INVITATION TO BID

AND

SPECIFICATIONS

FOR

Storm Sewer Point Repair Contractor

CITY OF ST. CHARLES

ILLINOIS

2016

SPECIFICATION #160711

BID OPENING: July 11, 2016

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SPECIFICATION #160711

BID OPENING : July 11, 2016

/cjb

Bid information\Bidstart Storm Sewwer Pt Repair

SECTION I

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., Monday, July 11, 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.

These Bids are available via the City Website. Alternatively, specifications and bidder information may be obtained at the Office of the Purchasing Manager, City of St. Charles, 200 Devereaux Way, St. Charles, IL 60174.

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 3:00 p.m., July 1, 2016, shall not be acknowledged or answered. Contractors shall take all necessary steps to propose questions prior to July 1.

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.

CITY OF ST. CHARLES
Mike Shortall
Inventory Control & Purchasing Manager

SECTION II
INFORMATION TO BIDDERS

1. **GENERAL CONDITIONS:**

A. Bids shall be submitted in a sealed envelope, inserted in a larger sealed envelope. Both envelopes shall be clearly marked with the word "Bid", and the name of the project or subject of the bid. (Sec. 2.33.200A of the St. Charles Municipal Code). The outer envelope shall be addressed "Purchasing Manager, City of St. Charles, Two East Main Street, St. Charles, IL 60174." Include a return address on both envelopes. Bids received after the specified time and date will be returned unopened. Bids shall be on City of St. Charles bid form and shall be returned attached to the original specification sheets. Copies are not acceptable. **All bids submitted are binding for sixty (60) calendar days following the date of the bid opening.**

B. All bid proposals must be signed with the firm name and by an authorized officer or employee of the company. One bid per bidder is allowed.

C. The award of bids shall be made, after determination of the successful bidder by the City Council, by issuance of a City purchase order from the City of St. Charles purchasing manager to the successful bidder.

D. The City of St. Charles reserves the right to waive minor specification deviations and reject any or all bids, and to accept the bid, which is in the opinion of the City Council, the lowest conforming bid from a responsible bidder as defined by state law and Sec. 2.33.230 of the St. Charles Municipal Code.

E. All bids must be quoted on the basis of delivery to the City storeroom, 200 Devereaux Way in St. Charles, IL. The price shall be stated in units and bids made on each item separately. In case of conflict, the unit price shall govern. The City reserves the right to award the bid in aggregate or on individual items.

F. All taxes, storage, handling and delivery costs incurred prior to receipt of the material by the City must be assumed by the successful bidder.

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The City of St. Charles is exempt from paying Illinois Use Tax, Illinois Retailers Occupation Tax, Federal Excise Tax, and Municipal Retailer's Occupation Tax.

The Illinois Department of Revenue tax exempt form can be obtained through the City of St. Charles Office of Purchasing.

The winning bidder will be required to complete the requested information included on this form. It is the purpose of this document to allow the winning bidder to purchase items for the bid project, tax free. It is the intent that the contractor will include the savings into the bid or quote.

Contractors will be responsible for utilizing this tax exempt form in a legal and responsible way. The contractor must sign a certification that the tax exempt form will be solely used for the purpose stated above. Abuse of the City's tax exempt status to avoid sales tax liability on other contractor purchases shall not be tolerated and may disqualify the contractor from being awarded future City contracts or business.

H. If applicable, material is to be delivered on a flatbed trailer and ready to be unloaded from the side of the trailer without driving a forklift onto the trailer. Advance notice of 48 hours is required by calling 630-377-4421. Deliveries can be made to the City between the hours of 7:00 a.m. - noon and 12:30 p.m. - 3:30 p.m.

I. Each bidder shall make an accurate statement in the proposal of the smallest number of calendar days in which delivery can be made after placement of the order.

J. Any firm bidding this/these unit(s) must have a full service shop which includes parts and service mechanics capable of making any adjustments or repairs as may be required. The firm must also have service truck capabilities.

K. Materials will be paid within 30 days of receipt/acceptance of same and receipt of invoice, or if a discount is allowed and is advantageous to the City, within five (5) days of receipt/acceptance of same and receipt of the invoice. Bids will be evaluated on both thirty (30) day and discount pricing.

REQUIRED_____ **NOT REQUIRED**__**X**_____

L. Travel time (incl. on-site repairs and/or pick up and delivery) is included within the labor or service warranty.

REQUIRED_____ **NOT REQUIRED**_**X**_____

2. **MATERIALS**:
Only new, unused, first quality material and/or equipment shall be offered by the bidder.

3. **BID RESULTS:**
The bidder must supply a self-addressed, stamped envelope for obtaining bid results. **NO** bid results will be given by telephone.

4. **ADDENDUM**
Any interpretation of the specifications will be mailed to each bidder receiving a set of the bid documents. Bidders shall acknowledge receipt of such addendum by returning the addendum form.

5. **BID DEPOSIT**
A 10% bid deposit (certified check, cashier's check, or bank draft) or bid bond **is** required to accompany this bid. Failure to do so will eliminate the bid.

REQUIRED_____ **NOT REQUIRED**__X_____

6. **PERFORMANCE & PAYMENT BONDS**

A performance bond in the amount of 100% of the bid submitted **is** required within ten (10) calendar days of acceptance of the bidder's proposal by the City.

The performance bond of the successful bidder shall have a minimum "A" rating as defined in Best's Key Rating Guide, be conditioned on the faithful performance of the requirements of the contract, and shall have as surety a corporate surety authorized to act as such in Illinois. The performance and payment bonds shall cover payment for all labor and material, and insure completion of the project. The bidder will be responsible for all claims for injuries to persons or damages to property or premises arising out of or in connection with his or her operations prior to the acceptance of the finished work or supplies, and that he or she will promptly make payments to all persons supplying him or her or them with labor or materials in the prosecution of the work provided for in the contract; and shall guarantee to indemnify and save the City and its officers and employees harmless from all costs, damages, and expenses arising out of or by reason of the bidder's failure to comply and perform the work and complete the contract in accordance with the specifications.

The performance and payment bonds shall be in conformance with the requirements of the Illinois Act in relation to bonds of bidders entering into contracts for public construction. (Illinois Compiled Statutes Ch. 30, Sec. 550/1, et seq.)

REQUIRED_____ **NOT REQUIRED**_X_____

7. **GENERAL GUARANTY**
The bidder agrees to (a) hold the City, its agents, and employees harmless from liability of any nature or kind for the use of any copyrighted or un-copyrighted

composition, secret process, patented or unpatented, invention, article, or appliance furnished or used in the performance of the contract in which the bidder is not the patentee, assignee, licensee, or owner; (b) protect the City against latent defective material or workmanship and to repair or replace any damages or marring occurring in transit or delivery; (c) pay for all permits, licenses, and fees and give all notices and comply with all laws, ordinances, and rules of the City and State of Illinois; (d) indemnify City against all claims for personal injury, death, and/or property damage arising out of the project.

8. **ASSIGNMENT**

Assignment of this contract or any part thereof, or any funds to be received thereunder by the bidder shall be subject to the approval of the City of St. Charles.

9. **DEFAULT**

The contract may be cancelled or annulled by the purchasing manager in whole or in part by written notice of default to the bidder upon nonperformance or violation of contract terms. An award may be made to the next lowest bidder, or articles specified may be purchased on the open market similar to those so terminated. In either event, the defaulting bidder (or his surety) shall be liable to the City for costs to the City in excess of the defaulted contract prices. The bidder shall continue the performance of this contract to the extent not terminated under the provisions of this clause. Failure of the bidder to deliver materials or services within the time stipulated on his or her bid, unless extended in writing by the purchasing manager, shall constitute contract default.

10. **INSURANCE**

Detailed insurance requirements are included under City of St. Charles Certificate of Insurance Requirements.

The bidder **shall** secure and maintain in effect at all times, at his or her expense, insurance of the following kinds and limits to cover all locations of the bidder's operations in connection with work on his or her company's projects, naming the City of St. Charles as an additional insured. The bidder shall furnish Certificates of Insurance to the City Finance Department Purchasing Office before starting construction or within 10 days after the execution of the contract, whichever date is reached first. All insurance policies shall include a non-cancellation clause provision preventing cancellation without 30 days written prior notice to the City. In case of insurance cancellation, bidder shall obtain a new insurance policy in compliance with this paragraph prior to the effective date of cancellation.

Certificates of insurance must be completed on the ACORD 25-S form, with the cancellation clause revised and revisions initialed. An example is enclosed.

REQUIRED__X_____ NOT REQUIRED_____

For this **specific** project, the City of St. Charles is requiring a liability umbrella of $ 5,000,000 (aggregate for this project).

REQUIRED__X_____ NOT REQUIRED_____

11. **CERTIFICATE OF COMPLIANCE**

All bidders are required to complete the Certificate of Compliance (attached) as per the Illinois Compiled Statutes Ch. 65, Sec. 11-42.1-1, which will be returned with the bid.

12. **HEALTH AND SAFETY ACT**

All work under this contract shall comply with the Occupational Safety and Health Act (OSHA) of 1975, and all other federal, state or local statutes, rules or regulations affecting the work done under the contract.

13. **PREVAILING WAGE RATE**

This contract calls for the construction of a "public work," within the meaning of the Illinois Prevailing Wage Act, 820 ILCS 130/.01 *et seq.* ("the Act"). The Act requires contractors and subcontractors to pay laborers, workers and mechanics performing services on public works projects no less than the current "prevailing rate of wages" (hourly cash wages plus amount for fringe benefits) in the county where the work is performed. The Department publishes the prevailing wage rates on its website at http://labor.illinois.gov/. The Department revises the prevailing wage rates and the contractor/subcontractor has an obligation to check the Department's web site for revisions to prevailing wage rates. For information regarding current prevailing wage rates, please refer to the Illinois Department of Labor's website. All contractors and subcontractors rendering services under this contract must comply with all requirements of the Act, *including but not limited to*, all wage requirements and notice and record keeping duties.

The successful bidder and each subcontractor shall submit monthly, in person, by mail, or electronically, a certified payroll to the City of St. Charles. The certified payroll shall consist of records of all laborers, mechanics, and other workers employed by them on the project. The records shall include each worker's name, address, telephone number (when available), the last four digits of the worker's social security number, classification or classifications, the hourly wages paid in each period, the number of hours worked each day, and the starting and ending times of work each day. The certified payroll shall be accompanied by a statement signed by the bidder or subcontractor which avers that:

A. Such records are true and accurate;

B. The hourly rate paid to each worker is not less than the general prevailing rate of hourly wages required; and

C. The bidder or subcontractor is aware that filing a certified payroll that he or she knows to be false is a Class B misdemeanor.

The City of St. Charles is required to keep the certification records submitted for a period of not less than five years. Furthermore, these records, except an employee's address, telephone number, and social security number, shall be made available in accordance with the Freedom of Information Act.

14. **EXECUTION OF CONTRACT, INSURANCE, & PERFORMANCE & PAYMENT BONDS**

The successful bidder, within ten (10) business days after acceptance of the bidder's offer by the City, shall execute all requested contract documents, supply satisfactory evidence of required insurance, and furnish a satisfactory performance and payment bonds when required by the bid documents. In the event that the bidder fails to furnish required documents, insurance, and performance and payment bonds within ten (10) business days after acceptance of the bidder's offer by the City, then the City's acceptance of the offer shall automatically terminate, and the bid deposit of the bidder shall be retained by the City as reimbursement for administrative costs.

15. **RELEASE OF BID DEPOSITS**

Within a reasonable time after the bid opening, bid deposits of all except the three lowest responsible bidders will be released. The remaining deposits will be released after the successful bidder has executed the contract documents and furnished evidence of the insurance and bonds required by the bid documents.

16. **EQUAL OPPORTUNITY EMPLOYER**

The City of St. Charles is an equal opportunity employer, and all bidders are required to be equal opportunity bidders as defined by all applicable state and federal laws and regulations.

17. **VETERANS PREFERENCE**

The City of St. Charles, per Illinois Compiled Statutes Ch. 330, par. 55/1-55/3, gives preference to veterans for public works contracts, should a tie bid arise between local OR non-local bidders.

18. **CERTIFICATE OF NON-DISQUALIFICATION**

All bidders are required to submit a completed Certificate of Non-Disqualification (attached), as required under Illinois Compiled Statutes, Ch. 720, Sec. 33 E-11.

19. **PROVISIONS OF ST. CHARLES MUNICIPAL CODE**

All bids and contracts shall be in accordance with Title 2, Ch. 2.33 of the City of St. Charles Illinois Municipal code, as from time to time amended, which shall take precedence over and control all aspects of this contract, and which are incorporated herein by reference.

20. **SURVIVAL**

The provisions hereof shall survive and shall not merge with the resulting purchase order or contract awarded to the successful bidder, but shall be additional terms thereof; and the submission of a bid shall be deemed as acceptance of these terms.

21. **CERTIFICATE OF COMPLIANCE WITH SAFETY STANDARDS**

All bidders are required to submit a completed Certificate of Compliance with Safety Standards (attached).

22. **CERTIFICATE OF COMPLIANCE WITH PUBLIC ACT 87-1257 OF THE ILLINOIS HUMAN RIGHTS ACT**

All bidders are required to submit a completed Certificate of Compliance with Public Act 87-1257 of the Illinois Human Rights Act (attached).

23. **WAIVERS OF MECHANICS LIEN**

A. With each application for payment, submit waivers of mechanics liens from the bidder, subcontractors, and suppliers for the construction period covered by the current application. Payment will not be released until the bidder has supplied the City with the waiver of liens.
    1. Submit partial waivers on each item for the amount requested, prior to deduction for retainage, on each item.
    2. When an application shows completion of an item, submit final or full waivers.
    3. The City reserves the right to designate which entries involved in the work must submit waivers.
    4. Waiver Delays: submit each application for payment with the bidder's waiver of mechanics lien for the period of construction covered by the application.

A. Initial application for payment: administrative actions and submittals, that must precede or coincide with submittal of the first application for payment, include the following:
    1. List of subcontractors.
    2. List of principal suppliers and fabricators.
    3. Schedule of values.

REQUIRED_____ **NOT REQUIRED**__X_____

JH/cb

CERTIFICATE OF COMPLIANCE OF
ILLINOIS COMPILED STATUTES, CH. 65, SEC. 11-42.1-1

The undersigned, upon being first duly sworn, hereby certifies to the City of St. Charles, Kane and DuPage Counties, Illinois, that _____ _____(bidder) is not currently delinquent in the payment of any tax administered by or owed to the Illinois Department of Revenue, or otherwise in default upon any such tax as defined under Ch. 65, Sec. 11-42.1-1, Illinois Compiled Statutes.

_____
Name of Bidder

By:_____

State of _____),
ss.
County of _____)

Subscribed and sworn to
before me this _____ day
of_____,_____.

_____
Notary Public

CERTIFICATE OF NON-DISQUALIFICATION
UNDER ILLINOIS COMPILED STATUTES, CH. 720, SEC. 33E-11

The undersigned, upon being first duly sworn, hereby certifies to the City of St. Charles, Kane and DuPage Counties, Illinois, that _____ _____(bidder) is not barred from contracting with any unit of State or local government, as a result of a violation of Ch. 720, Sec. 33E-11 of the Illinois Compiled Statutes.

_____
Name of Bidder

By:_____

State of _____),
ss.
County of _____)

Subscribed and sworn to
before me this _____ day
of_____,_____.

_____
Notary Public

NOTE TO BIDDER: Anyone who makes a false statement, material to this Certification, commits a Class 3 Felony under Illinois Compiled Statutes, Ch. 720, Sec. 33E-11 (b).

CERTIFICATE OF COMPLIANCE WITH SAFETY STANDARDS

The undersigned, upon being first duly sworn, hereby certifies to the City of St. Charles, Kane and DuPage Counties, Illinois, that _____ _____(bidder) shall comply with all local, state and federal safety standards.

_____
Name of Bidder

By:_____

State of _____),
ss.
County of _____)

Subscribed and sworn to
before me this _____ day
of_____,_____.

_____
Notary Public

CERTIFICATE OF COMPLIANCE WITH PUBLIC ACT 87-1257
OF THE ILLINOIS HUMAN RIGHTS ACT

The undersigned, upon being first duly sworn, hereby certifies to the City of St. Charles, Kane and DuPage Counties, Illinois, that _____ _____ (bidder) complies with the Illinois Human Rights Act as amended by Section 2-105, Public Act 87-1257 in relation to employment and human rights.

_____
Name of Bidder

By:_____

State of _____),
ss.
County of _____)

Subscribed and sworn to
before me this _____ day
of_____,_____.

_____
Notary Public

CERTIFICATE OF COMPLIANCE WITH PREVAILING WAGE RATE ACT

The undersigned, upon being first duly sworn, hereby certifies to the City of St. Charles, Kane and DuPage Counties, Illinois, that all work under this contract shall comply with the Illinois Prevailing Wage Act, 820 ILCS 130/.01, et. seq, (the "Act") and current City ordinance, to the extent required by law. Contractors shall submit monthly certified payroll records to the City.

_____
Name of Contractor

By:_____

State of _____),
ss.
County of _____)

Subscribed and sworn to
before me this _____ day
of_____,_____.

_____
Notary Public

/cjb

CERTIFICATE OF COMPLIANCE WITH SALES TAX FORM

The undersigned, upon being first duly sworn, hereby certifies to the City of St. Charles, Kane and DuPage Counties, Illinois, that _____ _____(bidder) shall comply with General Conditions, Paragraph 1.G. and the Illinois Department of Revenue tax exempt form.

_____
Name of Bidder

By:_____

State of _____),
ss.
County of _____)

Subscribed and sworn to
before me this _____ day
of_____,_____.

_____
Notary Public

JH:cb
Bidders Section II

Illinois Department of Revenue
Office of Local Government Services
Sales Tax Exemption Section, 3-520
101 W. Jefferson Street
Springfield, IL 62702
217 782-8881

January 2, 2015

CITY OF ST CHARLES
DIRECTOR OF FINANCE
TWO EAST MAIN ST
ST CHARLES IL 60174

Effective January 1, 2015, we have renewed your governmental exemption from payment of the Retailers Occupation Tax, the Service Occupation Tax (both state and local), the Use Tax, and the Service Use Tax, as required by Illinois law.

We have issued the following new tax exemption identification number:

E9996-0680-07
to
CITY OF ST CHARLES
of
ST CHARLES, IL

The terms and conditions governing use of your exemption number remain unchanged.

Office of Local Government Services
Illinois Department of Revenue

Issued To: _____

Company: _____

Date Issued: _____

Project: _____

Dates Valid: _____

Christopher A. Minick, Director of Finance

STS-70 (R-2/98)
IL-492-3524
10-0001268

City of St. Charles
Certificate of Insurance Requirements

Contractors shall carry all insurance coverage required by law. In addition, the Contractor shall carry, at its own expense, at least the following insurance coverage with a duly licensed and registered insurance company in the State of Illinois having a minimum A.M. Best rating of A-VI:

(a) Workers' Compensation & Occupational Diseases Insurance – Statutory amount for Illinois

(b) General Liability Insurance:

1) Bodily injury, with limits of not less than $1,000,000 each occurrence/
$2,000,000 aggregate;

2) Property damage, with limits of not less than $1,000,000 each occurrence/
$2,000,000 aggregate;

3) Contractual insurance – broad form, with limits of not less than $1,000,000
each occurrence/$2,000,000 aggregate.

(c) Automotive Liability Insurance:

1) $1,000,000 each occurrence/
$2,000,000 aggregate;

2) Property damage, with limits of not less than $1,000,000 each occurrence/
$2,000,000 aggregate. Property damage insurance coverage shall include non-owned, hired, leased, or rented vehicles, as well as owned vehicles.

(d) Umbrella liability $5,000,000.

(e) Contractor's insurance policy shall name City as an additional insured on the General Liability, Automotive Liability and Excess Liability insurance policies. The insurance coverage shall be written with insurance companies acceptable to City. All insurance premiums shall be paid without cost to City. The Contractor shall furnish to City a Certificate of Insurance attesting to the respective insurance coverage for the full contract term. Contractor shall submit satisfactory proof of insurance simultaneously with the execution of the contract.

(f) All insurance policies shall provide that the City shall receive written notice of cancellation or reduction in coverage of any insurance policy thirty (30) days to the effective date of cancellation.

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.

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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 3:00 p.m., July 1, 2016, shall not be acknowledged or answered. Contractors shall take all necessary steps to propose questions prior to July 1.

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 an 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 geo-textile 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:	*Neenah R-3281-A or R-3278-1*
	Depressed:	*Neenah R-3506-A2*
C.B., "behind the curb type":		*Neenah R-3305*
		Neenah R 1713 (Refer to Lid Detail)
C.B./M.H., Type "D":	Grate:	*Neenah R 1713 (Refer to Lid Detail)*
	Frame:	*Neenah R-1713*
C.B., "beehive type":		*Neenah R-4340-B*

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 PUBLICY 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.

ST. CHARLES
SINCE 1834

City of St. Charles Engineering Design and Inspection Policy Manual

ADOPTED: OCTOBER 2009
UPDATED: DECEMBER 2013

ENGINEERING DESIGN AND INSPECTION POLICY MANUAL

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SECTION II

STORM SEWER SYSTEM

A. DESIGN REQUIREMENTS
B. MATERIALS

A: Design Requirements:

1) Auger: Augering will be required at all roadway crossings unless otherwise permitted by the City of St Charles appropriate Engineering Division. Steel casing and "Cascade" spacers (or approved equal) shall be utilized. Following completion of the auger, the casing shall be filled with pea gravel or sand, and the ends shall be blocked and mortared shut (refer to City casing pipe detail).

2) 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).

3) Cover Depth: All storm sewer and sump lines must have a minimum cover of two (2) feet.

4) Video Note on All Plans: Engineering plans must contain the following note: "A current color video record and a type written transcription of the internal inspection of the newly constructed sewer system shall be submitted prior to refunding of site improvement escrow retention monies by the City of St Charles. All public mains shall be videotaped. The contractor must rotate the lens of the camera to look at all services. The service connections must be noted in the television report. When the proposed sanitary sewer system is to connect to an existing sanitary sewer system abutting the property, the existing sewer must also be televised and reported. The contractor shall coordinate the televising of existing contiguous sewers with the City of St Charles. All lines shall be flushed and cleaned prior to videotaping."

5) Disconnection of Existing Services: shall be 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.

6) Flared End Sections: All flared end sections greater than or equal to 12 inches, that 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.

7) Extension of Sewer System: The storm sewer must be extended to the limits of the subdivision or lot and must be sized to accept all tributary areas.

8) Capacity Calculations: Provide calculations to substantiate the available capacity of the existing receiving storm sewer/stream in light of the design discharge from the proposed development. Note on all plans which sewer lines are to be public and private. All proposed storm sewer systems shall be designed for a 10-year storm event per the Kane County Stormwater Ordinance as adopted and modified by the City of St. Charles.

9) 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.

10) 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).

11) 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 that 500' apart in pavement and shall not exceed 250' in grassy areas.

12) 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.

13) Underground Storage System
a. Underground chambers must be large enough to allow the chamber to be manually cleaned.
b. Access points for ingress and ventilation purposes are to be provided in the chamber at a maximum spacing of 100 feet and at the ends of the chamber.
c. Underground storage chambers are to be clearly labeled on the engineering plans as "Private Storm Water Storage Facility." These chambers are to be maintained by the developer until a owners association has been established.
d. Poured in place reinforced concrete chamber designs must be signed and sealed by an Illinois Licensed Structural Engineer.
e. All reinforcement steel shall be epoxy coated and all concrete shall be treated with a protective concrete coating, on the interior and exterior of the chamber.
f. For precast concrete construction, geo-textile fabric must be placed over the top of the structure, and all joints must be grouted.
g. All structural steel members used shall be Corten or hot dipped galvanized. All connections shall have a like treatment.
h. A minimum of 12 inches of topsoil plus sod must be placed to cover the underground storage facility when constructed under pervious surface.

14) 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).

15) Sewer Pipe, Minimum Size: Public sewer shall have a minimum diameter of 10" for the first "run" of pipe, 12" minimum for all other.

16) Slope: Slope shall be adequate to provide a minimum flow velocity of 3 fps and maximum acceptable velocity is 10 fps.

17) 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)

18) 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.

19) 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).

20) 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). FA-6 (clean beach sand) material shall be used in all other unpaved locations. All Backfill material shall be properly compacted unless otherwise directed by the appropriate Engineering Division. 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).

21) 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 geo-textile fabric shall be used to limit sedimentation in the pipe (refer to standard "Pipe Underdrain" detail).

22) Sump Lines: Storm services shall be constructed for all buildable lots. Services shall be constructed of PVC SDR 26 pipe, six (6) inch minimum diameter, and shall be extended to the rights-of-way limits. All connections to the public main shall be at a manhole or at a "wye" fitting approved by Public Works Division. Once installed all services extending to the City right-of-way limits shall be located utilizing a 2" x 4" wooden stake painted green.

23) 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:	*Neenah R-3281-A or R-3278-1*
	Depressed:	*Neenah R-3506-A2*
C.B., "behind the curb type":		*Neenah R-3305*
		Neenah R 1713 (Refer to Lid Detail)
C.B./M.H., Type "D":	Grate:	*Neenah R 1713 (Refer to Lid Detail)*
	Frame:	*Neenah R-1713*
C.B., "beehive type":		*Neenah R-4340-B*

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
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   - 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 PUBLICY 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.

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.