CLASS V ROADS STUDY COMMITTEE TUESDAY, October 16th, 2018 4 PM TOWN OFFICE CONFERENCE ROOM

Agenda

3:30 to 4 PM 10 year plan development – (This was attended by Sue MacKenzie and Bret Ryan and was not official because a quorum was not present.)

- 1. Approval of Minutes from October 2.
- 2. River Road reroute
- 3. River Road Speed Limits
- 4. Pony Hill Culvert Report on Puntin visit RFP
- 5. Covered Bridge catch basins Report on Puntin visit RFP
- 6. USACE Official letter from Town requesting continuing with project

The meeting was called to order at 4PM with Sue MacKenzie, Bret Ryan, Karen Henry, Ernst Kling, Steve Williams, Bill Malcolm and Dan Brand in attendance.

Minutes – The 1st Draft of minutes from the 10-2-2018 meeting was approved as presented.

<u>FEMA Grant Announcement –</u> Sue announced that the Town's application to FEMA for a grant to help replace three culverts on Dorchester Road was approved for funding.

<u>River Road Reroute</u> –Sue announced that the Town has acquired the right-of-way, and progress is being made on construction of the re-route of River Road. She pointed out that the contractor is not finding ledge (bedrock) where he though he was going to find it. Sue thinks that this might make construction easier. She said that it is relatively flat at the "top" of the hill, and that there won't be a lot of excavation required there, but that the grades leading to this area might be steeper than originally planned. Steve expressed some concern over this. Karen asked what the limit on the grades would be and Sue replied 12%.

<u>River Road weight limits, speed limits and trucking</u> – Sue said that it is really hard to drive 25 mph on River Road, and that the speed limits will remain as they currently are (30 mph).

<u>Pony Hill Culvert -</u> Sue asked Steve what he thought about the visit with Tony Puntin, P.E., engineering consultant, who inspected the culvert with Sue, Steve and Karen last Saturday. Steve replied that it was close to what he expected – that slip lining the culvert would be the least expensive alternative for repairs. He said that next week, there will be efforts to repair the severely eroded slop near the headwall in order to extend the life of the current culvert. (This was something that Tony recommended be done.)

Sue asked if anyone had read her draft Request for Proposals for repairs to the culvert. Karen replied that after reading Tony's Memorandum and after visiting the culvert with Tony last Saturday it was her opinion that this project should be incorporated into our 10-year plan vs. advertising immediately. This is with the caveat that the eroded area be repaired in the very short term. Steve added that he thinks it's not the Town's top priority currently. Bret added that he didn't think that damage to this area is likely to be catastrophic and Ernst pointed out that if the bridge were taken out a temporary bridge could be deployed relatively quickly. Steve said

that the repairs next week will include placing 2 ft stone, and that this could help buy time while we develop a plan. The Committee recommended that this project not be advertised immediately.

<u>Catch basins for the River Road covered bridge</u> – Steve explained that the catch basins have failed, and that if we leave them as they are now, water will run down to the contact between the bridge and the concrete and cause erosion. There are culverts in the catch basins, and the Highway Department has not been able to locate the outlets to the culverts. One recommendation (Daniels Construction) has been to fill in the catch basins, repave and reshape the road and provide cut outs so that surface water doesn't read the bridge deck/concrete interface. Tony Puntin recommended replacing the catch basins. Bret commented that diverting surface water doesn't always work as planned. Steve said that only one estimate of \$37K has been obtained for an appropriate fix. Steve thinks that this is a high estimate, and that the Town is likely to get lower cost estimates for the repair. Bret recommended that the cost is low enough, and the benefits are great, so that this repair is best done next spring.

<u>MAJOR PROJECTS LIST</u> – Sue recommended that the Committee think about prioritizing repairing the damage on the South end of River Road near the Hanover Town line. She thinks that the bank to the Connecticut River will fail soon if this is not addressed. She thinks that it might cost around \$800K, or we could break it into two smaller projects.

Steve asked where the ongoing bank instability on and near Carola Lea's property fits into future plans. Sue replied that this is also on our major project list and that she has sent a letter to the USACE (US Army Corps of Engineers) stating that the Town does want them to do the project, and would they please send us a timeline for completion of the project. (Date of the letter is October 2018.)

After the River Road Reroute is completed, Sue thinks that our next priority is the "Baker 1" project – replacement of the culvert. The South end of River Road (already discussed) and the reconstruction of Goose Pond Road are also important. The bank instability near Carola Lea's house and assessing the extent and severity of the problems on the gravel section of River Road (and then fixing them) between East and North Thetford Roads are also on the list of major projects.

Sue asked if there were any other projects that should be on the list. Karen mentioned that in addition to pavement preservation, we should be forward looking and try to implement some long-term mud-season mitigation techniques on Dorchester and/or Grafton Turnpike – probably starting small, but thinking in terms of long-term cost savings.

Bill asked when is the earliest that the 'by-pass' on River Road will be open. Sue and Steve mentioned that as of the 15th of November (weather permitting), it is likely that ONE LANE of the stabilized portion of the current River Road will be open to traffic. They (Norther New England Field Services) will probably not be able to complete the re-route of River Road before winter this year, but the Town will let residents use the one lane that he has stabilized. Bill commented that this may impact decisions about road projects given that there will be more access and several River Road residences will not be as isolated as they have been by the road closure.

Pavement preservation – Pinnacle Hill is being completed this fall. Acorn Hill will be next, and then when the Baker 1 project is completed, Sue would like to have Baker Hill repaved at the same time that the culvert is replaced. Bret asked when that is likely to occur and Sue replied "as soon as possible." Bret commented that, with regard to Town budget considerations, the

pavement on Acorn Hill is not likely to be "going anywhere anytime soon." Steve said that the reason that Acorn Hill is on the list is because underdrains were installed. Steve doesn't want the repaired subsurface to degrade. Bret thinks that the money might be better spent on other projects such as the Baker 1 culvert replacement.

Steve mentioned that paving will be done on River Road next year when the re-route of River Road is complete and Sue said that, if the Town can afford it, paving will be completed from the Grant Brook bridge (Fisher's Bridge) to East Thetford Road. It will be approximately 3000 ft of paving.

Sue said that as we can afford to do the preservation, we should do it (including Goose Pond Road).

Bridge projects – Hewes Brook bridge is contracted and ready to be constructed next year. Trout Brook under Pinnacle Hill Road - Sue said that she has heard back from the NH DOT regarding grants for bridge repairs (Bridge Aid Program), and they have told her that they are "booked for the next 10 years." They are no longer accepting applications.

Flint Hill on the East end near the Skiway has a double culvert bridge that is red-listed and going to have to be replaced. Sue noted that the bridge fund is a separate fund and we can prioritize them and get them done. She also mentioned that the three Dorchester Road culverts/concrete bridges will be constructed because of the FEMA grant being approved.

Sue asked if any other bridges should go on the list, and Ernst asked about one of Whipple Hill Road. Steve said that the area where the culvert washed out in July 2017 was just quickly fixed and we should probably put it on the list (especially the outlet wall) – this would be a culvert repair.

Bill asked about the bridge over Grant Brook on Baker Hill Road that is next to Dorchester Road. Steve said that the Town did receive an estimate from Daniels Construction for repairs to that bridge.

Culvert Inventory – Sue said that the field work of the culvert inventory conducted by the Upper Valley Lake Sunapee Regional Planning Commission is complete and they will be coming to the Select Board meeting in two days to present their findings. The major projects include Pony Hill, the three on Dorchester Road that we will be receiving grants for, Goose Pond Road at Baker Hill, Goose Pond Road at Rennie Road (hole keeps recurring), Baker 2, Pout Pond Lane has a double culvert and Flint Hill Road. Steve mentioned two on Grafton Turnpike – one by Dina Cutting's house and one near the Town line (this tops every year).

Steve said that there are no inlet or outlet headwalls on these culverts. There was some discussion about whether the road could be built up in the area by the culvert "in the low spot" of Grafton Turnpike in order to install a larger culvert.

Sue asked if there are any other culverts and for input on what order priority replacement should be in. Steve said that he would put Pout Pond Land and Flint Hill Road near the bottom of the list. Culverts on both of the Turnpikes would be higher priority. Steve also mentioned the big culvert as one turns onto Pinnacle Hill Road from Highbridge Road (the culvert is on Highbridge Road). He suggested that this might be re-sleeved someday. It's corroded on the ends, and it's hard to keep guard rails there. Bret said that it's hard to second guess which culvert is going to fail first, and it's best to have a budget set aside to work on whichever one(s) fail. He also said that the Flint Hill Bridge should be a higher priority than Pinnacle Hill Road, because Pinnacle Hill residents have access. He is not overly concerned about the culvert on Whipple Hill Road. Because we now have money for the bridges on Dorchester Road, they become a priority.

Steve said that every culvert on the dirt section of Pinnacle Hill Road was too small to handle the water from the July 2017 storm. He thinks that every one of them (about 12" diameter), should be replaced with larger sizes. Sue said that the culvert inventory will help inform us about what our priorities should be.

Bill asked whether culvert inventories for other Towns resulted in 'actionable items,' and Dan and Sue replied yes, that they have.

Discussion led to Bill offering to help Sue with her spreadsheet that lists the projects by year.

There was discussion about how involved repairing the south end of River Road near the Hanover Town line would be. Sue mentioned that there are at least four culverts that need to be replaced in that area, and that the road is failing in several places.

Sue said that the Committee will continue to refine the project list and the spreadsheet.

Bill asked what was the timeline of the Baker 1 Project, and Sue said that it should be constructed next year.

The meeting was adjourned at 450 PM.

Respectfully Submitted,

/s/ Karen Henry