

TECHNICAL MEMORANDUM

| PREPARED FOR: | Mr. Adam Wit, Clerk Charter Township of Harrison |
|---------------|--|
| PREPARED BY: | David M. Nummer, PE, Wade Trim Ryan T. Brown, Wade Trim |
| DATE: | March 21, 2022 |
| RE: | Huron Pointe 2 Street Paving SAD Charter Township of Harrison |
| FILE: | HSN 1020-22T, Task 110 |

Residents of E Archer Dr, W Archer Dr, northern portion of Pardee St, and Powers St have inquired about creating a Special Assessment District (SAD) to resurface their streets. The streets are approximately twenty feet wide and include 6,009 feet of asphalt paving with no shoulders, shallow ditches, and minimal storm sewer. The existing pavement is in very poor condition with excessive cracking and patching.

The Township has developed a combined cost estimate for the resurfacing of E Archer Dr, W Archer Dr, Pardee St, and Powers St per the limits described above and as shown on the attached map. The estimate was developed based on the construction cost estimates prepared by the Macomb County Department of Roads and actual costs from other recent SADs within Harrison Township for similar proposed paving projects. The estimated cost and a brief project description are presented below. However, a 120 ft section of Pardee St, from Powers St south to the dead end, is not in need of repaving due to it being in good quality, therefore will not be included in the cost estimates. The properties along this stretch of Pardee St will however be included in the cost per lot as they will experience a benefit from the remining portions of this project. One bridge also exists within the SAD boundary, this SAD does not cover improvements to the bridge. Lastly, the stretch of Archer Dr from S River Rd south to the intersection of E Archer Dr and W Archer Dr is in good condition and will not be included in the SAD improvements. The two houses with driveways on this portion of Archer Dr will not be included in the SAD as they will not benefit from it.

PROJECT SCOPE

The proposed project consists of crushing and reshaping the existing pavement to create a new base material with the addition of a new four-inch-thick asphalt surface. The work would also include minor drainage work and driveway patching as necessary to match the drives with the new roadway surface. The manholes will also have to be brought to grade and sealed, which has been added to the total construction cost. This project does not include any ditching or drainage improvements other than the minor work noted above.

SPECIAL ASSESSMENT DISTRICT

The Special Assessment will be financed on a per lot basis over 150 lots. Special Assessments are typically financed over a period of ten years.

1

MACOMB COUNTY SUBDIVISION RECONSTRUCTION PROGRAM

In previous years, the Macomb County Department of Roads had a program that provides 50% participation in the cost of reconstructing local subdivision streets, up to a maximum of \$500,000. To qualify for this program, a project must be complete reconstruction including new base material, pavement, and a complete drainage system. The County will also allow pavement to crush/reshape paving projects if they include "significant drainage improvements." We do not know if the County will offer this program again for 2023.

The Township is limited to three projects each year. If the residents of Huron Pointe are interested in exploring the subdivision reconstruction program, the application would have to be submitted in the fall of 2022 for 2023 construction (provided the County offers this program in 2023). In addition, the scope of the work would have to be expanded to include "significant drainage improvements" so the cost of the project with the County cost participation may or may not be less than the cost to do the crush and reshape project as proposed.

PROJECT COST ESTIMATE

| Unit Cost (based on the DOR estimated average for crushing | | | | |
|--|-------------------------|-------------------|---------------|--|
| and reshaping pavement in Harrison Township) | | | \$ 200 per LF | |
| Length of Road | | 6,009 LF | | |
| Estimated Construction Cost | | | \$ 1,201,800 | |
| 20% Contingency | | <u>\$ 240,360</u> | | |
| Construction Subtotal | | \$ 1,442,160 | | |
| 1% Township Administrative Costs* | | \$ | 14,422 | |
| 5% Bonding Cost | | \$ | 72,108 | |
| 3% County Preliminary Engineering | | | 43,265 | |
| 10% County Construction Engineering | | \$ | 144,216 | |
| 3% County Administrative Fee | | \$ | 43,265 | |
| | Estimated Project Costs | \$1 | 1,759,436 | |

Cost Per Lot (150 Lots Total) = \$11,730 Annual Assessment Payment** = \$1,519.09

*One percent administrative cost assumes the Township would use available funds to finance the project rather than bonding. Should the project be bonded, an additional five percent should be added for bonding costs.

**Based on ten-year assessment at five percent interest.

RTB:DMN:vhe HSN 1020-22T Huron Pointe 2 SAD Tech Memo.docx Attachment (Proposed Special Assessment District Map)

2

