

P.O. Box 432, New Boston, NH 03070

(603) 413-6650

March 29, 2022

Michael Pivero, Road Agent Town of Newton PO Box 378 2 Town Hall Road Newton, NH 03858

Re: Roadway Condition Evaluation

Dear Mr. Pivero:

KVPartners completed a Roadway Condition Evaluation on selected roadways identified by the Town as most in need of repairs. The evaluation included field investigations, roadway condition assessment, recommendations, and cost estimating. This work was developed to a level of detail adequate to plan a multi-year Capital Improvements Program (CIP) for these roadways.

The following roadways were included in the evaluation (see plans for project limits):

- Smith Corner Road
- Pond Street
- Meadow View Drive
- Gale Village Road
- Wallace Street
- New Boston Road
- Bartlett Street
- Wentworth Street
- Marcoux Road/Pond Street
- Country Pond Road

Scope of Evaluation

The field investigations for the roadway segments included visual observation of the roadway pavement conditions; roadside drainage patterns; locations of roadway cross culverts and drainage systems; approximate roadway widths and lengths; any severe cross slopes; and any obvious safety concerns. Adequate detail was collected to develop a plan for improvements and to determine budget level construction cost estimates. Town Staff was interviewed to determine road maintenance history and to identify problem areas. No field survey was completed.

Recommendations

The pavement rehabilitation recommendation was based on the pavement condition observed, need for roadway regrading, and need for roadside drainage improvements. Options considered included a reclaimed base course with new bituminous concrete pavement or shim and overlay. In general, if the pavement was distressed, with significant cracking, rutting and other evidence of base failure, the reclaimed base course option was recommended. If the pavement was cracked but still showed no evidence of rutting or major cracking a shim and overlay of the existing pavement was recommended. In short sections of pavement that were in relatively good condition, but between two areas where the pavement was in poor condition, the reclaimed base option was continued through those areas for construction practicality. The roads included in this study were all recommended for reclamation.



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Roadside drainage improvements and improvements where ponding was evident were recommended. Roadside improvements included bituminous berm (12" wide by 4" high so plow damage will be minimized) and vegetated swales (18" deep, 2-foot-wide bottom, and 3:1 side slopes). Berm was only recommended where a swale could not be installed without significant impacts to the roadside and to abutting properties. All drainage recommendations are conceptual and field survey and design will be required to verify the details and constructability of the concepts.

Specific recommendations for improvements to each roadway segment are depicted on the attached 8½" x 11" Schematic Plans. The 2010 Imagery available from GRANIT was used for the base maps for this area with proposed concepts shown graphically.

Cost Estimates

Cost Estimates were developed for each roadway segment. The cost estimates are planning level for establishing budgets only (see attached estimates). Following is a summary of project estimates:

Roadway	Approximate Cost	Length of Roadway (FT.)	Average Cost per foot
SMITH CORNER ROAD	\$221,000	3,450	\$64
POND STREET	\$125,000	1,800	\$69
MEADOWVIEW DRIVE	\$118,000	1,850	\$64
GALE VILLAGE ROAD	\$100,000	1,450	\$69
MEADOW VIEW DRIVE	\$106,000	1,300	\$64
WALLACE STREET	\$170,000	1,750	\$100
NEW BOSTON ROAD	\$211,000	3,400	\$62
BARTLETT STREET	\$139,000	2,400	\$58
WENTWORTH STREET	\$108,000	1,600	\$68
MARCOUX ROAD/POND STREET	\$170,000	2,900	\$59
COUNTRY POND ROAD	\$231,000	4,200	\$55
TOTAL PROGRAM	\$1,699,000	26,100	\$65

If you have any questions or need any additional information, please feel free to contact me at 603-413- 6650. Thanks!

Sincerely,

KV Partners LLC

Michael S. Vignale, P.E. Principal

Engineer