

CITY OF GRAND JUNCTION
SOLE SOURCE JUSTIFICATION FORM

Date: 11/26/2024 Requested By: Mark Ritterbush
 Department: Utilities Division: Water Services
 Vendor Name: Anode Systems Net Cost Delivered: \$ 44,985.00

Provide G/L Account where funds are budgeted: 301-610-010-8410-F0050-F005016
 Project code, if applicable _____

SOLE SOURCE JUSTIFICATION

(INITIAL ALL ENTRIES THAT APPLY)

Material/Service Description: CP System

1. _____ - Uniqueness: Is unique and unavailable from any other source due to proprietary rights, patents, copyrights, secret processes, or monopoly control;
2. MR - Compatibility: There is a need for compatibility with existing equipment, technologies, or processes, and only a specific product or service can satisfy that need;
3. _____ - Urgency: Delay would lead to serious injury, death, or significant financial loss;
4. _____ - Expertise: The vendor has unique experience, expertise, or capabilities unavailable elsewhere;
5. MR - Standardization: There is a need to standardize specific equipment or supplies to reduce training, inventory, or maintenance costs, and only one vendor can meet this need;
6. MR - Written demonstration and justification is available which reasonably and practicably establishes that the selection of a sole source vendor is in the best interest of the City.

Attach Justification Memo and Pricing Documentation, then proceed with signatures below.
After Dept Head approval, forward to Purchasing.


Department Director Approval:

I recommend that competitive procurement be waived and that the service or material described herein be purchased as a sole source.

Signed:  11/27/2024
Signed by: F3B7E9047888412 Department Head Signature Date

Purchasing Approval:

Based on the above and attached documents, I have determined this to be a sole source with no other vendor practicably available.

Signed:  11/27/2024
Signed by: 09BA3ED53ED04B7... Purchasing Manager Signature Date

Final Authorization

City Manager Approval Required (\$25K to \$50K)

yes / no

Signed:  12/3/2024
Signed by: 5149500A919B4AB City Manager Signature Date

City Council Approval Required (over \$50K)

yes / no



Memorandum

TO: Randi Kim, Utilities Director

From: Mark Ritterbush, Water Services Manager

DATE: November 26, 2024

SUBJECT: Sole Source Justification for Cathodic Protection for Tanks and 36" Steel Effluent Pipe.

The Water Department wishes to install cathodic protection to extend the life of our water tanks as well as the 36" steel pipe that conveys plant effluent water to the water storage tanks. Anode Systems provided us with a proposal after doing a site visit to see if it was feasible to add on to the existing system they installed and currently maintain that protects the inside of both of our 4 MG storage tanks. Anode Systems proposes to do this project in 3 phases due to the rocky nature of the soil the tanks are situated on; once the system for the South Tank is active, the level of protection carrying over to the North Tank can be determined and the number of anodes needed should be less than 10. The total price of the project for all 3 phases is \$44,985. There would be efficiencies financially and logistically to have this same vendor expand their current system opposed to having separate cathodic protection systems.

Choosing Anode Systems to expand the current system would ensure compatibility as well as standardize equipment. The efficiencies realized with this arrangement would be in the best interest of the Water Department.

**ANODE
SYSTEMS
COMPANY**

Design
Installation
Materials
Surveys

124 North 22nd Ct.
Grand Junction, Colorado 81501

Phone 970-243-4149
Fax 970-263-7295
Toll Free 888-609-9766

www.anodesystems.com

November 14, 2024

Mr. Mark Ritterbush
Water Services Manager
City of Grand Junction Water Treatment Plant
Grand Junction, CO

Subject: WTP Water Tanks and Piping Cathodic Protection System Installation Proposal #1

Dear Mr. Ritterbush:

This proposal is in response to your request for a cost estimate to install a cathodic protection system to protect the 1,377' of 36" water pipe at the treatment plant. My visual inspection last week in a vault between the tanks indicates the pipe is not coated like the inside of the 4M gallon tanks. Therefore, it will require an impressed current system consisting of a 60 volt 30 amp rectifier and 10 canister EHK cast iron alloy anodes to protect the 12,971 sq.ft. of external surface area. The materials cost for the above would be \$14,995.00. The installed cost of the 10 anodes, #8 gage cathodic protection cable and installation labor is \$1,500 per anode. If the City of G.J. will dig the ditch for the anodes and cable, we can include the \$4,995.00 rectifier at no cost to the City.

The pipes are electrically continuous with the two 4M gallon tanks since there are no dielectric flanges isolating the tanks from the pipes. Therefore, the cathodic protection will also extend to the underside of the tanks. This is a good thing for the protection of the tanks but it comes at a cost as reduced protection on the pipes. The better solution is to have each tank bottom protected by its own rectifier system. The surface area of a 4M gallon tank with a diameter of 170' is 22,686 sq.ft. The above system could protect a tank bottom.

If the City is interested in protecting the above pipes and tanks, they could be installed in Stage 1, Stage 2 and possibly, Stage 3. If the first system is installed on the south tank, we will know how much of the north tank is protected and how much of the plant's piping is protected when the rectifier is turned on. It's possible that the pipes will receive enough current from a Phase 2 rectifier system on the north tank that there won't be a need for a Phase 3 Rectifier system for the pipes. A Stage 2 or Stage 3 system would be \$14,995.00 each.

The amount of current generated with 60 volts is dependent on the rocky soil and moisture in the soil in which the anodes are installed. Our goal would be to protect the combined tank and piping surface area of 58,344 sq.ft. to the NACE Standard of -0.85 volts on each tank and pipe. Theoretically, it will take 58,344 mA or 56.34 amps. There will undoubtedly be buried conduit, electric grounds and some other buried steel that will also be protected. The protection from these systems has lasted 40 years on the Ute Water Pipeline from the Rapid Creek plant to Fruita and the lateral to the Redlands tank. At the end of the anodes' life, they can be replaced. There are rectifiers on the Ute Water pipeline that crosses the airport property that were made in 1983 and in 1984.

Our technicians can install the anodes in one day after the ditch around the south tank has been dug. The City will need to run 110 v.a.c. up into the rectifier outside the vault from inside the vault. We have the anodes and rectifier in stock and the manpower to do the work anytime. Thank you for this opportunity to provide our specialized engineering services to the City.

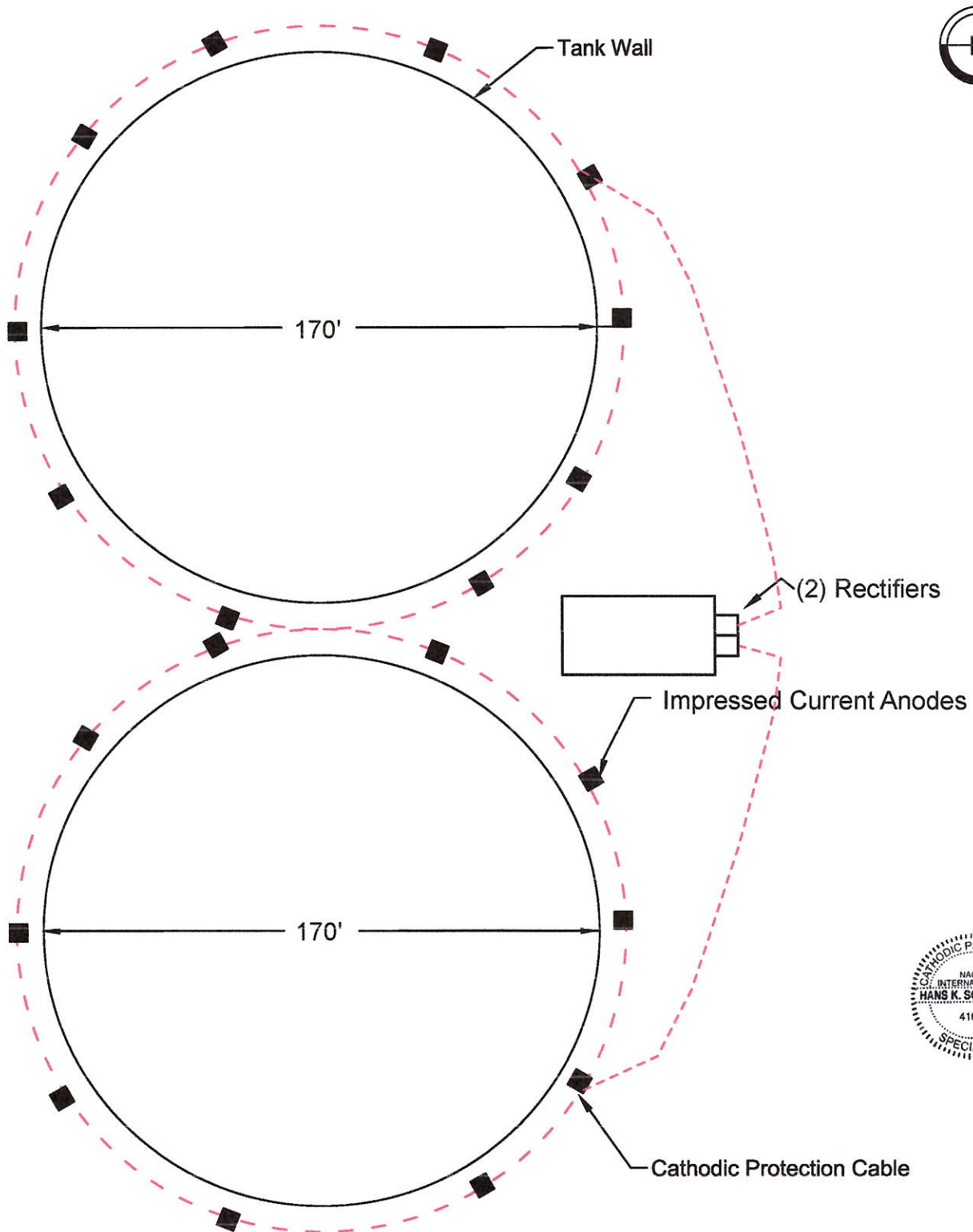
I ride for the brand,



Hans Schmoldt

NACE Cathodic Protection Specialist #4162





**ANODE
SYSTEMS
COMPANY**

124 North 22nd Court, Grand Junction, Colorado, 81501

Office : (970) 243-4149

Design · Installation · Materials · Surveys

**Proposed AST Cathodic Protection System
City of Grand Junction - Dual 4M Tanks**

DATE	11/13/24	DRAWING NUMBER	0001	SCALE	None	DRAWN BY	Sanchez
						APPROVED BY	Schmoldt