



**AGENDA ITEM EXECUTIVE SUMMARY**

Agenda Item number: 5.e

Title:

Recommendation to Award the Bid and approve Purchase Order for Storm Sewer Point Repair Services

Presenter:

AJ Reineking

Meeting: Government Services Committee

Date: August 22, 2016

Proposed Cost: \$113,000.00

Budgeted Amount: \$113,000.00

Not Budgeted:

**Executive Summary** *(if not budgeted please explain):*

Throughout the fall of 2015 and into the winter of 2016, City staff and our contractor, Visu-Sewer, cleaned and inspected the storm sewer in Zones 4 and 5 (bordered by Main Street to the north, the Fox River to the east, Gray Street to the south, and Randall Road to the west). Critical repairs were addressed immediately, and now non-critical structural defects that were identified can be scheduled to be repaired.

On July 25, 2016, the City of St. Charles opened bids for an hourly rate contract for storm sewer point repair services. The City received two bids with J&S Construction of Oswego, IL being the lowest responsive, responsible bid.

J&S was awarded this bid in 2015, the first year of the program. Rather than having contractors provide quotes for each individual repair, a bid was created to address all repairs on a Time & Materials basis. Having one contractor established for this work saved time gathering quotes while still maintaining competitive pricing. Public Services Crew Leaders worked closely with J&S Construction's staff to ensure that the repairs were made in a timely, professional manner and that all cost-saving measures were taken.

Staff is currently preparing the 2016 cleaning and televising program bid package for the upcoming fall and winter seasons. J&S has indicated that they will be available to mobilize for critical repairs that are identified as part of that program.

Staff will continue to work closely with J&S Construction to ensure that all repairs are made properly and efficiently.

**Attachments** *(please list):*

Bid Tabulation \* Bid Specifications \* J&S Construction's Bid Sheet

**Recommendation/Suggested Action** *(briefly explain):*

Recommendation to award the bid and approve Purchase Order for Storm Sewer Point Repair Services to J&S Construction in the submitted bid amounts, not to exceed \$113,000.00.

Storm Sewer Point Repair Bid  
 Bid Opening: Monday, July 25, 2016

	<b>J&amp;S Construction</b>	<b>River Valley Land Improvement Co.</b>
	Oswego, IL	Elgin, IL
Mobilization	\$ 516.00	\$ 800.00
Crew Rate (per hr) w/o Flagger	\$ 490.00	\$ 475.00
Crew Rate (per hr) with Flagger	\$ 672.00	\$ 675.00
OT Crew Rate (per hr) w/o Flagger	\$ 620.00	\$ 685.00
OT Crew Rate (per hr) with Flagger	\$ 888.00	\$ 915.00
Materials Markup Percent (%)	15%	15%

8 Hr Day Without Flagger	\$ 4,436.00	\$ 4,600.00
8 Hr Day With Flagger	\$ 5,892.00	\$ 6,200.00

## **Storm Sewer Point Repair Services**

St. Charles Public Works Department is seeking a point repair contractor to perform repairs to the City's storm sewer system throughout the duration of the 2016/2017 fiscal year, ending April 30, 2016. The City is also requesting rates for an optional second year (May 1, 2017 – April 30, 2018). This option will be exercised at the sole discretion of the City. All work will be contracted on a time and materials basis.

Bids for Point Repair Services, as described in the accompanying technical scope, shall be received before **10:00 a.m, Friday, July 8, 2016** at the City of St. Charles City Hall, 2 East Main Street, St. Charles, IL 60174, Council Chambers, Attention: Purchasing Manager. Proposals will be read aloud at this time. Any proposal received subsequent to the time specified will be promptly returned to the Contractor unopened.

Proposals shall be in a sealed envelope labeled with "Sealed Bid – Storm Sewer Point Repair Services".

Any questions shall be submitted to AJ Reineking via e-mail to the following e-mail addresses:

areineking@stcharlesil.gov

Upon receipt of questions prior to **July 1, 2016**, the Contractor shall receive a reply e-mail acknowledging the receipt of the question. Response to the question shall be as soon as practical. Should the question result in a clarification that requires addenda, such addenda will be issued via website update as soon as practical.

Questions submitted after 3PM, July 1, 2016 shall not be acknowledged or answered. Contractors shall take all necessary steps to propose questions prior to July 1<sup>st</sup>.

City reserves the right to extend the due date. Should an extension be necessary, communication of such shall be e-mailed to all registered Contractors.

### **Scope:**

The work shall be performed on storm sewers throughout the City, in areas identified by staff or through the City's contracted cleaning and televising program. Storm sewers in this area lie under pavement and/or within utility easements.

All work performed shall be in compliance with the City's design and inspection policy manual for storm sewers, an excerpt of which is provided herein these specifications.

## **General Conditions**

Contractor should have experience with underground infrastructure work, with storm sewer repair work seen as a bonus.

The work schedule shall be coordinated by the City and the successful bidder. All work shall be completed and invoiced by April 30 of each contract year.

The Contractor may not start work before 7:00 AM weekdays, and must be completed for the day by 3:00 PM weekdays. Additional hours must be approved 24-hours in advance to coordinate inspection. Note that the contractor may be restricted with respect to work hours each day depending on special events in the area and weather. Weekend hours must be approved by the City in advanced, and generally will not be permitted.

Once the work starts on a site, the City expects, within reason, the work to proceed without delay to completion.

The Contractor shall provide a Safety Officer contact for the City Inspector to address any safety related concerns that arise on the job. The Safety Officer shall have the ability to respond and address the concern in a timely fashion.

Job show up. The City Public Works facility, upon request, can be used for a job show up location. Utility trucks and private cars can be parked within our fenced in yard. The City reserves the right to revoke this privilege. The yard is open weekdays from 6:00 AM to 5:00 PM and is locked at all other times.

Contractor is required to abide by the Illinois Prevailing Wage Act and must submit certified payroll records with all pay requests. Pay request without certified payroll will not be processed by the City Accounts Payable Dept.

## **Technical Specifications & Requirements**

### ***A: Design Requirements:***

- 1) **Catch Basins:** Catch basins shall consist of four (4) foot minimum interior diameter reinforced concrete structures with a 3' sump (refer to restrictor structure detail).
- 2) **Cover Depth:** All storm sewer and sump lines must have a minimum cover of two (2) feet.
- 3) **Disconnection of Existing Services:** Where necessary for the purposes of completing a repair, existing services shall be disconnected by means of cutting out existing "wye" or tee and replacing with a straight piece of equal size pipe and making the final connection with "non-shear" mission couplings. Disconnection of all services must be performed prior to the demolition of an existing structure.

- 4) Flared End Sections: All flared end sections greater than or equal to 12 inches, which will receive or discharge storm water, shall have a removable grate system to prevent entry. This grate system shall be made from steel stock that is hot-dipped galvanized after fabrication.
- 5) Connecting to an Existing Sewer: When connecting to an existing sewer main by means other than an existing “Y”, “T”, or an existing manhole, one of the following methods shall be used:
  - a. Using pipe cutter, neatly and accurately cut out desired length of pipe for insertion of proper fittings. Use “band-seal” couplings or similar couplings, and shear rings and clamps to fasten the inserted fittings and hold it firmly in place. Mission couplings shall have the length of boot approximately equal to the pipe diameter. Follow manufacturer’s recommendations for the installation. No cut-in connection, made by breaking or cutting a hole in the main and inserting the spigot end of an ordinary sewer pipe shall be permitted.
  - b. Circular, saw-cut of sewer main with proper tools (“Shewer-tap” machine or similar) and proper installation of hub-“Y” saddle or hub-“T” saddle, in accordance with manufacturer’s recommendations. This method shall only be allowed for pipe sizes over 12 inches in diameter. All must be encased in concrete flowable fill.
- 6) Frame & Grate: Frames and grates shall be provided as appropriate for the structure location (i.e.: depressed curb, barrier curb, overflow route, rear yard...). All grates to be located near a paved surface shall be “bicycle safe”. Calculations may be required to demonstrate that the proposed grates allow for an inflow that does not exceed the design capacity for the downstream pipe (refer to standard details).
- 7) Inlets: Inlets shall consist of a two (2) foot minimum interior diameter reinforced concrete structure. Inlets shall be placed at the sag of vertical curves in roadways, at low points in parking areas, and at other locations as necessary to minimize stormwater ponding and/or flow across roadways or intersections. Storm sewer inlets shall be placed not more than 500’ apart in pavement and shall not exceed 250’ in grassy areas.
- 8) Release Structure / Restrictor: The release structure shall be of a weir wall orifice design (refer to overflow weir structure detail) or as approved by the City of St. Charles.
- 9) Separation Requirements: A minimum ten (10) foot horizontal separation shall be established between the sewer and any proposed or existing water distribution facility, or the invert of the water main shall lie a minimum of 18” above the top of the sewer pipe. Where neither of the above conditions can be met, the water main shall be encased for the duration of the horizontal conflict (10’ on each side of a perpendicular conflict), or the sewer shall be constructed of water main quality materials the duration of the conflict (10’ on each side of a perpendicular conflict).

- 10) Sewer Pipe, Minimum Size: Public sewer shall have a minimum diameter of 10” for the first “run” of pipe, 12” minimum for all other. Replacement sizing for all point repairs should be consistent with the size of the section removed.
- 11) Slope: Slope shall be adequate to provide a minimum flow velocity of 3 fps and maximum acceptable velocity is 10 fps.
- 12) Structure Sizing: Manholes and catch basins shall have a minimum inside diameter of four (4) feet for sewer pipe 18” or less in diameter, five (5) feet for sewer pipe 21” to 48” in diameter. Pipes larger than 48” in diameter will require a special design (refer to standard manhole and catch basin details)
- 13) Structure Spacing: Manholes / Catch basins shall be provided at:
  - 400’ minimum intervals.
  - Change in pipe diameter.
  - Change in pipe material.
  - Change in vertical alignment.
  - Change in horizontal alignment.
- 14) Sump Lines: Domestic sump services shall be constructed of PVC SDR 26 with a minimum diameter of 4”. All domestic services shall connect to the public sewer by removing a section of main and installing a new “wye” fitting for pipes less than 15” in diameter, “Kor-N-Tee” Boots for pipes 15” and larger, or at a structure (refer to connection detail).
- 15) Trench Backfill: All utility and service trenches within (3) feet of paved surfaces, or at a distance specified by the Engineer, shall be backfilled with CA-7 (Virgin Crushed Limestone). In other unpaved locations, CA-7 material shall be used within 12’ of the pipe on all sides, and the excavated material may be replaced in the hole from that point. All Backfill material shall be properly compacted unless otherwise directed by the appropriate City staff. Backfill under existing pavements, where an open cut of the pavement has been approved, shall be Flowable Fill that meets the IDOT standards of Controlled Low Strength Material (CLSM) Mixture #1. No fly ash will be permitted in this mix (refer to City pipe trench detail).
- 16) Underdrains: Underdrains will be required under curbs at the bottom of all roadway sags. Underdrains shall extend 50 feet on each side of the inlet. Underdrains shall be perforated polyethylene pipe. The underdrain shall be encased in gravel trench with no fines, and a geotextile fabric shall be used to limit sedimentation in the pipe (refer to standard “Pipe Underdrain” detail). Where an underdrain is removed for a point repair, it shall be restored to its original condition and function.
- 17) Culverts: Culvert pipe designs shall be in accordance with the Illinois Department of Transportation “Standard Specification for road and Bridge Construction” latest edition. Publicly owned culver pipes shall be PVC for pipes less than 15” in diameter or RCP for pipes equal to 15” or larger in diameter.

***B: Materials:***

- 1) Casing: Where water main protection is required, encasement shall consist of PVC SDR 26, or steel casing with “*Cascade type CCR-STD*” spacers or approved equal.
  
- 2) Frame & Grate:

Curb Inlet/C.B.:	High back:	<i>Neenah R-3281-A or R-3278-1</i>
	Depressed:	<i>Neenah R-3506-A2</i>
C.B., “behind the curb type”:		<i>Neenah R-3305</i>
		<i>Neenah R 1713 (Refer to Lid Detail)</i>
C.B./M.H., Type “D”:	Grate:	<i>Neenah R 1713 (Refer to Lid Detail)</i>
	Frame:	<i>Neenah R-1713</i>
C.B., “beehive type”:		<i>Neenah R-4340-B</i>
  
- 3) Manhole: Manholes shall be reinforced concrete with steps provided 16” on-center. All manholes shall have a minimum inside diameter which conform to the following:
  - 18” storm sewer and smaller - four (4) foot inside diameter
  - 21” to 48” storm sewer - five (5) foot inside diameter
  - Larger than 48” storm sewer - special design required
  
- 4) Sewer Pipe, Materials: Main line storm sewer shall be constructed of one of the following:
  - a. Pre-cast reinforced concrete pipe, with “O-ring” joints;
  - b. PVC pipe, rigid, (Min. SDR 26, push-on gasket joints);
  - c. All joints shall conform to ANSI 21.11 for ductile iron pipe.
  - d. Ductile iron pipe, (Class 52), minimum;
  - e. HDPE pipe, (Rigid with corrugated exterior and smooth interior meeting AASHTO M-294, Type S. Pipe sections shall be joined with PVC double bell couplers installed on the pipe with O-ring gaskets. Ex-filtration standards shall meet or exceed that of PVC SDR 26 with push-on-joints.) **FOR PRIVATE USE ONLY. NOT TO BE USED WITHIN PUBLIC RIGHT-OF-WAY OR FOR PUBLICLY OWNED AND MAINTAINED STORM SEWER**
  - f. The type of pipe material will be dependent upon the depth of bury, soil conditions, and pipe criteria, and as approved by the City of St. Charles.
  - g. For RCP/CSP pipe, lifting holes shall not be allowed on pipes less than 84” in diameter.
  - h. All storm sewer smaller than 15-inches in diameter that will be publicly owned and maintained shall be PVC pipe, rigid, (Min. SDR 26, push-on gasket joints).
  
- 5) Flared End Section: Flared end sections and subsequent riprap material shall be designed and specified per the Illinois Department of Transportation “Standard Specification for Road

and Bridge Construction” latest edition. Flared end sections shall be constructed of a concrete material only or approved by the appropriate Engineering Division.

***C: Traffic Control:***

The Contractor is responsible for all traffic control and protection. Work in IDOT ROW requires traffic control and protection measures that meet IDOT standards for such. A City inspector will be making spot checks and any deficiencies must be addressed immediately. The City will secure an IDOT permit for any work on state roadways; however, the Contractor is responsible for reviewing the jobsite and quantifying the need for flaggers.

***D: Erosion Control:***

The Contractor shall be responsible to establish silt screens on the downstream end of any de-watering discharge.

***D: Restoration:***

- 1) Non-Paved Surfaces: In the parkway and other non-paved surfaces, a minimum of 4” of topsoil must be used for all landscaped restoration areas. Contractor is responsible for leveling and seeding all parkway excavations and installing erosion blankets.
- 2) Paved Surfaces: Excavations in the pavement shall be backfilled with the above specified materials up to existing surface depth. All existing pavement depths must be matched with like surface material, or asphalt may be used to complete depth of existing surface material. Asphalt lifts must be completed at 2” intervals.
- 3) Temporary Restoration: No excavations may be left open overnight or after the contractor has left the site. On paved surfaces, cold patch or plating is required as a temporary surface prior to completion of final surface on all arterial roadways and for all surfaces that will not see final surface material for more than 24 hours.
- 4) Restoration of Private Property: The Contractor shall notify the City prior to removal of any or part of a driveway apron or sidewalk section. These areas are not to be marked as part of the initial excavation.

Respect for resident and business property is very important. Where specialized equipment could be utilized to minimize private property damage, Contractor should consider such. Contractor shall make the City aware of any work on private property that may damage trees, landscaping, fences, sheds, or other property **prior to starting work**. Any abnormal damage, as deemed by the City Inspector, shall be the responsibility of the Contractor, without any additional payment by the City. The amount of forecast damage identified by the Contractor and communicated to/approved by the City, requiring advanced restoration,

shall be added to the evaluated price. To the extent that private property damage can be minimized, it is in the Contractor's best interest. Any driveways or sidewalks in the construction zone should be photographed by the Contractor prior to work starting to defend against resident claims that Contractor work cracked or damaged such. Contractor shall be responsible for defending and satisfying any claims for driveway or sidewalk damage. Pending resident claims against the Contractor could delay final invoice processing.

## **Loaded Crew Rate Pricing Request**

The City is requesting contractors provide loaded hourly crew rates for storm sewer repair work, including emergency repairs.

For unplanned overtime work, the contractor needs to be prepared to work the amount of time that the City needs the crew for, which may be a short period, or may be an extended period. For emergency restoration work, the City expects the contractor to have the requested crews on site within 24 hours of notification.

### **Mobilization**

Provide a standard charge per mobilization to the City. If working in consecutive days, or if the contractor pulls off a site before completing an agreed upon list of tasks, only one mobilization charge may be applied.

\$ \_\_\_\_\_ per mobilization

### **Straight Time Hourly Rates**

Please provide a loaded crew rate on a time and materials basis for a standard crew with standard equipment (1 operator, 2 laborers, excavator, skid steer), assuming no flagging required.

\$ \_\_\_\_\_ per crew hour without flaggers

Please provide a loaded crew rate on a time and materials basis for a standard crew with standard equipment (1 operator, 2 laborers, excavator, skid steer), including two flaggers in the event that the job is on a street where a lane is blocked.

\$ \_\_\_\_\_ per crew hour with flaggers

### **Additional work – Overtime at time and a half hourly rates**

The City may choose to hire the Contractor on a time and material basis for additional projects. Please provide a loaded crew rate for a standard overhead crew with standard equipment (as described above), assuming no flagging required, **for overtime.**

\$ \_\_\_\_\_ per crew hour without flaggers

The City may choose to hire the Contractor on a time and material basis for additional projects. Please provide a loaded crew rate for a standard overhead crew with standard equipment (as

described above), including two flaggers in the event that the job is on a street where a lane is blocked, **for overtime.**

\$ \_\_\_\_\_ per crew hour with flaggers

**OPTIONAL Year 2 Labor Increase**

Provide a percentage (%) labor increase for optional Year 2 (May 1, 2017 – April 30, 2018). This option will be exercised at the sole discretion of the City.

Optional Year 2 Labor Rate Adjustment \_\_\_\_\_%

**Materials Price Markup**

Being a time and materials contract, the contractor is requested to provide a material markup percentage for all consumable products (pipe sections, clamps, etc.) expended during the course of the work. Tools and equipment that break or malfunction during the course of work for the City do not qualify for reimbursement under this section.

Materials Markup Percentage \_\_\_\_\_%

Upon request, the Contractor must provide a receipt of the charged materials to verify markup pricing. In such cases, the City will not issue payment until the requested receipts are furnished.

**Additional Clarifications**

Feel free to provide additional pricing details or breakouts, or cost per hour for specialized equipment or additional crew staff that Contractor could foresee needing or that was not covered in previous sections. Such would streamline the administration of the contract and reduce the likelihood of conflict.

Contractor should provide basic definitions of what constitutes overtime, if such is applicable. If no detail is provided, the definitions for overtime work will follow the City of St. Charles Teamsters Local 330 contract in effect at the time of the work.

## Loaded Crew Rate Pricing Request

The City is requesting contractors provide loaded hourly crew rates for storm sewer repair work, including emergency repairs.

For unplanned overtime work, the contractor needs to be prepared to work the amount of time that the City needs the crew for, which may be a short period, or may be an extended period. For emergency restoration work, the City expects the contractor to have the requested crews on site within 24 hours of notification.

### Mobilization

Provide a standard charge per mobilization to the City. If working in consecutive days, or if the contractor pulls off a site before completing an agreed upon list of tasks, only one mobilization charge may be applied.

\$ 516 per mobilization

### Straight Time Hourly Rates

Please provide a loaded crew rate on a time and materials basis for a standard crew with standard equipment (1 operator, 2 laborers, excavator, skid steer), assuming no flagging required.

\$ 490 per crew hour without flaggers

Please provide a loaded crew rate on a time and materials basis for a standard crew with standard equipment (1 operator, 2 laborers, excavator, skid steer), including two flaggers in the event that the job is on a street where a lane is blocked.

\$ 672 per crew hour with flaggers

### Additional work – Overtime at time and a half hourly rates

The City may choose to hire the Contractor on a time and material basis for additional projects. Please provide a loaded crew rate for a standard overhead crew with standard equipment (as described above), assuming no flagging required, **for overtime**.

\$ 620 per crew hour without flaggers

The City may choose to hire the Contractor on a time and material basis for additional projects. Please provide a loaded crew rate for a standard overhead crew with standard equipment (as

described above), including two flaggers in the event that the job is on a street where a lane is blocked, **for overtime.**

\$ 888 per crew hour with flaggers

**OPTIONAL Year 2 Labor Increase**

Provide a percentage (%) labor increase for optional Year 2 (May 1, 2017 – April 30, 2018). This option will be exercised at the sole discretion of the City.

Optional Year 2 Labor Rate Adjustment 3 %

**Materials Price Markup**

Being a time and materials contract, the contractor is requested to provide a material markup percentage for all consumable products (pipe sections, clamps, etc.) expended during the course of the work. Tools and equipment that break or malfunction during the course of work for the City do not qualify for reimbursement under this section.

Materials Markup Percentage 15 %

Upon request, the Contractor must provide a receipt of the charged materials to verify markup pricing. In such cases, the City will not issue payment until the requested receipts are furnished.

**Additional Clarifications**

Feel free to provide additional pricing details or breakouts, or cost per hour for specialized equipment or additional crew staff that Contractor could foresee needing or that was not covered in previous sections. Such would streamline the administration of the contract and reduce the likelihood of conflict. *ANY Traffic Control Devices that must be rented such as Arrow Boards, etc... would be invoiced at cost + 5%*  
Contractor should provide basic definitions of what constitutes overtime, if such is applicable. If no detail is provided, the definitions for overtime work will follow the City of St. Charles Teamsters Local 330 contract in effect at the time of the work.

*Overtime - Work beyond 8 hours on a weekday or any work on Saturday*

*Double time - ANY Holiday or Sunday work*