Staff Report

Subject: **Migrate Esri Enterprise from SQL 2008 to SQL 2016 – Spatial Engineering – PID: 22012-OCS-02**

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Department: GIS

Meeting Date: 03-07-2023

Item Description: Consideration to approve proposal by Spatial Engineering to migrate the existing GIS database from SQL 2008 to 2016, upgrade the SDE to 10.8.x, and install ArcGIS Image Server

Summary Recommendation:

Effingham County's GIS data is currently housed in a 2008 SQL database. The GIS department, with the assistance of IT and Spatial Engineering, requests funding approval for migration support to SQL 2016. The current Operating System and 2008 version of SQL are no longer supported. This creates unnecessary risk of losing GIS data and productivity. Additionally, with the new SQL Server 2016, the County will update their Enterprise GIS from Arc Server 10.0 to 10.8.1 and create an image server to host raster imagery. The County has made significant investments in GIS data and mapping assets. The ability to support future GIS innovation will be greatly aided with the data migration and server updates. The proposed upgrades will be executed under Spatial Engineering's current contract with the County; PID 22012, On-Call Support. Per the current contract with Spatial Engineering, On-Call Services (OCS) provides the County the ability to request support on an as needed basis.

Executive Summary/Background:

- Spatial Engineering's expertise will mitigate downtime for the GIS department as well as all departments that it supports including; Development Services, Tax Assessors, E911, and Fire
- Upgrade to SQL 2016 and Install Arc Server 10.8.1
    - The primary benefits bring the server Operating System and SQL to a version that is supported, and will have continued support for several years.
    - The older systems currently in place limit the support that the County receives from ESRI as the County will not be able to upgrade past the current software.
    - The new servers will be built on the IT department's new Host server platform hardware and storage which will increase speed and reliability.
    - The current server platform is scheduled for retirement.
    - The server upgrade will allow for future upgrades to ArcGIS Portal, a hybrid web based data sharing platform that will allow for efficient sharing of GIS data and maps throughout the County departments.
    - Portal integration eliminates the need for staff to manually maintain the data updates for the Interactive web map.
- Install ArcGIS Image Server
    - Image server will be created to provide efficient raster imagery access.
        - Imagery is currently accessed using a file based system that slows data maintenance and the editing process
    - The increased speed of access to imagery will support the daily use of the GIS data, parcel editing, web based mapping, and efficiencies for multiple department in addition to GIS.

Alternatives for Commission to Consider:
1. Approve the proposed contract with Spatial Engineering in the amount of $11,723.00.
2. Do not approve the proposed contract with Spatial Engineering
3. Provide Staff with Direction

Recommended Alternative:
Staff recommends Alternative number 1

Other Alternatives: N/A

Department Review: GIS Manager and IT Director

Funding Source: 100-7403-225-52-1202 using a budget amendment drafted by finance for FY23.

Attachments: Spatial Engineering Proposal