



From: Paul M. Davis, P.E.
To: Rochester Hills City Council
Date: July 20, 2015
Re: Engineer's Report for the Proposed Norton Lawn and Hickory Lawn
Special Assessment District (SAD) Paving Project; City File No. E14-030

The recommendation is made that the City Council accept this report at their July 20, 2015 meeting and set the date of August 10, 2015 for the public hearing on necessity for this project.

Overview

The proposed Norton Lawn and Hickory Lawn paving project is the first gravel to pavement road SAD to progress to an engineering report since the City Council restored the SAD program on October 1, 2013. The SAD program was developed to encourage and assist residents to pave their local gravel streets. The assistance form is to provide a cap of \$5,000.00 per buildable lot to the residents and an intent to have a cost share of 60% City and 40% resident for the paving project.

History

Mr. John Meiers initiated the request for Norton Lawn and submitted a SAD request with 24 signatures to the City. An initial public information meeting was held on September 18, 2014 at City Hall in response to the SAD request. The initial public information meeting provided greater detail on the SAD process and the residents were told that a formal petition signature was required to show that at least 50% support for the paving project existed. The formal petition includes dated signatures ranging from October 3 to October 28, 2014.

Mr. Joseph Peters collected resident signatures along Hickory Lawn and submitted an SAD request dated October 27, 2014 with 22 signatures to the City. Engineering staff subsequently hosted an initial public information meeting on December 4, 2014 for the Hickory Lawn residents. Similar to Norton Lawn, a formal petition signature drive was undertaken to show that at least 50% support for the paving project existed. The formal petition includes dated signatures ranging from December 4, 2014 to January 3, 2015.

City staff then combined the two SAD request into a single project and prepared an agenda summary to the January 26, 2015 City Council meeting with a request to formally accept the petitions and direct the City Engineer to prepare an Engineer's Report. Also attached with the council meeting agenda item were SAD Paving Petition Verification Reports for each street by the City Assessor. City Council approved a resolution to formally accept the petition request and continue moving the process forward.

City staff requested a proposal from an engineering design consultant (OHM Advisors) to prepare the construction plans and specifications for the project. The OHM design proposal was a meeting agenda item for the March 30, 2015 City Council meeting and City Council approved it. OHM proceeded to prepare a draft set of design plans for the second public information meeting which was held at Rochester Hills City Hall on June 24, 2015. Resident questions were answered at this meeting and the resident attendees were given an opportunity to review the draft design plans.

Street Summary

The proposed paving length of Norton Lawn is approximately 2,100 feet. The existing right-of-way width of Norton Lawn is 50-feet and public water main and sanitary sewer exists along the entire length of the proposed paving project. Storm water drainage is handled by open drainage ditches and an overhead utility pole line runs north-south along the westerly side of Norton Lawn. The existing paved approach to Auburn Road appears to be fair to poor in quality.

The proposed paving length of Hickory Lawn is approximately 2,000 feet. The existing right-of-way width of Hickory Lawn is 50-feet and public water main and sanitary sewer exists along the entire length of the proposed paving project. Storm water drainage is handled by open drainage ditches and an overhead utility pole line runs north-south along the easterly side of Hickory Lawn. The existing paved approach to Auburn Road appears to be good and in better condition than the Norton Lawn version.

Both streets are included within the Eyster's Avon Gardens subdivision plat and are located between Auburn and Wabash Roads. A single project will be bid for the paving construction of both streets assuming that they each continue to hold a majority of residents supporting the paving of both gravel roads.

Scope of Work

The proposed road construction includes the following activities:

Tree Removal - It is currently expected that one tree will need to be removed on Norton Lawn; there are no tree removals currently planned on Hickory Lawn.

Ditching - Because of right-of-way width constraints, both roads are planned for a open ditches with a maximum 2-foot depth, 1 vertical to 3 maximum horizontal side slopes, and a V-shaped construction profile.

Culverts - Existing culverts appear to mostly be in good condition with end sections. These driveway culverts were placed during the Wolf Drain construction work so it is planned to salvage and reinstall approximately two-thirds of the driveway culverts and end sections. If field inspections of existing removed culverts warrant their replacement, select culverts will be replaced as directed by the engineer.

Road Cross Section - The proposed pavement is a 4-inch thick asphalt pavement section over a minimum 8-inch thick aggregate base. Actual thicknesses of aggregate base may exceed the 8-inch thickness on each road. The design engineer is currently consulting with a geotechnical engineering company (Testing Engineers Consultants) to obtain soil borings to verify the existing aggregate depths.

Curbing - There is currently no placement of concrete curbing planned for either road. Some existing concrete curbing exists at the Hickory Lawn approach to Auburn Road and it appears to be in good condition. The Norton Lawn approach does not have curbing.

Traffic Calming - Residents attending the two public information meetings have expressed a strong concern for implementing speed control measures with the paving project to discourage cut-thru traffic and control speeding. The City Transportation Engineer is suggesting 4 speed hump locations be incorporated with each street into the project construction. The inclusion of the speed humps will need to be supported by the directly adjacent property owners to remain in the project. This resident supported requirement has been successfully demonstrated in previous subdivisions where speed humps have been installed to control speeding. It is expected that some speed humps will be built on each street but the total number and corresponding locations will be finalized as the design further progresses.

Driveway Approaches - Driveway approaches will be replaced in-kind in paved driveways exist at residences. Existing gravel driveways will be provided with an asphalt pavement driveway surface.

Mailbox Posts - Temporary relocation of mailboxes is planned for the road paving project. The project cost estimate currently includes 61 mailbox posts that are planned for relocation and 15 new posts.

Turf Restoration - Disturbed areas are expected to be restored with a combination of seed and mulch or sod. A topsoil base is also being planned.

Opinion of Probable Construction Cost

The current total project construction cost for paving the two gravel roads is estimated to at approximately \$804,200.00. It should be noted, however, that the construction cost is only one component of the total costs necessary to take a project from start to finish. When the various other project costs of design, testing, inspection, contract administration, and additional construction engineering tasks are included, the total project cost is estimated to be \$1,078,390.00. Since the roads are almost the same lengths of existing gravel, a 50/50 split of the total costs is assumed for each road.

The draft assessment roll has determined the number of buildable lots to be 34 for Hickory Lawn and 36 for Norton Lawn. The Rochester Hills SAD policy caps the total contribution per buildable lot at \$5,000.00 so the total estimate of the resident share of 70 combined lots is \$350,000.00 with the balance of \$728,390.00 being the City responsibility. These values equate to a cost share percentage of: Residents: 32.5 percent and City: 67.5 percent

Thus, Rochester Hills is expected to share a little greater share of the project costs than the intent of a 40% resident / 60% City split based on the latest construction cost estimate.

A preliminary assessment roll is attached for reference and subject to change based on future review of the Assessing Department. The roll was prepared with the declining rate ratio method and only includes directly benefitting properties (for example, the indirectly benefitting properties of the Eyster's Avon Gardens subdivision already on paved road portions of Norton Lawn and Hickory Lawn are not included. This preliminary assessment roll has not been verified and is provided to provide City Council with a reference.

Attachment(s): Draft SAD Assessment Roll for Norton Lawn
Draft SAD Assessment Roll For Hickory Lawn
Aerial Location Map.pdf

c: Bryan K. Barnett, Mayor
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