APPROVED: 7/17/12

CLASS V ROADS STUDY COMMITTEE MEETING MINUTES July 3, 2012

Members Present: C. Jay Smith, Fred Stearns, Jim Jenks , Frank Bowles, Sue Mackenzie, Matt Stevens.

Jay opened the meeting at 6:00 pm.

- 1. The meeting was devoted to continued discussion of the data needed to calculate the actual cost of rebuilding a 'standard' section of dirt class V road using a combination of geotextile and consolidated 1-1/2" minus crushed stone.
- 2. Jim and Frank went over the calculation for the material cost for a lineal yard of 1-1/2 foot thick 1-1/2" minus crushed stone and confirmed that it was \$85 per lineal yard.
- 3. Jim and Fred noted that converting hourly equipment costs into cost per unit area was difficult because of varying work conditions.
- 4. Jim suggested that the basic cost of materials for a mile of road ((1760 yards) x \$85= \$149,600) might be reduced and the quality of the job improved by cutting down the road a foot, rolling the new surface, putting down geotextile and then replacing the material and then only adding 6" or so of 1-1/2"-minus and rolling it. Both Fred and Jim noted that each section of road is different and that in some cases, any change in road height would create problems, so material would have to be removed rather than moved and replaced. There was general agreement that this sort of major road reconstruction would require use of several machines, typically an excavator, a bulldozer and a vibratory roller.
- 5. We discussed machine and personnel costs and note the following numbers for hourly costs: Grader \$100, Loader \$75, Roller \$100, Dozer \$150, Excavator \$200. These costs include the operator. Labor was estimated at \$50/hr.
- 6. Jim and Fred detailed the costs of putting in a 18" culvert (Materials \$650, machines \$600, Labor \$800) and agreed that \$2000 was a good working number for a culvert. (Note added by Frank: we did not discuss underdrains, which are less expensive in terms of materials, but likely require similar amounts of labor and equipment. On a given stretch of road, several underdrains might be required along an area that tended to stay wet.)
- 7. Jim and Fred thought that it was reasonable to base calculations for rebuilding a road on being able to fix 500' a day.
- 8. Frank will add the data on machine costs and labor into the spreadsheet he has developed to allow the committee to review the cost calculations and to try different combinations of materials and rebuilding to develop a road-by-road model of rebuilding costs.
- 9. We discussed the difficult problem of dealing with the severely degraded areas of south River Rd. and Jim urged that we do something to fix things up even if we understand that the basic problem is an unstable undergrade. There is general

agreement that the town needs to come up with some source of major funds to stabilize the road in several places where either the bank is slowly collapsing and causing the road to sag or where the clay undergrade creates an unstable situation for the pavement topping.

10. Minutes of the last meeting were approved.

The meeting adjourned at 7:00 pm. The next meeting will be Tuesday, July 17 at 6:00 pm.

Respectfully submitted, /s/Frank Bowles