SWEETWATER SPRINGS WATER DISTRICT

TO: Board of Directors **AGENDA NO. V-E**

FROM: Steve Mack, General Manager

Meeting Date: October 2, 2014

Subject: APPROVAL OF RESOLUTION 14-21, APPROVING AN AGREEMENT WITH OPEN SPATIAL FOR PROFESSIONAL SERVICES FOR A HOSTED GIS AND RELATED SERVICES FOR MAPPING OF DISTRICT FACILITIES

RECOMMENDED ACTION: Approve Resolution 14-21 which approves an agreement with Open Spatial Corporation to provide professional services for a hosted GIS and related services for mapping District facilities and authorizes the General Manager to sign.

FISCAL IMPACT: The Open Spatial proposal would cost $13,775 for the first year and $4,200 per year in following years.

DISCUSSION:

For some time the District has discussed accumulating all District mapped data into one workable format that would allow reasonable access and real-time updating. The District has a relatively large annual capital project and several smaller in-house capital projects each year. We have some level of mapping (on the wall, for example) but we know much of that information is incorrect and the hard copy representations don't get updated frequently.

The proposal by Open Spatial provides a web-based geographical information system (GIS) that allows District staff online access, including production of maps and frequent updating of existing information when projects are completed or when staff find and correct mapped data. The proposed cost for these services are quite reasonable when one considers that there is no cost for software – Autocad has substantial seat licenses, no cost for staff trained in Autocad or other similar software, no costs for hardware – typically a workstation is needed for this. The proposal includes training for District staff.

The proposal provided by Open Spatial (Exhibit A) has a listed cost of $13,775 for the first year including annual maintenance costs of $4200. The quoted cost does not include staff time – entering into this agreement implies a commitment by the District to help Open Spatial get the initial mapping done and then implies a commitment by District staff to use the product. We are quoted a "light" version of their products; it's quite possible that if we find these products are very useful, we'll want more robust versions. It's also possible that the District will need more than the allowed amount of maintenance hours; the proposal includes the billing rate for those additional services.

Staff have had 3 meetings with Open Spatial regarding this proposal. At the last meeting on September 22, the meeting was attended by the General Manager Steve Mack, Administrative Manager Julie Kenny, Field Manager Kevin Gilman, Senior Crew Supervisor Keith McDonald, and Joe Machado, an engineer with Coastland Engineering. All were impressed with various aspects of the proposal, were skeptical that the proposed work would be done for the proposed cost and supportive of moving forward with this project (many clarifying questions to the Open Spatial team in this regard). We realize that updated, correct mapping of the District facilities is important, that the historical knowledge of District staff needs to be documented, and that this approach appears to be a good way to do it. One important aspect of the Open Spatial proposal – if we work with this firm for a year or so and find that it doesn't work for us, the work done is the property of the District – it's not lost effort.

I called Purissima Hills Water District, one of the listed references in the proposal and a water district of similar size to us, about their experience. The General Manager there was very positive in his response – costs have been in line with their agreement and the Open Spatial staff are very easy to work with and helpful, and the product is very useful in their work.

The funds required for this agreement are not in the FY 2015 Budget. However, the costs are reasonable and can be easily covered by District Reserves if savings are not achieved in the approved Budget.

Staff recommends approval of Resolution 14-21.

RESOLUTION 14-21

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SWEETWATER SPRINGS WATER DISTRICT APPROVING AN AGREEMENT FOR PROFESSIONAL SERVICES WITH OPEN SPATIAL CORPORATION FOR A HOSTED GIS OF DISTRICT FACILITIES AND RELATED SERVICES AND AUTHORIZING THE GENERAL MANAGER TO SIGN

WHEREAS, Sweetwater Springs Water District has undertaken a large capital faclities improvement effort in the past few years and has a need for continual updating of the digital mapping of District facilities as these projects are completed, new capital projects are started, and specific map products are needed; and

WHEREAS, the professional services needed for this work is beyond the capabilities of existing staff and hiring in-house staff for this kind of work is impractical; and

WHEREAS, District staff have been in discussions with Open Spatial Corporation staff for providing an Internet based hosted GIS that incorporates all existing information into a digital mapping of District facilities; and

WHEREAS, access to this mapping effort will be online and available to District staff without purchase of additional hardware and sofware; and:

WHEREAS, Open Spatial has provided the District with a proposal for their services (Exhibit A) which is very reasonable for the scope of the services; and

WHEREAS, staff has reviewed this proposal and finds it responsive to the District's need for digital mapping services.

NOW, THEREFORE, BE IT RESOLVED, that:

1. The Agreement for a Web hosted GIS mapping solution, a copy of which is attached hereto as Exhibit A, is hereby approved in the sum of $13,775; and

2. The General Manager is authorized to execute said Agreement on behalf of the District.

I hereby certify that the foregoing is a full, true, and correct copy of a Resolution duly and regularly adopted and passed by the Board of Directors of the SWEETWATER SPRINGS WATER DISTRICT, Sonoma County, California, at a meeting held on October 2, 2014, by the following vote:

Director	**Aye**	**No**
Sukey Robb-Wilder	_____	_____
Tim Lipinski	_____	_____
Richard Holmer	_____	_____
Gaylord Schaap	_____	_____
Victoria Wikle	_____	_____

_____
Richard Holmer
President of the Board of Directors

_____
Attest: Julie A. Kenny
Clerk of the Board of Directors

Exhibit A

Sweetwater Springs Water District

Web hosted GIS mapping solution

Prepared by:
Open Spatial Corporation
September 2014
www.openspatial.com

Table of Contents

1. Introduction 3
2. Solution provided 4
3. Project stages 5
4. Pricing 5
   4.1 Expected costs for Sweetwater Springs WD: 5
   4.2 Terms: 6
5. About Open Spatial 7
   5.1 Summary of Open Spatial product offerings 8
   5.2 Sample of Open Spatial customers in the region 9
   5.3 Contact information 9
6. Appendix A: Signature page 10

Revisions

Version	Date	Description	Author
v1.0	September 22, 2014	Initial proposal	Colin Hobson
v1.1	September 23, 2014	Added a section for the Terms, Added Appendix A – Signature page	Colin Hobson
v1.11	September 24, 2014	Included current standard hourly rates in the terms	Colin Hobson

1. Introduction

Sweetwater Springs WD (SSWD) provides water distribution services to five townships adjacent to the Russian River in the Guerneville, CA area. Approximately 3,600 connections are serviced from water supply drawn from wells. Currently Sweetwater Springs WD does not have a GIS, and outsource all of their CAD work to engineering firms, who have drawings of the water system in various states of completion.

This proposal is for the provision of a web hosted GIS mapping system and services to build out a complete data set of the water distribution system assets and primary attributes over time. Open Spatial has off the shelf data models and applications that provide a high level of tried and tested functionality for public works and utility districts and divisions. These applications are used by many organizations in-house and also by Open Spatial itself to rapidly build out a database driven GIS asset inventory and map. Open Spatial affords the ability of smaller customers to get high end services and functionality on a budget appropriate to small organizations. Using the services and hosted software from Open Spatial will enable the ongoing completion of a good asset inventory and map that is attributed, connected and modelling ready. This assures the recording and transfer of institutional knowledge while also building out the asset inventory as advised by the EPA.

With this system Sweetwater Springs WD personnel will be able to login and view the districts asset inventory for the water distribution system from any computer on the web. Users will be able to search, query, view attributes and perform trace and break analysis. Primary asset information where available such as ID, diameter, material, age and connectivity can be displayed as needed. Data quality and completeness will be improved on an ongoing basis by red-lining markups directly on the web map which Open Spatial will then capture once verified. Open Spatial recommends a support and services contract of 2 hours per month for Open Spatial to update the base map as requested and/or as per markups submitted.

The system provides a good starting point that enables the base data to be improved and updated. It is also a scalable solution such that additional functionality can be added as and when needed. Such as linking to work order system and/or billing systems for example.

2. Solution provided

Open Spatial will provide a web hosted solution that would include and/or support the following functionality:

- Provision of a server and web mapping application with login/user access control
- The creation of a connected attributed pipe/node network of sewer and water data (based on the current data as provided by Sweetwater Springs WD).
- Web based maps and interface to the Sweetwater Springs WD asset information
- Web forms and advanced forms (drill down, traverse diverse databases, filter and search, zoom to any asset on the map).
- Configurable editing of attribute/form data
- Browser based redlining and mark-ups with comments
- Browser based network tracing for trace and break analysis with pass through capability, reporting and mail merge capability (where data is provided and configured)
- Listing and linking of as-built documents as captured
- Monthly support and data updating services (from red-line markups, paper and/or digital)

Optional additional functionality available as needed/selected:

- High resolution plot/print from the browser through plot templates
- Linked photo's and other documents to any asset or data record
- Data integration framework for easy configuration of links within the core data and with data in other systems, including work order management systems and billing systems
- Addition of mobile/tablet based data viewing and updating solution (*additional fees apply)
- Data and system can be moved on-site onto customers intranet if desired (*additional fees apply)

3. Project stages

The project will have 3 stages. The stages and expected timing is listed in the table below.

Project stage	Expected duration
Setup and preparation	8 Weeks
Training	2 days
Deployment and usage	Ongoing after training

4. Pricing

The proposed solution for Sweetwater Springs WD includes the initial conversion and loading of the existing mapped information from CAD drawings into one single database. This proposal assumes that this data is fairly well drawn/captured and fairly complete with basic information (diameter and material) and covers the full extent of the districts jurisdiction. While the real world location and attributes of this data will not be validated by Open Spatial, the use of it as-is to load into the system is recommended. Scanned as-built data will be used as needed and referenced in the system as the project progresses.

4.1 Expected costs for Sweetwater Springs WD:

In summary, the costs for the project are expected to be:

Initial setup, data loading, install and training	**$9,575**
Annual subscription fee **enlighten light** (3 user logins) (i.e. $200/month)	**$2,400**
Expert Services – 2 hours per month. Annual cost (GIS analysts, data capture specialists, IT, Industry specialists)	**$1,800**

4.2 Terms:

- Services costs for initial setup, data loading, install and training will be billed in two parts - at the 50% stage and 100% stage.
- 100% stage will be once the client is provided with user login information and initial training is done. This will be the commencement date for the annual contract.
- Software subscription is an annual contract, and will be billed at least 30 days before it is due each year.
- Services contract is an annual contract, hours do not accrue beyond each year. Services will be billed at least 30 days before due, each year.
- Payment terms are: Net 30 days.
- Open Spatial will provide all hardware, software and services as outlined in this proposal. This is included in the subscription cost.
- Open Spatial will provide a web solution with a guaranteed minimum of 95% up time per month.
- Water asset inventory data remains the property of SSWD. Open Spatial will provide a copy, of the database and/or a CAD drawing with attributes, of the asset data at system deployment, decommissioning and when requested by SSWD. Requests for the data exceeding once per quarter will be done but will use consulting time.
- SSWD can choose not to renew the annual contract at any time. Payments made are however not refundable as Open Spatial has had to provision for the hardware, software and staffing ahead of time.
- Additional user logins can be provided. Costs will be as per Open Spatial standard pricing at the time.
- Additional services (over and above those included in the annual contract) are available on a time and materials basis, or can be quoted individually on a per task basis prior to commencement. Costs will be as per Open Spatial standard pricing at the time. The current standard rate structure on a per hour basis is:
    - Data capture and CAD work $75/hr
    - GIS, reporting and customer support $100/hr
    - IT, Analyst and DBA work for complex/custom technical or programming tasks varies from $150 to $200/hr
- The solution is fully functional as an off-the-shelf suite of applications. That, combined with the many years of industry experience and technical expertise is what enables Open Spatial to offer an easy to use, cost effective solution that includes a deep set of functionality. The solution is scalable and additional functionality can be added/selected as and when needed.

5. About Open Spatial

Open Spatial specializes in providing World-Class Spatial Solutions to Utilities and Local and Central Government. Our Solutions are based on Open Geospatial compliant technologies through partnerships with Oracle and Autodesk. Our Open Geospatial Solutions are in use at over 100 authorities worldwide. Since 1994, we have delivered software and services that have improved productivity and efficiencies to engineering, planning and geospatial managers. Open Spatial is a trusted geospatial solutions provider to Local and Central Government.

Our solutions bridge the gap between engineering and geospatial data custodians. The focus on rules based disciplines assures data quality and integrity. The shared engineering/geospatial database between departments is a collaborative environment that is accurate and current. Our focus on data quality improves your ability to make better decisions. Our Asset Decision Support System that integrates with property, asset management, records management, is delivered enterprise wide, from the one stop shop customer service to the inspectors in the field.

Open Spatial is a leading supplier of Geospatial Engineering Solutions to Utilities (water, sewer, electricity, gas and Telco). Our solutions focus on the business problems facing each discipline within the industry. Such as the efficient management of assets, operational management, meeting regulatory reporting requirements, and improving business process efficiency with better data management, anywhere and anytime.

Our customers rely on our Asset Information and Decision Support Solutions to create and deliver accurate, reliable and timely geospatial engineering information that is integrated with corporate data and corporate applications. Our solution includes powerful off the shelf editing applications that run on AutoCAD on the desktop and browser based, easy to use data publishing and distribution frameworks that are equally used by staff in the office and those in the field. In addition we provide an integrated Field intelligence framework for mobile solutions. Our solution suite assists staff to improve the quality and speed of their decision making while also improving operational efficiencies.

Product purchasing models provided by Open Spatial

The various Open Spatial products are typically available for purchase off the shelf using any of the following 3 approaches:

- Purchase: Traditional up front purchase with an annual upgrade subscription
- Annual contract: Purchase of a renewable annual usage contract
- Hosted: Hosted/Cloud provision, either on-site or in the cloud

5.1 Summary of Open Spatial product offerings

Product	Purpose	Description
Munsys Asset Intelligence (Ai)	Edit and Maintain spatial data in AutoCAD. Data Models for storing engineering asset information is a single central database.	Rich editing applications that run on AutoCAD and provide purpose built functionality and business rules for Water, Sewer, Storm, Electrical, Cadastral and more
Enlighten Business Intelligence (Bi)	Publishing and sharing interface for map and asset data via the internet or intranet	A map centric visualization portal that incorporates all types of geospatial, engineering and corporate data. Access to data is provided through an internet browser. Data is consolidated from many corporate repositories and presented in a single application.
Cloud Intelligence (Ci)	Scalable delivery of all geospatial and engineering resources	On demand access to editing resources that keep engineering, asset, and geospatial data up to date.
Design Intelligence (Di)	Automation of electronic digital design and direct data extraction and integration into enterprise data stores.	The Design Intelligence Di Suite automates the import of As-Built drawings into any GIS and Asset Management system concurrently. It provides an easy to use user interface for the configuration of attribute rules and engineering geometric validation. Plans can be checked prior to submission and the plan check process can be automated and tracked.
Field Intelligence (Fi)	Provide location aware maps and forms in the field on a variety of lightweight and/or ruggedized mobile devices.	Field Intelligence knows where mobile staff is at all times and whether they are in an isolated location or by themselves. When integrated with common work order management systems Open Spatial Fi is an essential work companion on the move.

5.2 Sample of Open Spatial customers in the region

The following customers of Open Spatial are located in and around the bay area or west coast.

City and County of San Francisco
City of Vallejo
San Francisco International Airport
Purissima Hills Water District (Los Altos, CA)
City of Albany
County of Solano
County of Sacramento
City of Garden Grove
Olivehurst Public Utilities District
City of Medford, OR

5.3 Contact information

5701 Lonetree Blvd, Suite 211

Rocklin, CA 95765

1-800-696-1238

Further information is available at www.openspatial.com

6. Appendix A: Signature page

Open Spatial Corporation
5701 Lonetree Blvd, Suite 211
Rocklin, CA 95765

September 24, 2014

Board of Directors
Sweetwater Springs Water District
17081 California Hwy 116
Guerneville, CA 95446
Tel: (707) 869-4000

RE: Hosted GIS solution and services for Sweetwater Springs Water District

Open Spatial is pleased to provide the Sweetwater Springs Water District (SSWD) with this proposal for our hosted GIS solution and services for small water districts. The solution, functionality and services as detailed in the proposal, focus on providing a hosted web based water specific GIS interface, an initial asset inventory map and expert services for updating the inventory on an ongoing basis.

We are requesting sign-off on the terms and approval to commence with the project.

Sincerely,

Colin Hobson
Director, North America
Open Spatial Corporation
chobson@openspatial.com

Terms accepted for SSWD by:

Signature: _____

Date: _____

Name printed:_____

Title: _____

Directors: W Skerrett, JW Nel, C Hobson