



POGGEMEYER
DESIGN GROUP

July 19, 2017

Mr. Andy Hummel, P.E.
City of Sparks Community Services
431 Prater Way
Sparks, Nevada 89431
ahummel@ci.sparks.nv.us

**RE: Sewer Pipeline Assessment Project (SL-RAT)
System wide Implementation Phase
City of Sparks**

RN17XXX

Dear Mr. Hummel,

Poggemeyer Design Group, Inc. ("PDG") is pleased to provide the City of Sparks (Sparks) this proposal for engineering services related to system wide inspection of major portion of the 8,146 sewer line segments using the Sewer Line Rapid Assessment Tool (SL-RAT). The initial two week period has been completed including data encoding and review. During that period approximately 556 segments were inspected during a 10 day period, which equates to approximately 56 per 8-hour shift. The production has varied for the second implementation by increasing in some instances if the segments are readily accessible to lower if manholes cannot be located, they are locked, or exist within private property. The 3.25 week implementation prior to system wide implementation is underway. The secondary phase will come to conclusion at the end of this month. This proposal has been developed to provide PDG's project understanding, our proposed scope of services, our proposed fee, and project services to deliver the System wide Implementation Phase.

This phase includes:

- Inspection to be completed by a two person team and the data will be uploaded daily utilizing SL-RAT software and the City of Sparks Application for your staff review and input within your GIS database. The information is downloaded and cleaned every day in accordance with your and manufacturer's recommendations.
- Inspection to be completed by a two person team with traffic control for the high volume areas and the data will be uploaded daily utilizing SL-RAT software and the City of Sparks Application for your staff review and input within your GIS database. The information is downloaded and cleaned every day in accordance with your and manufacturer's recommendations.
- A One-hour meeting biweekly to review the testing that has been completed, prioritization of specific areas requiring inspection, and review of progress to date.

- Calibration of two or three segments taken monthly to verify the inspection equipment is functioning properly and resulting in validation of the collected data.

Project Understanding

The Sewer Line Rapid Assessment Tool (SL-RAT) requires a two man team, one on the transmitter and one on the receiver. PDG has been utilizing City of Sparks purchased equipment for use for these inspections. Each segment of pipe will be documented with the asset ID or marking test locations with SL-RAT measurement ID and acoustic score utilizing the application developed by Sparks into a handheld device while making acoustic measurements.

Task 1: System wide Implementation Phase

The system wide implementation phase will consist of an assessment that will involve all of the remaining segments. This work will include the remaining entire system segment data collection and data downloading for City of Spark’s record keeping. The SL-RAT will be used at each manhole. PDG will continue data collection that has conformed to past data collected. Each operator will advance their device to the next manhole after measurement is performed. The recommended method of inspection is to have the receiver (RX) and the transmitter (TX) on adjacent manholes. If the RX and TX unit are “close” to each other (within 50’), it is recommended to obtain one measurement for the shorter segment, then another acoustic measurement with an intermediate manhole in between.

PDG recommends starting this phase following City Council consideration and approval on August 14, 2017.

Fees

PDG will perform the services as outlined above as follows:

Task 1.1: Baseline Inspection: No traffic control.....	\$144,360
Task 1.2: Baseline Inspection: Traffic control.....	\$59,977
Task 1.3: 1 hour biweekly meetings.....	\$2,700
Task 1.4: Monthly calibration.....	\$1,440
Total.....	\$208,477

Reimbursable expenses such as prints, copying, etc. will be billed additionally. The reproducible costs will be itemized as applicable in each invoice.

Terms and Conditions

Work outside the established SCOPE OF WORK can be performed on a time and materials basis in accordance with our current fee schedule. A standard fee schedule is attached and incorporated into this proposal. This proposal is valid for 30 working days from the date of this letter.

PDG will send monthly progress billings on this project. The amount of these billings will be based upon the time and materials for the work completed. The terms are 'Due upon Receipt' and accounts are past due after 45 days. Accounts over 45 days old will be subject to interest at the rate of 1 ½% per month and such collection action as may be necessary to collect the account. In addition, a "Stop Work Order" may be issued on past due accounts. In this case, no further work will be performed until the account is brought current.

Thank you for the opportunity to provide you with this proposal, and if you have any questions please do not hesitate to call me at (775) 857-3330.

Sincerely,



Rodney Savini, P.E.
Northern Nevada Operations Manager

**SL-RAT Sewer Pipeline Assessment Project
Systemwide Implementation Phase
Fee Estimate**

Task and Scope	Amount	Daily Production	Staff Classification	Hours	Hourly Rate	Subtotal	PDG Total
Task 1: Systemwide Implementation Phase							
Segment quantity:	8,146						
Phase I quantity:	556	56					
Remaining Quantity	7,590						
Phase II (projected 56 per day)	904						
Remaining Segments to be inspected	6,687						
No Traffic Control (90% of remaining segments)	6,018						
Traffic Control (10% of remaining segments)	669						
Task 1.1: Baseline Inspection: No traffic control							
No Traffic Control (90% of remaining segments)	6,018						
60 segments daily: 107 days			2- Inspectors	802	\$180.00	\$144,360.00	\$144,360.00
			Vehicle	802	\$.00	\$0.00	\$0.00
			Traffic Control				
							\$144,360.00

Task 1.2: Baseline Inspection: Traffic control		669					
Traffic Control (10% of remaining segments)		Staff Classification	Hours	Hourly Rate	Subtotal	PDG Total	
25 segments daily: 27 days		2-Inspectors	214	\$180.00	\$38,520.00	\$38,520.00	
		Vehicle	214	\$0.00	\$0.00	\$0.00	
		Traffic Control	Item	Quantity	Daily Rental		
			Cones	40	\$19.60		
			D/G signs on stands	8	\$36.60		
			Arrowboard	1	\$75.00		
			T/C Supervisor	1	\$660.00		
			Daily Total		\$791.20	\$ 21,362.40	
			T/C plans		\$95.00	\$95.00	
						\$59,977.40	\$59,977.40

Task 1.3: 1 Hour meeting biweekly							
15 meetings		Staff Classification	Hours	Hourly Rate	Subtotal	PDG Total	
		2-Inspectors	15	\$180.00	\$2,700.00	\$2,700.00	\$2,700.00

Task 1.4: Monthly Calibration							
4 each		Staff Classification	Hours	Hourly Rate	Subtotal	PDG Total	
		2-Inspectors	8	\$180.00	\$1,440.00	\$1,440.00	\$1,440.00
		Vehicle	8	\$0.00	\$0.00	\$0.00	\$0.00
						\$1,440.00	\$1,440.00
							Total
							\$208,477.40