



CITY OF NOVI CITY COUNCIL
APRIL 26, 2021

SUBJECT: Consideration of approval of Change Order No. 1 to Pro-Line Asphalt Paving Corporation for the 2021 Neighborhood Road Program – Asphalt Streets, in the amount of \$1,070,965.00.

SUBMITTING DEPARTMENT: Department of Public Works, Engineering Division

EXPENDITURE REQUIRED	\$ 1,070,965.00
AMOUNT BUDGETED	\$ 2,205,667.00
APPROPRIATION REQUIRED	\$ 0
LINE ITEM NUMBER	203-203.00-864.223

BACKGROUND INFORMATION: OHM-Advisors assisted the Engineering Division with developing a list of potential streets for the 2020 and 2021 Neighborhood Road Program (NRP). The program was divided into two contracts: concrete roads and asphalt roads. The programs were also advertised for a two-year contract to secure unit prices and lower the overall costs of bidding and design.

In 2019, the streets in the 2020/2021 program were being looked at for surface conditions and geotechnical investigations for base and subbase discrepancies. All remaining streets in the Orchard Ridge Estates Subdivision, located off 10 Mile Road, just east of the Civic Center, were selected as final candidates for the 2021 Neighborhood Road Program. At that time, it was determined that nearly half of the existing concrete curb and gutter needed replacement.

In preparation for this year's program, we noted significant, excessive deterioration of the curb and gutter which was not visible during the 2019 inspection or selection process. It appears all the curb and gutter in this subdivision suffers from a chemical condition called ASR or Alkali-Silica Reaction, more commonly known as "concrete cancer". ASR is a deleterious swelling reaction that occurs over time in concrete between the highly alkaline cement paste and the reactive silica found in many aggregates. This chemical reaction causes the expansion of the altered aggregate by the formation of a soluble and viscous gel

and ultimately causes spalling and loss of strength of the concrete. The rate of deterioration from ASR can vary greatly from location to location. The final stages of this reaction can take place in a rapid 10 years to a slow 40+ years. The viscous gel is normally not visible until the curb has reached its total loss of structural integrity.

This amount of additional concrete curb and gutter removal and replacement doubles the original curb bid items by \$334,776.

After redirecting dollars from the FY 20-21 Capital Preventative Maintenance - Asphalt Program and monies withheld from last year's road program due to COVID-19, DPW can tackle this additional curb and gutter as well as several smaller street segments which were originally "on the bubble" during the initial construction and budgeting selection process.

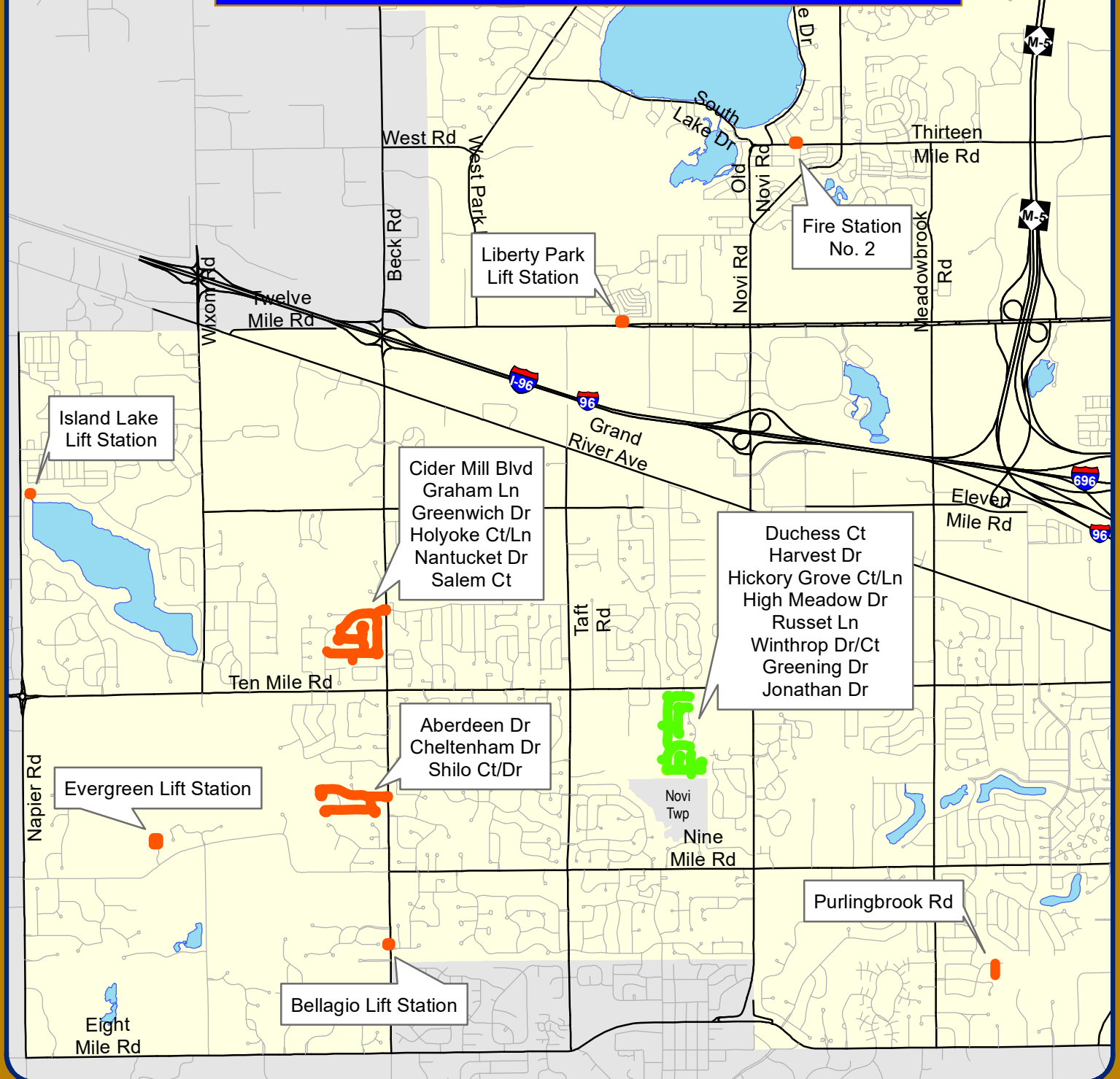
The following street segments are being proposed for addition to this year's asphalt program: Catherine Industrial and Myrtle Court off 10 Mile Road, Twain Place and Cummings Lane in the Tollgate Woods/Ravines developments. These additional street segments can also provide the contractor with places to alternate work tasks, instead of delays or even performing other work outside Novi. Also, addressing these street segments now significantly reduces the amount of maintenance required throughout the coming years.

The contract administration and geotechnical engineering services related to these project additions will be granted to the following pre-qualified firms using the fee percentages in the Agreements for Professional Engineering Services and Geotechnical Engineering Services for Public Projects.

OHM-Advisors			
Orchard Ridge Curb & Additional Streets	Contract Administration	4.75% of the construction contract (\$1,070,965.00 X 0.0475)	\$ 50,870.84
	Crew Days	\$700 daily inspection fee x 57 days	\$ 39,900.00
	Design Services	7.0% for additional streets	\$ 19,595.00
Testing Engineers & Consultants, Inc. (TEC)			
Orchard Ridge Curb & Additional Streets	Material testing services	1.9% of the construction contract (\$1,070,965.00 X 0.019)	\$ 20,348.34

RECOMMENDED ACTION: Approval of Change Order No. 1 to Pro-Line Asphalt Paving Corporation for the 2021 Neighborhood Road Program – Asphalt Streets, in the amount of \$1,070,965.00.

2020 - 21 Asphalt Construction: Neighborhood Roads Program, Lift Station Driveways, and Fire Station No.2



Map Author: Rebecca Runkel
Date: May 7, 2020
Project: 2020-21 NRP Asphalt
Version #: 1.0

MAP INTERPRETATION NOTICE
Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

Legend

- 2020 Asphalt Program (NRP, Lift Stations, Fire Station No.2)
- 2021 NRP Asphalt Program



City of Novi
Engineering Division
Department of Public Works
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Feet
0 800 1,600 3,200 4,800
1 inch = 4,080 feet



2021 Neighborhood Road Program Additional Asphalt Segments Location Map



Map Author: Rebecca Runkel
Date: 4-13-21
Project: 2021 NRP Asphalt Additions
Version #: 1.0

 Additional Segments

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1 inch = 2,293 feet



