of prioritizing roads and their maintenance according to selected criteria. Kevin asked us - do we want to use a spreadsheet to manage our data collection of roads? Bill asked what would be the purpose of the spreadsheet. Mike explained that it was a budget management tool that allows project planning for the future.

Bill said that if we know what roads are going to be worked on, what would be the purpose of the spreadsheet. He noted that that is how we have been operating. Karen said that if we are always in "emergency" mode, then there would be no purpose in developing a spreadsheet.

Kevin said that the developer of the spreadsheet was yet to be determined and that the conversation about whether to develop a spreadsheet was useful in the sense of considering whether it would actually be used. Bret thinks that such a spreadsheet might be useful in terms of documenting what has actually been constructed.

At 515 PM, the motion was made to adjourn the meeting (Sue), it was seconded by Mike, the motion passed unanimously and the meeting was adjourned at 515PM.
Respectfully submitted,

/s/ Karen Henry