



Legislation Text

File #: 2019-0110, **Version:** 1

Title/Name/Summary

2019 Fernway Subdivision Roadway and Drainage Improvements, Watershed #4 - Design Engineering Services

History

The pavement in Fernway Subdivision was originally constructed in the early 1960's. At that time, the unincorporated roadways were constructed to a rural cross section below village standards. The village has spent considerable resources maintaining these roadways since annexing the area in the mid-1980s. The village's pavement management consultant, Applied Research Associates (ARA), has recommended full depth pavement reconstruction with installation of a concrete shoulder to contain the pavement edge. Due to the scale of work and projected construction cost, the improvements for the entire Fernway subdivision are projected to span a period of nine years beginning in 2016, continuing to 2024, subject to available funding. An overall Fernway improvement map is provided for reference, showing the nine color-coded project areas representing each anticipated road-and-ditch reconstruction project year. The map also identifies six watershed areas defined by green borders and numbers. The determining factor for each project year is dictated by the lay of the land, working from low-lying areas to higher areas; however, since there are several separate (and some independent) watersheds in Fernway, the proposed project years are a guide and not absolute.

The storm water design of each Fernway reconstruction area has been engineered by Christopher B. Burke Engineering Ltd. (CBBEL). The village approved a contract with CBBEL in 2013 to provide storm water design for the roadside ditch improvements within watershed areas one (#1) through three (#3). The overall map shows the 2019 project location lies in the southern portion of watershed four (#4) and therefore the village must engage a consultant to provide storm water design services for this area.

Since initiating this multi-year project in 2016, the Village Board has annually approved contracts with Baxter & Woodman Consulting Engineers to provide roadway design services (Phase II) and construction oversight services (Phase III) for each project area. Baxter & Woodman has provided the road design engineering and incorporated the CBBEL storm water design into the overall plans for construction bidding. The Phase II road engineering (provided by Baxter & Woodman) and ditch design engineering (provided by CBBEL) includes field evaluation, utility coordination, pavement rehabilitation evaluation, ditch re-grading, project specifications, detailed engineering bid drawings and bidding assistance. Each year the village has ultimately received an acceptable project design from their collaboration. However, a large amount of back-and-forth coordination occurred between the two firms to finalize the project design. After three years of using this approach, village staff believes the process would be more efficient by using one consulting engineer for both the road design and the storm water design.

To date the first three road reconstruction project areas have been successfully completed. The

overall project map indicates 2019 reconstruction to include the following streets: Robinhood Drive (north of 167th Street to 165th Place), 166th Place, 166th Street and 165th Place. Village staff requested proposals from both Baxter & Woodman and CBBEL for the 2019 road and ditch design, and for the storm water design of watershed four (#4) in its entirety. Note that the entire drainage area for watershed four covers three (3) full road project years and part of a fourth year.

Baxter & Woodman submitted a stormwater design proposal for watershed four (#4) in the amount of \$71,703.00 and a proposal for the 2019 road and ditch design in the amount of \$41,440.00, resulting in a combined total of \$112,743.00. CBBEL submitted a combined stormwater design and roadway design proposal for watershed four (#4) and the 2019 project area in the amount of \$99,400.00.

To date, CBBEL has demonstrated excellent ability to perform the services necessary for proper development of the Fernway stormwater design. CBBEL is also well qualified to provide design services for the road and ditch engineering. Based upon the proposals submitted and previous Fernway reconstruction experience by CBBEL, staff recommends accepting the proposal from Christopher B. Burke Engineering Ltd. of Rosemont, Illinois in an amount not to exceed \$99,400.00.

Based on the type of construction, 55% of the road and ditch design cost will be funded by the Road Improvement Program and 45% of the road and ditch design cost will be funded by the Storm Water Fund.

On February 18, 2019 this item was reviewed by the Public Works Committee and recommended for approval and referred to the Village Board of Trustees for consideration.

Financial Impact

Funds for this work are included in the Road Improvement Program account 054-0000-471250, and storm water fund account 031-6007-470500.

Recommended Action/Motion

I move to approve accepting the proposal for 2019 Fernway Subdivision Roadway and Drainage Improvements, Watershed #4 from Christopher B. Burke Engineering, Ltd. of Rosemont, Illinois, in an amount not to exceed \$99,400.00.