Legislation Text

File #: 2021-0408, **Version:** 0

Title
Fernway 2021 Phase Six Design Engineering- Proposal

History
The pavement in Fernway Subdivision was originally constructed in the early 1960's. At that time, the unincorporated roadways were constructed with a rural cross section, far below current Village standards. The Village has spent considerable resources maintaining these roadways, creek culverts and water mains since annexing the area over 40 years ago.

Due to the scale of work and expected construction cost, since its 2016 inception the comprehensive road and ditch project for the entire subdivision has been projected to span nine (9) years. An overall Fernway phased improvement map is provided for reference, showing the nine (9) color-coded street areas representing each anticipated reconstruction project year. The map also identifies six (6) 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 2016 through 2020 phases of this project have all been completed with positive results. Note that the road construction and final ditch restoration for the 2020 project carried-over to spring 2021 due to early onset of winter last season. Regardless of the carry-over, the project was completed in a timely fashion by PT Ferro Construction. The sodded ditches have rooted well and the grass has begun to grow nicely.

The 2021 Fernway road and ditch design engineering includes field evaluation, utility coordination, pavement rehabilitation evaluation, specifications, detailed drawings, ditch re-grading plan and profile sheets with cross-sectioning and bidding assistance. The 2021 project area consists of the following streets highlighted in dark blue on the attached map:

>164th Street from 88th Avenue to Sherwood Drive
>Sherwood Drive from 164th Place to 163rd Street
>163rd Street from 88th Avenue to 8650 163rd Street (eastern limit of Orland Park corporate limits)

The Village's pavement management consultant, Applied Research Associates, has unequivocally recommended full depth pavement reconstruction and stabilization for every phase of this regional project, in addition to recommending concrete shoulders to support the pavement edge. This is due to the fact that the original street construction was built upon poor soils. The wholesale ditch re-grading is necessary to reestablish proper, consistent ditch flows from street-to-street on account of the existing driveway culverts being of meager size and frequent cases of blockage and/or deterioration. Many ditches have also been modified by adjoining residents, which often adversely impacts upstream neighboring properties.

Since the project consists of both street and storm water improvements, the Village has previously engaged in design contracts with both Baxter & Woodman Consulting Engineers and Christopher B. Burke Engineering (CBBEL) to both design and oversee the road reconstruction and ditch grading improvements. Years 2016 through 2018 were a joint design effort between Baxter & Woodman and CBBEL, with Baxter & Woodman leading the design. Year 2019 introduced a new, separate watershed area (number four) and the Village requested proposals from both Baxter & Woodman and CBBEL to select a sole design engineering firm for the improvements, thereby eliminating the joint effort and simplifying the combined road and stormwater design process.

In 2019 CBBEL was awarded the contract for three (3) years of drainage design. The intent of awarding three (3) years of drainage design was to cover the entirety of watershed area number four due to the overlapping drainage ways from one project year to the next. CBBEL was also awarded the respective years of 2019 and 2020 of road and ditch reconstruction design each year, due to the considerable budget impact that would be incurred if the entirety of the design was awarded for three (3) years “up front.”.

The present 2021 project area is therefore year three (3) of three (3), within watershed number four. Proposals were requested from CBBEL and Baxter & Woodman, given their past investment and history with the Fernway regional project. Other firms were polled for their interest and respectfully declined, given the CBBEL and Baxter & Woodman previous design history with watershed number four. Staff expects future watersheds five and six to be an equal opportunity for any engineering firm to secure the design work.

To date, CBBEL has demonstrated excellent ability to perform the services necessary for proper development of the Fernway stormwater design. CBBEL is also equally qualified to provide design services for the road and ditch plan-and-profile engineering. Based upon previous Fernway reconstruction experience and excellent performance by CBBEL, staff recommends accepting the proposal from Christopher B. Burke Engineering Ltd. of Rosemont, Illinois in an amount not to exceed $69,900.00

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.

Financial Impact
Funds for this work are available in the Road Improvement Program account 054-0000-471250 CP-1015, and in the Underground Water & Sewer Lines account 031-6007-470500.

Recommended Action/Motion
I move to accept the proposal for 2021 Fernway Subdivision Roadway and Drainage Improvements, from Christopher B. Burke Engineering, Ltd. of Rosemont, Illinois, dated May 26, 2021 in an amount not to exceed $69,900.00;

And

To authorize the Village Manager to execute all related contracts, subject to Village Attorney review.