

**BILL NO. S-12-12-12**

**SPECIAL ORDINANCE NO. S-\_\_\_\_\_**

AN ORDINANCE approving SONAR CCTV  
TINSPECTION FOR SIPHONS AND SEWERS -  
W.O. #75635 between R & R VISUAL, INC. and  
the City of Fort Wayne, Indiana, in connection with  
the Board of Public Works.

**NOW, THEREFORE, BE IT ORDAINED BY THE COMMON  
COUNCIL OF THE CITY OF FORT WAYNE, INDIANA:**

**SECTION 1.** That the SONAR CCTV TINSPECTION FOR  
SIPHONS AND SEWERS - W.O. #75635 by and between R & R VISUAL,  
INC. and the City of Fort Wayne, Indiana, in connection with the Board of  
Public Works, is hereby ratified, and affirmed and approved in all respects,  
respectfully for:

All labor, insurance, material, equipment, tools, power,  
transportation, miscellaneous equipment, etc., necessary for  
expertise to sonar/cctv approximately 43,991+/- linear feet  
of sewers and siphons throughout the City. There are 23  
siphons at approximately 9,400+/- linear feet and  
approximately 35,000 linear of sewers ranging in size from 8  
inches to 120 inches:

involving a total cost of TWO HUNDRED TWELVE THOUSAND, FIVE  
HUNDRED THIRTY-FOUR AND 39/100 DOLLARS - (\$212,534.39). A copy  
said Contract is on file with the Office of the City Clerk and made available for  
public inspection, according to law.

**SECTION 2.** That this Ordinance shall be in full force and effect from and after its passage and any and all necessary approval by the Mayor.

\_\_\_\_\_  
Council Member

APPROVED AS TO FORM AND LEGALITY

\_\_\_\_\_  
Carol Helton, City Attorney

CITY OF FORT WAYNE, INDIANARFR Visual Inc.  
(Vendor Name)**VENDOR DISCLOSURE STATEMENT RELATING TO:**

1. FINANCIAL INTERESTS;
2. POTENTIAL CONFLICTS OF INTERESTS;
3. CURRENT AND PENDING CONTRACTS OR PROCUREMENTS

Vendors desiring to enter into certain contracts with the City of Fort Wayne, Indiana (the "City") shall disclose their financial interests, potential conflicts of interest and current and pending contract or procurement information as set forth below.

The following disclosures by Vendors are required for all contracts with annual payments by the City in the amount of \$25,000 or more. Vendors shall disclose the financial interests, potential conflicts of interest and other contract and procurement information identified in Sections 1, 2 and 3 below as a prerequisite for consideration of an award of contract by the City. This Disclosure Statement must be completed and submitted together with Vendor's contract, bid, proposal, or offer.

A publicly traded entity may submit its current 10K disclosure filing in satisfaction of the disclosure requirements set forth in Sections 1 and 2 below.

**Section 1. Disclosure of Financial Interest in Vendor**

- a. If any individuals have either of the following financial interests in Vendor (or its parent), please check all that apply and provide their names and addresses (attach additional pages as necessary):

(i) Equity ownership exceeding 5%

☒

(ii) Distributable income share exceeding 5%

☐

(iii) Not Applicable (If N/A, go to Section 2)

☐Name: Rex RobisonName: Kristina RobisonAddress: 1928 W. Olson Rd Rochester, IN 46975Address: 1928 W. OLSON Road  
Rochester, IN 46975

- b. For each individual listed in Section 1a., show his/her type of equity ownership: sole proprietorship ☒ stock ☐ partnership interest ☐ units (LLC) ☐ other (explain) \_\_\_\_\_

Rex 75  
Kristina 25

- c. For each individual listed in Section 1a., show the percentage of ownership interest in Vendor (or its parent): ownership interest: 75 % Rex  
25 % Kristina

**Section 2. Disclosure of Potential Conflicts of Interest (not applicable for vendors who file a 10K)**

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Purchasing Department

For each individual listed in Section 1a., check "Yes" or "No" to indicate which, if any, of the following potential conflict of interest relationships apply. If "Yes", please describe using space under applicable subsection (attach additional pages as necessary):

- a. City employment, currently or in the previous 3 years, including contractual employment for services. Yes \_\_\_\_\_ No. X
- b. City employment of "Member of Immediate Family" (defined herein as: spouse, parent, child or sibling) including contractual employment for services in the previous 3 years. Yes \_\_\_\_\_ No. X
- c. Relationship to Member of Immediate Family holding elective City office currently or in the previous 3 years. Yes \_\_\_\_\_ No. X
- d. Relationship to Member of Immediate Family holding appointive City office currently or in the the previous 3 years Yes \_\_\_\_\_ No X

**Section 3. DISCLOSURE OF OTHER CONTRACT AND PROCUREMENT RELATED INFORMATION**

- a. Does Vendor have current contracts (including leases) with the City? Yes \_\_\_\_\_ No X.
- b. If "Yes", identify each current contract with descriptive information including purchase order or contract reference number, contract date and City contact using space below (attach additional pages as necessary).
- c. Does Vendor have pending contracts (including leases), bids, proposals, or other pending procurement relationship with the City? Yes \_\_\_\_\_ No. X

If "Yes", identify each pending matter with descriptive information including bid or project number, contract date and City contact using space below (attach additional pages as necessary).

**Section 4. CERTIFICATION OF DISCLOSURES**

In connection with the disclosures contained in Sections 1, 2 and 3 Vendor hereby certifies that, except as described in attached Schedule A:

- a. Vendor (or its parent) has not, within the five (5) year period preceding the date of this Disclosure Statement, been debarred, suspended, proposed for debarment declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. No officer or director of Vendor (or its parent) or individual listed in Section 1a. is presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state or local) with commission of any offense;
- c. Vendor (or its parent) has not, within the five (5) year period preceding the date of this Disclosure Statement, had one or more public transactions (federal, state or local) terminated for cause or default;
- d. No officer or director of Vendor (or its parent) or individual listed in Section 1a. has, within the five (5) year period preceding the date of this Disclosure Statement, been convicted, adjudged guilty, or found liable in any criminal or civil action instituted by the City, the federal or state government or any other unit of local government; and
- e. Vendor has read, understands and shall comply with the applicable requirements of the City of Fort Wayne, Indiana Ethics Ordinance; and
- f. Neither Vendor, nor its parent, nor any affiliated entity of Vendor, or any of their respective officers, directors, or individuals listed in Section 1a. is barred from contracting with any unit of any federal, state or local government as a result of engaging in or being convicted of: (i) bid-rigging; (ii) bid-rotating; or (iii) any similar federal or state offense that contains the same elements as the offense of bid-rigging or bid-rotating.
- g. Pursuant to IC 5-22-16.5, Vendor hereby certifies they do NOT provide \$20 million dollars or more in goods or services to the energy sector of Iran. Vendor also certifies it is not a financial institution that extends \$20 million dollars or more in credit that will provide goods or services to the energy sector of Iran or extends \$20 million dollars or more in credit to a person identified on the list as a person engaging in investment activities in Iran.

The disclosures contained Sections 1, 2 and 3 and the foregoing Certifications are submitted by

R+R Visual Inc.  
(Name of Vendor)

1828 W. Olson Road Rochester  
Address  
(574) 223-5426  
Telephone  
bbenn@seepipe.com  
E-Mail Address

RFP: #3569

City of Fort Wayne  
Purchasing Department



## City of Fort Wayne

Thomas C. Henry, Mayor

Purchasing Department

Citizens Square

200 East Berry Street, Ste 490

Fort Wayne, Indiana 46802

Telephone (260) 427-6070 Fax (260) 427-1393

## Front Page/Request for Proposal

### Request for Proposal (RFP) Information

RFP .....#3569

Description ..... Sonar, CCTV Inspection for Siphons and Sewers for the City of Fort Wayne, Indiana

Pre-Proposal Meeting..... Tuesday, October 30, 2012 at 11:00 am

Meeting Location..... CITIZENS SQUARE, 200 E. Berry St, Fort Wayne, IN - Suite 250,  
City Utilities Engineering Office, Room 255

RFP Due Date..... Wednesday, November 7, 2012 at 11:00 am

Sealed proposals should be delivered to the Purchasing Department at the address specified above up to 11:00 a.m. on or before the opening date. Sealed proposals will be opened publicly at 11:01 a.m. in the Purchasing Conference Room. No proposals will be accepted after 11:00 a.m. for any reason whatsoever.

By mutual agreement between the City of Fort Wayne and the supplier, the contract period may be extended for additional like or lesser time periods. However, the agreement to extend must be completed in written form at the original price and under the original conditions governing the contract.

Prompt payment discounts will be allowed as follows: 0 % if paid within \_\_\_\_\_ days.

This Request for Proposal is issued to establish a contract to supply the City of Fort Wayne with a commodity or service in accordance with accompanying specifications. The execution hereof by the bidder is acceptance of all terms and conditions herein and in that regard the bidder agrees to be bound by same and be bound to the amount of the proposal for a period of ninety (90) days.

Company: R4R Visual Inc

Signature: [Signature] Printed Name: Bryan Benn  
(Authorized Representative)

Title: Operations Manager Date: November 5<sup>th</sup>, 2012

### Checklist & General Information for Bidders

Below is a checklist provided to assist you in preparing a responsive proposal, and includes common errors made by bidders responding to proposal invitations. Please note that these instructions may not contain all applicable requirements, and careful reading of the Request for Proposal is critical. Failure to follow these instructions or those printed in the Request for Proposal may lead to the rejection of your proposal.

It is not necessary to return this page with your proposal response. It is being provided for your use.

- ☐ Sign the proposal form manually in ink.
- ☐ Type or print in ink all prices and extensions, as well as correct vendor name & address.
- ☐ The Non-Collusion Affidavit must be manually signed and notarized by a commissioned notary public and submitted with the proposal.
- ☐ Clearly detail in writing any deviation to the stated specifications.
- ☐ Vendor must submit original RFP packet plus three (3) to facilitate evaluation.
- ☐ Do not add any additional contractual or payment terms and conditions. Terms of the award will be those listed in the Request for Proposal and the resulting purchase order only.
- ☐ If applicable, the proposal bond must be submitted in proper form with the proposal (Request for Proposal terms will indicate if bond is required-see **Notice to Bidders**.)
- ☐ Proposal must be received and clocked in by or prior to the due date and time indicated in the Request for Proposal. Faxed proposals cannot be accepted.
- ☐ If you are not willing to accept a split award (partial order), your proposal must include the statement: "Bidding all or none."
- ☐ Proposal must be returned in a separate envelope. Either the envelope provided, or see below.\*

The envelope must clearly indicate the following information.

- a. The notation "Sealed Proposal," with the RFP number on the lower left corner
- b. The date and time of the date due
- c. The completed envelope must be returned to:  
City of Fort Wayne  
Purchasing Department  
200 East Main Street, Ste 490  
Fort Wayne IN 46802-1804
- d. Do not send to the attention of the purchasing agent

\*In order to protect the integrity of the sealed proposal process, failure to properly identify your sealed proposal according to the above instructions may result in an automatic disqualification from consideration.

RFP: #3569

City of Fort Wayne  
Purchasing Department

Form No. 95 (Revised 1987)

**BID OF:**

R+R Visual Inc.  
(Contractor)

1828 W. Olson Road

Rochester, IN 46975  
(Address)

**FOR SALE or  
LEASE OF MATERIALS**  
(Defined at I.C. 36-1-1-9.5)

FILED: \_\_\_\_\_, 20\_\_\_\_

**THIS BID ACCEPTED FOR THE  
FOLLOWING CLASSES OR ITEMS:**

This \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

P.O. No.: \_\_\_\_\_

Date: \_\_\_\_\_

IF NO PART OF BID IS ACCEPTED, WRITE  
THE WORD REJECTED ACROSS FACE.



**DECLARATION OF INDIANA BUSINESS**

The City of Fort Wayne, Indiana has enacted an Indiana Business preference program through Ordinance. This program only gives preferences to Indiana Businesses, registered with the State of Indiana Department of Administration, in the case that a non-Indiana business is apparent low bidder. The preferences available are as follows:

| <u>Cost of Commodity/Service</u> | <u>Preference to be Applied</u> |
|----------------------------------|---------------------------------|
| \$25,000-\$499,999.99            | 5%                              |
| \$500,000-\$1,000,000            | 3%                              |
| Greater than \$1,000,000         | 1%                              |

| <u>Request for Proposal</u>     | <u>Points to be Applied</u>  |
|---------------------------------|------------------------------|
| Registered as Indiana business? | 5 out of 100 possible points |

This preference does not guarantee Indiana businesses award but merely gives additional points in the proper circumstances. This preference does not give any local Indiana business advantage over a non-local Indiana business. That is a requirement of State Law. This preference does not apply to Public Construction or Professional Services Contracts.

Please complete the below form, sign and return with your Bid, Quote or Proposal.

I, Bryan Berr, a duly authorized agent of R+R Visual Inc. (name of Company), declare under penalties of perjury that (check all that apply):

- ☒ The above named company is registered as an Indiana business with the State of Indiana Department of Administration.
- ☐ The above named company is in the process of registering with the State of Indiana Department of Administration as an Indiana business and anticipates approval by the time of award (note: your business MUST be approved as an Indiana business by the State at the time of award in order to be eligible for the preference).
- ☐ I am not an Indiana business.

R+R Visual Inc.  
(Name of Company)  
By: Bryan Berr  
(Authorized Representative of Company)

**PLEASE SEE <http://www.in.gov/idoa/2464.htm> FOR INSTRUCTIONS AND ELECTRONIC REGISTRATION AS AN INDIANA BUSINESS WITH STATE DEPARTMENT OF ADMINISTRATION.**

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City of Fort Wayne  
Purchasing Department

Prescribed by the State Board of Accounts

Form No. 95 (Rev. 1987)

**BID, OFFER OR PROPOSAL FOR SALE OR LEASE OF MATERIALS**

(Defined at I.C. 36-1-2-9.5) PLEASE TYPE OR PRINT

DATE: 11-5-2012

- 1) Governmental Unit: \_\_\_\_\_
- 2) County: \_\_\_\_\_
- 3) Bidder (Firm): R+R Visual Inc.
- Address: 1828 W. Olson Road
- City/State: Rochester, IN 46975
- 4) Telephone: 574-223-5426
- 5) Agent or Bidder (If Applicable): Bryan Benn

Pursuant to notices given, the undersigned offers bid(s) to \_\_\_\_\_ (Governmental Unit) in accordance with the following attachment(s) which specify the class, item number or description; quantity, unit, unit price and total amount. The contract will be awarded by classes or items in accordance with specifications. Any changes or alterations in the items specified will render such bid void as to that class or item. Bidder promises that he has not offered nor received a lesser price than the price stated in his bid for the materials included in said bid. Bidder further agrees that he will not withdraw his bid from the office in which it is filed. A certified check or bond shall be filed with each bid if required, and liability for breach shall be enforceable upon the contract, the bond, the certified check or both as the case may be.

Bryan Benn  
SIGNATURE OF BIDDER OR AGENT  
BID OFFER or PROPOSAL

Attach separate sheet listing each item bid based on specifications published by the governing body. Following is an example of the bid format:

| Class or Item | Quantity | Unit | Description | Unit Price | Amount |
|---------------|----------|------|-------------|------------|--------|
|               |          |      |             |            |        |

**NON-COLLUSION AFFIDAVIT**

STATE of INDIANA )  
 ) ss:  
Fulton COUNTY )

The undersigned bidder or agent, being duly sworn on oath, states that he has not (nor has any other member, representative or agent of the firm, company, corporation or partnership represented by him) entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such bidding; nor to prevent any person from bidding; nor to induce anyone to refrain from bidding; and that this bid is made without reference to any other bid and without any agreement, understanding, or combination with any other person in reference to such bidding. He further states that no person or persons, firm or corporation has or will receive either directly or indirectly, any rebate, fee, gift, commission or thing of value on account of such sale.



JANICE L. HOWDESHELL, Notary Public  
A Resident of Fulton County, IN

My Commission Expires February 24, 2017

Subscribed and sworn to before me on this 5 day of November, 2012.

My Commission Expires: 2-24-2017

County of Residence: FULTON

**ACCEPTANCE**

There now being sufficient unobligated appropriated funds available, the contracting authority of \_\_\_\_\_ (Governmental Unit) hereby accepts the terms of the attached bid for classes or items numbered \_\_\_\_\_ and promises to pay the undersigned bidder upon delivery the price quoted for the materials stipulated in said bid.

Contracting Authority Members: \_\_\_\_\_

Date: \_\_\_\_\_

R+R Visual Inc.  
BIDDER (FIRM)

Bryan Benn  
Signature of Bidder or Agent

Janice L. Howdeshell  
Notary Public - Signature

Notary Public - Printed Name

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City of Fort Wayne  
Purchasing Department

The individual authorized to sign on behalf of Vendor represents that he/she: (a) is fully informed regarding the matters pertaining to Vendor and its business; (b) has adequate knowledge to make the above representations and disclosures concerning Vendor; and (c) certifies that the foregoing representations and disclosures are true and accurate to the best of his/her knowledge and belief.

Name (Printed) Bryan Benn Title Operations Manager

RFP: #3569

City of Fort Wayne  
Purchasing Department

### INDIANA LEGAL EMPLOYMENT DECLARATION

The State of Indiana has enacted a law (I.C. 22-5-1.7) requiring all state agencies and political subdivisions request verification from their contractors that their employees are legally eligible to work in the United States. This Declaration serves as notice that all Contractors doing business with the City of Fort Wayne must, as a term of their contract:

1. Enroll in and verify the work eligibility status of newly hired employees of the contractor through the E-Verify programs (but is not required to do this if the E-Verify program no longer exists); and
2. Verify, by signature below, that the Contractor does not knowingly employ unauthorized aliens.

I, Bryan Benn, a duly authorized agent of R+R Visual Inc. (name of Company), declare under penalties of perjury that R+R Visual Inc. (name of Company) does not employ unauthorized aliens to the best of its knowledge and belief.

R+R Visual Inc.  
(Name of Company)

By: Bryan Benn  
(Authorized Representative of Company)

PLEASE SEE <https://e-verify.uscis.gov/enroll/StartPage.aspx?JS=YES> FOR INSTRUCTIONS AND ELECTRONIC REGISTRATION FOR E-VERIFY.

Subscribed and sworn to before me on this 5 day of November, 2017

My Commission Expires: \_\_\_\_\_

County of Residence: FULTON

Janice L. Howdeshell  
Notary Public - Signature



JANICE L. HOWDESHELL, Notary Public  
A Resident of Fulton County, IN  
My Commission Expires February 24, 2017

Notary Public - Printed Name

RFP: #3569

City of Fort Wayne  
Purchasing Department

**Project:** Sonar, CCTV inspection for Siphons and Sewers for the City of Fort Wayne

**Owner:** City of Fort Wayne

**Contact:** City of Fort Wayne, City Utility Engineering

## **INTRODUCTION:**

The City of Fort Wayne is implementing a program to inspect its large diameter sewers Interceptors and Siphons. In 2010, sonar technology completed on some of the large diameter sewers. It was found that in several locations, there was a considerable amount of debris in the sewer pipes, especially around the City's siphon structures. That experience has prompted this sewer inspection to not only look at our Interceptors upstream and downstream from the City's siphons, but also to investigate the siphons themselves. It is the intent of this project to assess the structural condition of these sewers and siphons. It is also the intent to assess the operational condition of the sewers by noting the amount of debris or obstructions in these sewer/siphon lines. In order to do this, three different methods of inspecting and assessing the sewers may be used: closed circuit televising (CCTV) (alone), a combination of CCTV and sonar and sonar alone.

Many of the sewers in this project surcharge during wet weather. All of our siphon barrels are full of wastewater at all times allowing only sonar to be used. Enclosed is a DVD of upstream and downstream structures and siphon barrels on all the interceptors/siphons to be televised/sonar, based on the City's Structure ID numbering system. The DVD has highlighted maps and aerial photos showing locations of the interceptors/siphons. It is hoped that video/sonar of the pipes can be achieved to physically see the structural and operational condition of these sewers. Siphon barrels under 14" diameter will not be inspected using sonar. There are 21 separate siphon locations to be assessed.

## **REQUIREMENTS FOR PROPOSALS:**

The Proposal shall include the following minimum information:

1. Recommendation of equipment to be used and accuracy of the equipment.
2. Provide information of relevant projects that your firm has performed within the last 5 years that best demonstrates your firm's and your proposed key personnel's current qualifications and ability to perform the Work or similar scope and complexity to the Project as described in enclosed DVD. Information should indicate:
  - a. Project name, location, and summary work.
  - b. A clear demonstration of which key personnel proposed in your submittal were involved significantly (had relevant experience/roles) in the projects being listed as relevant.
  - c. Client reference information (name, phone number, email address).
  - d. Specific experience with sewers that are difficult to access.
3. Identify key personnel proposed to be assigned to the Project and provide a short summary of the key personnel (Supervisor and key field members) along with resumes and PACP certification numbers.
4. A statement ensuring that your firm has reviewed the proposed time schedule for

completion and is able to dedicate the necessary resources to complete Project within the time outlined in the RFP.

5. A list of projects that your firm has previously performed for any department of the City of Fort Wayne during any part of the previous five (5) years.
6. Other information as you determine necessary or recommend as beneficial to the Project submittal or the Project's overall success.
7. A complete cost per method of inspection, per diameter (in inches) of sewers to be inspected.

## **LARGE DIAMETER SEWER INSPECTION SPECIFICATIONS**

### **PART 1 – GENERAL**

#### **1.1 DESCRIPTION**

- A. Scope: The CONTRACTOR shall furnish and operate all necessary labor, materials, equipment, tools, accessories, transportation, and technical competence for performing all operations required to professionally execute the internal inspection of the sewer system in strict accordance with the Contract Documents and subject to the terms and conditions of this Contract. It is the intent of this Contract to assess the internal structural and operational condition of the sewers prior to any rehabilitation. Assessment will be performed using close circuit televising with a pan and tilt color camera. In those circumstances where depth of flow is too great for CCTV, sonar or a combination of sonar and CCTV shall be used.

It is not anticipated that confined space entry will be used on this Project. CONTRACTOR shall familiarize himself/herself with access points to the sewer and thus CONTRACTOR is aware that some of the sewers/siphons on all the sewer interceptors may be difficult to access. Maps and aerial photos have been supplied to help the CONTRACTOR locate all manholes. The River Greenway trails along the interceptors were not constructed to withstand loads heavier than a pickup truck. Also, at the present time, this trail is closed between the 4.75 mile marker and the 5.0 mile marker due to the Maplecrest Road Extension project. Care must be taken to avoid damage to the River Greenway area, including bike/walk path, railings, bridges, cross culverts, fence, landscaping. Any damage done to the River Greenway by CONTRACTOR will be restored to original or better condition, with the cost of any restoration of the River Greenway to be the sole responsibility of the CONTRACTOR. Any damage done to the access road that parallels the east side of the driving range will be repaired to THE property owner's satisfaction. All damaged property, including asphalt drive and lot, will be repaired to original or better condition. All CCTV Work shall be graded using the NASSCO PACP defect coding.

- B. A list of sewers/siphons to be televised is attached. Areas are shown on attached highlighted maps and aerial photos (on Attached CD's).
- C. Information concerning depths of flow, manhole depths, air quality in sewers, accessibility of manholes, location of manholes, and other safety considerations are to be the sole responsibility of the CONTRACTOR. The CONTRACTOR shall be responsible for obtaining the information and incorporating the necessary provisions into the overall Contract price to complete the specified Work under the conditions existing in the sewers to be inspected. If any manhole frames, cones, barrel sections, or bolt down manhole lids, must be removed in order to provide access for the inspection operations, then they must be replaced in original or better condition, with the cost of such repair or replacement shall be included in the cost of the Work.
- D. Lines scheduled for inspection shall be inspected in their existing conditions. The CONTRACTOR shall be responsible for having the necessary camera transport equipment, floats, crawlers, skids, and cables, to allow inspection of these lines in a manner acceptable to the City under live conditions.
- E. If, during the inspection operations, the inspection camera (for CCTV) is unable to pass through the entire segment, the CONTRACTOR shall reset his/her equipment to permit the inspection from the opposite direction. If the camera again fails to pass through the entire length of the segment, the CONTRACTOR shall document the obstruction, and then use CCTV/sonar or sonar only to finish the inspection.
- F. It is the responsibility of the CONTRACTOR to comply with OSHA Regulations, the City's Guidelines and the City's confined space guidelines as applicable. The CONTRACTOR shall provide written documentation that all workers have received the training required under these regulations and guidelines.
- G. Upon award, the period of the Contract shall be 210 calendar days after receipt of the written Notice To Proceed.

## 1.2 PERFORMANCE REQUIREMENTS

- A. The CONTRACTOR shall inspect pipelines with color pan and tilt CCTV imagery, sonar and/or combined color pan and tilt CCTV/sonar as specified so as to record all relevant features and to confirm their structural and service condition. Inspection of pipelines shall include both target length of sewer inspected between manholes as well as actual length inspected.
- B. All CCTV/sonar equipment operators responsible for direct reporting of sewer condition shall have a minimum of 3 years previous experience in sewer surveying, processing, and interpretation of data associated with CCTV

and sonar inspections. The CONTRACTOR shall provide the City with written documentation that all CCTV and sonar survey operators meet these experience requirements which shall include a list of projects undertaken as well as client name and telephone number for reference.

- C. The CONTRACTOR shall provide sufficient inspection equipment and all ancillary equipment, including standby units in the event of breakdown, in order to complete all sewer inspections as specified. The CONTRACTOR shall maintain this equipment in full working order and at the commencement of each working shift, ensure that all items of equipment are in full working order. Each inspection unit shall contain a means of transporting the CCTV camera and/or sonar equipment in a stable condition through the sewer under survey and/or inspection. Where the CCTV camera and/or sonar head are towed by winch through the sewer, all winches shall be stable with either lockable or ratcheted drums. All bonds shall be steel or of an equally non-elastic material to ensure the smooth and steady progress of the CCTV camera and/or sonar equipment. All winches shall be inherently stable under loaded conditions.

### **1.3 FIELD SUPERVISION BY CONTRACTOR**

- A. The CONTRACTOR shall maintain on site at all times a competent field supervisor in charge of the inspection. Any change of supervision must be approved in writing prior to the change. The field supervisor shall be responsible for the safety of all site workers and site conditions as well as ensuring that all Work is conducted in conformance with these specifications and to the level of quality specified.

### **1.4 APPLICATION OF INSPECTION TYPE**

- A. Generally CCTV alone shall be used for internal condition assessment where the depth of flow of sewage is less than 20% of overall sewer diameter at the start of the survey. The CONTRACTOR will make an informed decision to continue should the depth of flow increase beyond the 20% level, but CCTV operations shall cease once the depth of flow is no greater than 40% of overall sewer diameter at anytime throughout the length.
- B. Generally, CCTV combined with sonar shall be used for internal condition assessment where depth of flow of sewage varies from 20% to 75% of overall sewer diameter, for sewers greater than 40" in diameter.
- C. Generally, sonar alone shall be used where depth of flow in the sewer exceeds 75%.

## **PART 2 – EXECUTION**

### **2.0 CLEANING PRIOR TO SEWER CONDITION INSPECTION**

- A. There will be no cleaning provided by the City.



- B. The CONTRACTOR shall not clean for this Project.

## 2.1 CCTV - GENERAL

- A. CCTV Camera Head Prime Position: The CCTV camera/sonar head shall be positioned to reduce the risk of picture distortion. In circular sewers, the CCTV camera lens and/or sonar head shall be positioned centrally (i.e. in prime position) within the sewer when possible. In non-circular sewers, picture orientation shall be taken at mid-height when possible, unless otherwise agreed. In all instances, the camera lens head shall be positioned looking along the axis of the sewer when in prime position.
- B. CCTV Camera Head Speed: The speed of the CCTV camera in the sewer shall be limited to 30 feet per minute for surveys to enable all details to be extracted from the recording.
- C. CCTV Color Camera: The CONTRACTOR shall provide a color pan and tilt camera to perform the survey and inspection of all sewers including defects such as hydrogen sulfide corrosion in the soffit of sewers and benching or walls of manholes over and above the standard defects that require reporting. These will be carried out as part of the normal CCTV assessment.
- D. Linear Measurement: The CCTV monitor display shall incorporate an automatically updated record in feet and tenths of a foot of the footage of the camera or center point of the transducer, whichever unit is being metered, from the cable calibration point. The relative positions of the two center points should also be noted. The CONTRACTOR shall use a suitable metering device, which enables the cable length to be accurately measured. This metering device shall be accurate to  $\pm 1\%$  or 3 inches, whichever is greater.
- E. Data Display, Recording and Start of Inspection: At the start of each sewer length and each reverse set-up being inspected, the length of pipeline from zero footage, the entrance to the pipe up to the cable calibration point shall be recorded and reported in order to obtain a full record of the sewer length. All reverse set-ups, blind manholes, and buried manholes shall be logged on a separate log. Video digits shall be recorded so that every recorded feature has a correct tape elapsed time stamp. Each log shall make reference to a start and finish manhole. The City's manhole Structure ID # shall be indicated in the remarks column of the detail report.
- F. The footage reading entered onto the data display at the cable calibration point must allow for the distance from the start of the inspection to the cable calibration point such that the footage at the start of the survey is zero.

- G. In the case of inspecting through a manhole where a new header sheet must be completed, the footage shall be set at zero with the camera focused on the outgoing pipe entrance. The correct City manhole Structure ID # shall be used.
- H. At the start of each manhole length/siphon, a data generator shall electronically generate and clearly display on the viewing monitor (and subsequently on the recording) a record of data in alphanumeric form containing the following minimum information:
  - 1. Automatic update of the camera's footage in the sewer line from adjusted zero
  - 2. Sewer dimensions
  - 3. City's Manhole Structure ID# (From and To)
  - 4. Date of inspection
  - 5. Road name/location
  - 6. Direction of inspection (upstream or downstream)
  - 7. Time of start of inspection
  - 8. Sewer use (SA-Sanitary, CO-combined)
  - 9. Pipe material
- I. The size and position of the data display shall be such as not to interfere with the main subject of the picture.
- J. Once the survey of the pipeline/siphon is under way, the following minimum information shall be continually displayed: Automatic update of the camera's footage position in the sewer line from adjusted zero, manhole reference number based on City's Structure ID#'s -- to be "From and To".
- K. Footage shall be given throughout inspection for all construction features encountered.
- L. All CCTV coding shall be done in NASSCO PACP format.
- M. It is anticipated that all siphon barrel inspections will be completed by using sonar alone.

## 2.2 SUBMITTALS

- A. The CONTRACTOR shall provide to the City the following:  
Experience Record of CONTRACTOR and/or Subcontractor(s)  
listing of CCTV and Sonar Equipment
- B. The CONTRACTOR shall complete a daily written record detailing the Work carried out. The CONTRACTOR shall include possible delays, weather, equipment on site, personnel on site (by name), incident report (damage to property), major defects encountered (including collapsed pipe, cave-ins, sink holes, manhole lids off, any obvious river intrusion

potential), and visitors to site.

## 2.3 CCTV SURVEY DATA

- A. No later than fourteen days following the completion of a pipeline inspection, CONTRACTOR, using a USB 2.0 external hard drive, shall download all survey data at the Water Pollution Control Maintenance Department at 515 Wallace Street. The supplied data and information shall become the property of the City. This information shall be validated using Flexidata software. CONTRACTOR shall provide a detailed inspection report of the pipeline, per line segment and siphon barrel. The profiling shall show general pipeline condition including debris build-up, sediment depth, open breaks, deflection, erosion, collapses and voids. The report shall show the total amount of debris (in cubic yards per line segment). The CONTRACTOR shall produce a report that is transmitted to the City in an Adobe Acrobat format. Report shall include the average and maximum levels of debris and the distance of the maximum level noted. CONTRACTOR shall compile a list of the defects and the associated locations of the defects. CONTRACTOR shall be responsible for stringing all pipelines/siphons and locating all manholes. If unable to string sewers/siphons after several attempts, CONTRACTOR shall notify Mike Hicks, City Utilities Engineering. (260-427-2706) Photographs shall be taken of all "Major" defects (Category #5 on PACP Coding). The Report shall include the following:
- up and down stream structure ID#'s, Siphon upstream and downstream ID#'s, and siphon barrel sizes
  - Siphon #
  - Entry manhole ID#
  - Exit manhole ID#
  - Survey direction (upstream or downstream)
  - Date inspected
  - Length of segment inspected
  - Diameter of segment
  - Material of segment
  - Cross section of segment
  - Maximum debris depth
  - Average debris depth
  - Average Water Level
  - Approximate debris volume

## 2.4 REMOTE CCTV PERFORMANCE

- A. Color CCTV: All CCTV Work shall use color CCTV reproduction. Playback video shall be capable of a minimum of 400 lines recorded at standard playback. Video shall be downloaded from a USB 2.0 External Hard Drive for direct insertion into City's Flexidata

database.

- B. CCTV Focus/Iris/Illumination: The adjustment of focus and iris shall allow optimum picture quality to be achieved and shall be remotely operated. The illumination must allow an even distribution of the light at the sewer perimeter without loss of contrast picture, flare out or shadowing. Camera shall have a minimum of 4 high intensity LED lights that move with the camera head to view the pipe wall. In addition, the camera must be complemented with cross focused joint illumination LED lights to prevent shadowing when viewing into joints and fractures.
- C. CCTV Zoom: The camera must have a minimum of 10X optical zoom and 4X digital zoom to accurately inspect large diameter sewers.
- D. The camera must always have an upright picture control so that the image is never upside down when viewing on the monitor. The camera must provide an overlay on the video screen showing the viewing position of the camera head at all times. This shall be achieved by displaying a round circle (or other) shape to depict the pipe wall with a moving icon showing the camera's pan and tilt orientation.

## 2.5 SONAR PERFORMANCE

- A. Sonar survey requirements: CONTRACTOR shall collect data of complete geometrical data of selected pipeline interior and measurement of flow depth and silt depth. Inspection speeds shall allow for a minimum 1 full profile for every 3 feet.
- B. Inspection shall allow for continuous output on conventional annotated media format of all sewers surveyed, and shall be supported by complete written report. Additionally, silt levels shall be reported as a percentage depth of sewers at a minimum of 5 foot intervals for each sewer segment surveyed and graphed showing depth of silt and water level. To facilitate this requirement and to assist in geometrical measurement, particularly where a sewer is deformed and/or where a sewer has suffered hydrogen sulfide corrosion, CONTRACTOR shall make screen graphics available to enable measurements to be taken in any position across the diametrical profile of the sewer as the sonar survey proceeds.
- C. Where combined CCTV and sonar imagery is required, the output shall display combined CCTV and sonar images of the sewer being surveyed. The sonar image shall be superimposed on the real CCTV image as a combined operation.
- D. The range of resolution shall be +/- 0.1 inch.
- E. The maximum beam width of sonar energy pulse shall be no greater than 2 degrees from the center of the transducer.
- F. The transducer shall be of the continuous scanning type.
- G. The underwater scanning unit must have an acoustic frequency of 2MHz to properly profile sewers from 10 inch to 120 inch in diameter

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- H. through normal suspended solids found in sanitary sewer systems. The angular resolution of the underwater scanning unit must be no greater than 0.9 degrees, giving 400 sectors of data per revolution. For each sector, the data shall be oversampled and peak detected to arrive at 250 range cells. Each scan shall take no longer than 2 seconds to complete.
- I. The underwater scanning unit must be equipped with a pitch and roll sensor in analog and digital form that will display reading through the software.
- J. Sonar data collection software must be able to display live data from the sonar scanning head and display the information as an image using 256 colors to designate signal amplitude. The software must be able to capture screen images and save the images as a JPG or bmp file. These images shall be readable in all major software programs used for word processing and report generation. An instant report shall be able to be produced and printed showing the desired captured still image in full color. Included on this report shall be the distance count from the footage encoder on the cable drum and pitch and roll data from the underwater scanning unit. The software must have real time measurement capabilities. This software shall include point-to-point measurement, diameter measurement using a circle overlay, and area calculations to acquire volume data of sediment and debris. Measurements must be able to be printed on reports and saved with the image.
- The first echo reflection data must be available to produce a line outline of the pipe wall. This line data must be able to be saved as an XYZ file for use in most major computer aided design (CAD) programs. Software shall display both graphically and numerically the pitch and roll data from the underwater scanning unit.
- K. Transport methods: CONTRACTOR shall use a Floatable inspection vessel (raft) with a mounting assembly to correctly position the underwater scanning unit to not interfere with sonar operations. The raft shall be constructed to fit through a 23" manhole opening or smaller. The material used to construct the raft shall be non-corrosive or coated to resist corrosion. CONTRACTOR shall use a robotic tractor with a mounting assembly unit to not interfere with Sonar operations.
- L. Only siphon barrels 14" and greater in diameter shall be inspected using sonar.

## 2.6 MEASUREMENT AND PAYMENT

- A. The items listed below refer to and are pay items listed in the bid form. They constitute all of the pay items for completion of the Work. No deduct or separate payment will be made for providing miscellaneous temporary or accessory Work.
- The payment for the total footage for each size pipe and method of inspection is based on a percentage of the total footage for that size sewer.
- The final quantities of unit items will be based on measured quantities

actually inspected in the field. The method of measurement and the basis of payment shall be as follows:

1. Item #1 – Mobilization and demobilization. Item #1 shall be measured and paid upon completion of the CONTRACTOR'S mobilization and demobilization of the Work shown, specified or required, including but not limited to: performance of inspection preparatory operations; coordination and administration; notification of other utilities, agencies or individuals associated with the Work; all supervision, labor and obtaining permits where not otherwise specified. This Item shall not exceed a total of five percent (5%) of the total contract amount. Not less than one-third (1/3) of the amount bid for this item shall be reserved for demobilization at completion of the Work.
2. Items # 2 through #12 – The payment for the footage of each sewer siphon size and the method used for the inspection is based on a percentage of the footage. Siphons shall be inspected by the use of sonar. The measurement of length of siphon inspected shall be from inside face of Siphon structure to to inside face of siphon structure. This shall be measured horizontally along the sewer line. This work shall include all supervision, materials, equipment, stringing of the sewer segments, locating of manholes, uncovering manholes, winch setup, access and insertion of equipment, access requiring confined space entry, deployment of inspection equipment, removal and replacement of any bolt down manhole lids found, and all Work necessary to inspect the listed siphon barrels.
3. Items # 13 through #16 – This Work is for the use of CCTV/sonar for inspections of sewers larger than 42 inch in diameter and for elliptical sewers as described in the bid schedule. The payment for the footage of each sewer size and the method used for the inspection is based on a percentage of the total footage. The measurement of length inspected shall be from the inside face of manhole to inside face of manhole. This shall be measured horizontally along the sewer line. This Work shall include all supervision, materials, equipment, stringing of the sewer segments, locating of manholes, uncovering manholes, winch setup, access and insertion of equipment, access requiring confined space entry, deployment of inspection equipment, removal and replacement of any bolt down manhole lids found, and all Work necessary to inspect the listed sewer segments.

City of Fort Wayne  
Purchasing Department

4. Items #17 through #26 - This Work is for the use of CCTV for inspection of sewers between 8 inch and 36 inch in diameter. The payment for the footage of each sewer size and the method used for the inspection is based on a percentage of the total footage. The measurement of length inspected shall be from the inside face of manhole to inside face of manhole. This shall be measured horizontally along the sewer line. This Work shall include all supervision, materials, equipment, stringing of the sewer segments, locating of manholes, uncovering manholes, winch setup, access and insertion of equipment, access requiring confined space entry, deployment of inspection equipment, removal and replacement of any bolt down manhole lids found, and all Work necessary to inspect the listed sewer segments.
5. Item #27 -- Maintaining Traffic shall be paid on a Lump Sum basis. Item #27 shall include all costs to provide adequate signs, barricades, warning lights and watchmen; and take all necessary precautions for the protection of the Work and safety of the public. The CONTRACTOR shall provide flagmen for areas as needed. The CONTRACTOR shall arrange and procure the Work in a manner such that property owners and businesses will experience minimal access disruption.
6. Item #28 -- Work Allowance -- the CONTRACTOR shall Furnish all labor, materials, equipment, tools, accessories, transportation, and technical competence necessary to perform the additional miscellaneous Work as directed by the City. This allowance shall be used to compensate the CONTRACTOR for Work performed under this allowance for this Item. No Work shall be performed under this allowance without the consent of the City.

## 2.9 BID SCHEDULE

| BID SCHEDULE FOR LARGE DIAMETER/SEWER SIPHON INSPECTION RFP |                                     |                          |       |            |           |
|-------------------------------------------------------------|-------------------------------------|--------------------------|-------|------------|-----------|
| ITEM #                                                      | DESCRIPTION                         | ESTIMATED QUANTITY (+/-) | UNITS | UNIT PRICE | AMOUNT    |
| 1                                                           | MOBILIZATION/DEMOBILIZATION         | 1                        | LS    | Ø          | Ø         |
| 2                                                           | SONAR FOR 14 INCH SIPHON BARRELS    | 2991                     | LFT   | 6.00       | 17,946.00 |
| 3                                                           | SONAR FOR 16 INCH SIPHON BARRELS    | 297                      | LFT   | 6.70       | 1,986.90  |
| 4                                                           | SONAR FOR 18 INCH SIPHON BARRELS    | 1774                     | LFT   | 6.00       | 10,644.00 |
| 5                                                           | SONAR FOR 20 INCH SIPHON BARRELS    | 768                      | LFT   | 6.50       | 4,992.00  |
| 6                                                           | SONAR FOR 24 INCH SIPHON BARRELS    | 2018                     | LFT   | 6.50       | 13,117.00 |
| 7                                                           | SONAR FOR 30 INCH SIPHON BARRELS    | 913                      | LFT   | 6.50       | 5,934.50  |
| 8                                                           | SONAR FOR 36 INCH SIPHON BARRELS    | 647                      | LFT   | 6.50       | 4,205.50  |
| 9                                                           | SONAR FOR 96 INCH SIPHON BARRELS    | 1312                     | LFT   | 9.02       | 11,834.25 |
| 10                                                          | SONAR FOR 42X76 INCH SIPHON BARRELS | 247                      | LFT   | 9.02       | 2,227.94  |
| 11                                                          | SONAR FOR 48X76 INCH SIPHON BARRELS | 251                      | LFT   | 9.02       | 2,264.02  |
| 12                                                          | SONAR FOR 72 INCH SIPHON BARRELS    | 3556                     | LFT   | 9.18       | 32,644.08 |
| 13                                                          | CCTV/SONAR FOR 42 INCH SEWERS       | 822                      | LFT   | 3.85       | 3,164.70  |
| 10                                                          | CCTV/SONAR FOR 48 INCH SEWERS       | 6341                     | LFT   | 3.90       | 24,729.90 |
| 11                                                          | CCTV/SONAR FOR 54 INCH SEWERS       | 2501                     | LFT   | 3.90       | 9,753.90  |
| 12                                                          | CCTV/SONAR FOR 60 INCH SEWERS       | 3311                     | LFT   | 3.90       | 12,912.90 |
| 13                                                          | CCTV/SONAR FOR 72 INCH SEWERS       | 2399                     | LFT   | 3.90       | 9,356.10  |
| 14                                                          | CCTV/SONAR FOR 84 INCH SEWERS       | 5311                     | LFT   | 4.00       | 21,244.00 |
| 15                                                          | CCTV/SONAR FOR 38X60 INCH SEWERS    | 210                      | LFT   | 4.00       | 840.00    |
| 16                                                          | CCTV/SONAR FOR 66X108 INCH SEWERS   | 847                      | LFT   | 4.10       | 3,472.70  |
| 17                                                          | CCTV FOR 8 INCH SEWERS              | 90                       | LFT   | 0.90       | 81.00     |

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RFP: #3569

City of Fort Wayne  
Purchasing Department

|       |                         |      |     |            |              |
|-------|-------------------------|------|-----|------------|--------------|
| 18    | CCTV FOR 12 INCH SEWERS | 262  | LFT | 0.90       | 235.80       |
| 19    | CCTV FOR 14 INCH SEWERS | 400  | LFT | 0.90       | 360.00       |
| 20    | CCTV FOR 15 INCH SEWERS | 81   | LFT | 0.45       | 76.95        |
| 21    | CCTV FOR 18 INCH SEWERS | 727  | LFT | 1.50       | 1,090.50     |
| 22    | CCTV FOR 21 INCH SEWERS | 683  | LFT | 1.50       | 1,024.50     |
| 23    | CCTV FOR 24 INCH SEWERS | 2727 | LFT | 1.85       | 5,044.95     |
| 24    | CCTV FOR 27 INCH SEWERS | 684  | LFT | 2.10       | 1,436.40     |
| 25    | CCTV FOR 30 INCH SEWERS | 434  | LFT | 2.10       | 911.40       |
| 26    | CCTV FOR 36 INCH SEWERS | 1025 | LFT | 2.10       | 2,152.50     |
| 27    | MAINTAINING TRAFFIC     | 1    | LS  | 1,850.00   | 1,850.00     |
| 28    | WORK ALLOWANCE          | 1    | LS  | \$5,000.00 | \$5,000.00   |
| TOTAL |                         |      |     |            | \$212,534.39 |
|       |                         |      |     |            |              |
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# Interoffice Memo

Date: December 6, 2012  
To: Common Council Members  
From: Mike Hicks, Program Manager, PDS EXT: 2706  
RE: **Sonar CCTV Inspection for Siphons and Sewers  
W.O. #75635**

## Council District City Wide

The contractor shall furnish all labor, insurance, equipment, materials and power for the completion of the project: "Sonar CCTV Inspection for Siphons and Sewers" as follows: The company selected will provide all equipment, labor, and expertise to sonar/cctv approximately 43,991 +/- linear feet of sewers and siphons. This work shall be carried out throughout the City. There are 23 siphons at approximately 9,400 +/- linear feet and approximately 35,000 linear of sewers ranging in size from 8 inches to 120 inches.

Implications of not being approved: These siphons are choke points on our major interceptors. If these siphons and sewers near these siphons are full of debris or are damaged, then the possibility of backups and overflows exist. This project will give the City an indication where the interceptors may have to be put on a cleaning schedule.

There were 5 submitted proposals and R & R Visual firm was selected through the purchasing department based on their qualifications and there submitted fee for the **Sonar CCTV Inspection for Siphons and Sewers** project in the amount \$212,534.39

The cost of said project funded by 2011 Sewer Revenue Bond

## Council Introduction Date: December 11, 2012

CC: BOW  
Matthew Wirtz  
Diane Brown  
Construction Manager  
Chrono  
File