January 28, 2019

Mr. Arthur Genualdo; Public Works Director Sandown Highway Department Post Office Box 1756 Sandown, New Hampshire 03873

Subject: Sandown Road System Action Plan – 2020 through 2024

Dear Mr. Genualdo:

In 2008 this office worked cooperatively with your Department on preparation of a document entitled Sandown Road System Action Plan – 2008. Within that Action Plan we identified a prioritized series of individual but systematic public roadway improvement projects, which effectively took the form a capital improvement program for Sandown's Class V public highway system for the ten year period which concluded in 2018. A retrospective review of the 2008 Action Plan reveals all but one (Wells Village Road) of the major/collector roads scheduled for improvement at the time the Action Plan was adopted are now complete. As you are aware, a 4,750 foot long segment of Wells Village Road (Chester town line to Eagle Ridge Road) is scheduled to be completed in 2019 with the remainder (Eagle Ridge Road to Hampstead Road) tentatively scheduled for the following year (2020). Taken together, it is fair to say the 2008 Action Plan served the Town of Sandown well over the decade that has passed since its adoption.

At the direction of the Board of Selectmen your Department and this office once again collaborated on development of an Action Plan for municipal road system improvements. This time for the five year period which will run from 2020 through 2024. In addition to Wells Village Road, we identified two other major Class V collector roads (Odell Road and Cross Road) that are in need of significant improvement during this five year period. Based upon our review of current road system conditions, we recommend the following systematic improvements be undertaken and completed on an annual basis commencing in 2020:

• Fiscal Year 2020:

Subject to 2019 Town Meeting approval of funding needed to complete the northwesterly segment of Wells Village Road (Segment #1 – Sandown/Chester municipal boundary to Eagle Ridge Road), a 4,750 foot length of Wells Village Road will be reconstructed during Fiscal Year 2019. The following year (Fiscal Year 2020) the 4,700 foot remainder of Wells Village Road (Segment #2 – Eagle Ridge Road to Hampstead Road) will be reconstructed in an identical manner. Specific betterments are to include: (a) selective roadside drainage improvements; (b) reclaimed stabilized base reconstruction of the existing paved roadway

Civil Engineering

Land Surveying

Landscape Architecture

and shoulder surfaces supplemented with an additional 4 to 6 inch thickness of crushed gravel road base material where conditions warrant; (c) installation of hot bituminous pavement (3 inch thickness) to a nominal width of 20 feet flanked by 2 foot wide graded gravel shoulders; and (d) miscellaneous repairs or replacements. The estimated project cost of Wells Village Road – Segment #2 is \$470,000.

• Fiscal Year 2021:

The program goal for Fiscal Year 2021 is reconstruction of the southerly portion of Odell Road (Segment #1). Given the total length of Odell Road (10,100 feet), for budgetary reasons, reconstruction of this collector road is proposed to occur over a two year period. In Fiscal Year 2021 reconstruction of the 4,900 foot segment of Odell Road extending from Main Street to Excalibur Drive is planned. Specific betterments are to include: (a) selective roadside drainage improvements; (b) reclaimed stabilized base reconstruction of the existing paved roadway and shoulder surfaces supplemented with an additional 4 to 6 inch thickness of crushed gravel road base material where conditions warrant; (c) installation of hot bituminous pavement (3 inch thickness) to a nominal width of 20 feet flanked by 2 foot wide graded gravel shoulders; and (d) miscellaneous repairs or replacements. Estimated cost of Odell Road – Segment #1 is \$540,000.

• Fiscal Year 2022:

The program goal for Fiscal Year 2022 is reconstruction of the northerly portion of Odell Road (Segment #2) extending 5,200 feet from Excalibur Drive to the southerly limit of recently improved paved roadway surface at Fremont Road. Specific betterments shall be identical to those planned at Segment #1. Estimated Cost of Odell Road – Segment #2 is \$570,000.

• Fiscal Year 2023:

The program goal for Fiscal Year 2023 is reconstruction of the 3,500 foot length of Cross Road situated between Sargent Road and North Road. Specific betterments are to include: (a) selective roadside drainage improvements; (b) reclaimed stabilized base reconstruction of the existing paved roadway and shoulder surfaces supplemented with an additional 4 to 6 inch thickness of crushed gravel road base material where conditions warrant; (c) installation of hot bituminous pavement (3 inch thickness) to a nominal width of 20 feet flanked by 2 foot wide graded gravel shoulders; and (d) miscellaneous repairs or replacements. Estimated cost of Cross Road is \$385,000.

• Fiscal Year 2024:

The program goal for Fiscal Year 2024 is reconstruction of a series of residential streets situated near the northwest corner of the community: Cricket Lane; Highland Avenue and Bingham Circle. These three public streets have an estimated collective length of 5,250 feet. Specific betterments are to include: (a) selective roadside drainage improvements; (b) reclaimed stabilized base reconstruction of existing paved roadway and shoulder surfaces

supplemented with an additional 4 inch thickness of crushed gravel base material; (c) installation of hot bituminous pavement (3 inch thickness) to a nominal width of 20 feet flanked by 2 foot wide graded gravel shoulders; and (d) miscellaneous repairs or replacements. Estimated project cost is \$525,000.

The series of annual systematic roadway improvement projects described above may be summarized by the following graphic:

Program Year	Project Name/Length	Est. Cost (in 2019 dollars)
2020	Wells Village Road – Segment #2 (4,700')	\$470,000
2021	Odell Road – Segment #1 (4,900')	\$540,000
2022	Odell Road – Segment #2 (5,200')	\$570,000
2023	Cross Road (3,500')	\$385,000
2024	Cricket Lane (2,750') Highland Avenue (1,700') Bingham Circle (800')	\$275,000 \$170,000 <u>\$ 80,000</u> \$525,000

We trust you will find information presented in the foregoing summary consistent with our recent discussions and your Department's expectations. As always, please contact the writer at your convenience if you should have questions or further instructions related to this matter.

Sincerely:

Steven B. Keach, P.E. President Keach-Nordstrom Associates, Inc.