

RETURN WITH BID

City of  
Genoa

Local Public Agency  
Formal Contract Proposal

PROPOSAL SUBMITTED BY:

\_\_\_\_\_  
Contractors's Name

\_\_\_\_\_  
Street

\_\_\_\_\_  
City

\_\_\_\_\_  
State

\_\_\_\_\_  
Zip Code

STATE OF ILLINOIS

COUNTY OF DEKALB  
CITY OF GENOA

for the

SANITARY SEWER LINING OF 300 Blk.East Side South Hadsall St &727 Watson Dr Portions  
to Country View Apartments

STREET NAME OR ROUTE NO. 300 Blk.East Side South Hadsall St &727 Watson Dr  
Portions to Country View Apartments

TYPE OF FUNDS LOCAL – CITY OF GENOA

SPECIFICATIONS

For Municipal Projects

Submitted/ Approved/ Passed

\_\_\_\_\_  
Director of Public Works

\_\_\_\_\_  
Date

Note: All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed.

## RETURN WITH BID

County DEKALB

Local Public Agency GENOA

### NOTICE TO BIDDERS

Route VARIOUS STREETS

Sealed proposals for the improvement described below will be received at the office of THE CITY OF GENOA  
333 E. First St., Genoa, Illinois 60135 until 10 a.m. on November 15th 2023.  
Address Time Date

### DESCRIPTION OF WORK

Name 2023 SANITARY SEWER LINING-300 Block S. Hadsall East side & 727 Watson to Country View Apartments  
Length 1130 feet

Locations 300 Block S. Hadsall East side & 727 Watson to Country View Apartments

Proposed Improvement TELEVISIONING, CLEANING AND LINING OF SANITARY SEWER AND REINSTATEMENT  
OF SEWER SERVICE LATERALS.

1. Plans and proposal forms will be available in the office of City of Genoa, City Hall  
333 E. FIRST ST, GENOA, IL. 60135  
ADDRESS
2. Prequalifications- See special provisions.
3. The Awarding Authority reserves the right to waive technicalities and to reject any or all proposals as provided in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals.
4. The following BLR Forms will be returned by the bidder to the Awarding Authority:
  - a. BLR 12200: Local Public Agency Formal Contract Proposal
  - b. BLR 12200a Schedule of Prices
  - c. BLR 12230: Proposal Bid Bond
5. The quantities appearing in the bid schedule are approximate and are prepared for the comparison of bids. Payment to the Contractor will be made only for the actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as hereinafter provided.
6. Submission of a bid shall be conclusive assurance and warranty the bidder has examined the plans and understands all requirements for the performance of work. The bidder will be responsible for all errors in the proposal resulting from failure or neglect to conduct an in depth examination. The Awarding Authority will, in no case be responsible for any costs, expenses, losses or changes in anticipated profits resulting from such failure or neglect of the bidder.
7. The bidder shall take no advantage of any error or omission in the proposal and advertised contract.
8. If a special envelope is supplied by the Awarding Authority, each proposal should be submitted in that envelope furnished by the Awarding Agency and the blank spaces on the envelope shall be filled in correctly to clearly indicate its contents. When an envelope other than the special one furnished by the Awarding Authority is used, it shall be marked to clearly indicate its contents. When sent by mail, the sealed proposal shall be addressed to the Awarding Authority at the address and in care of the official in whose office the bids are to be received. All proposals shall be filed prior to the time and at the place specified in the Notice to Bidders. Proposals received after the time specified will be returned to the bidder unopened.
9. Permission will be given to a bidder to withdraw a proposal if the bidder makes the request in writing or in person before the time for opening proposals.

RETURN WITH BID

PROPOSAL

County DEKAB  
Local Public Agency GENOA  
Route VARIOUS STREETS

1. Proposal of \_300 Blk S. Hadsall & 727 Watson to Country View Apts.

for the improvement of the above section by the construction of:

TELEVISIONING, CLEANING AND LINING OF SANITARY SEWER AND REINSTATEMENT OF SERVICE  
LATERALS

a total distance of 1150 feet.

- 2. The plans for the proposed work are those prepared by CITY OF GENOA
- 3. The specifications referred to herein are those prepared by the Department of Transportation and designated as "Standard Specifications for Road and Bridge Construction" and the "Supplemental Specifications and Recurring Special Provisions" hereto, adopted and in effect on the date of invitation for bids.
- 4. The undersigned agrees to accept, as part of the contract, the applicable Special Provisions indicated on the "Check Sheet for Recurring Special Provisions" contained in this proposal.
- 5. The undersigned agrees to complete the work within 110 working Days unless additional time is granted in accordance with the specifications.
- 6. A proposal guaranty in the proper amount, as specified in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals, will be required. Bid Bonds will be allowed as a proposal guaranty check, complying with the specifications, made payable to:

CITY OF GENOA

The amount of the check is 5% of BID AMOUNT ( \_\_\_\_\_ )

- 7. In the event that one proposal guaranty check is intended to cover two or more proposals, the amount must be equal to the sum of the proposal guaranties, which would be required for each individual proposal. If the proposal guaranty check is placed in another proposal, it will be found in the proposal for : \_\_\_\_\_.
- 8. The successful bidder at the time of execution of the contract may be required to deposit a contract bond for the full amount of the award. When a contract bond is not required, the proposal guaranty check will be held in lieu thereof. If this proposal is accepted and the undersigned fails to execute a contract and contract bond is required, it is hereby agreed that the Bid Bond or check shall be forfeited to the Awarding Authority.
- 9. Each pay item should have a unit price and a total price. If no total price is shown or if there is a discrepancy between the product of the unit price multiplied by the quantity, the unit price shall govern. If a unit price is omitted, the total price will be divided by the quantity in order to establish a unit price.
- 10. A bid will be declared unacceptable if neither a unit price nor a total price is shown.
- 11. The undersigned submits herewith the schedule of prices on BLR 12200a covering work to be performed under this contract.
- 12. The undersigned further agrees that if awarded the contract for the sections contained in the combinations on BLR 12200a, the work shall be in accordance with the requirements of each individual proposal for the multiple bid specified in the Schedule for Multiple Bids below.

RETURN WITH BID

SCHEDULE OF PRICES

County DEKALB  
 Local Public Agency GENOA  
 Route 300 Blk S. Hadsall East Side &  
 727 Watson to Country View Apts.

Schedule for Multiple Bids

Combination Letter	Sections Included in Combinations	Total

Schedule for Single Bid

(For complete information covering these items, see plans and specifications)

Bidders Proposal for making Entire Improvements

Item #	Items	Unit	Quantity	Unit Price	Total
1	Traffic Control and Protection	L.S.			
2	Televise, Clean & Line Sanitary Sewers 8'	L.F.	1150		
3	Reinstate Laterals	Each	11		
4	Cut Protruding Taps	S.Y.			

## RETURN WITH BID

### CONTRACTOR CERTIFICATIONS

County: DEKALB  
Local Public Agency: GENOA  
Route: 300 Blk S. Hadsall east side &  
727 Watson Dr. to Country View Apts

The certifications hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with bidder.

**Debt Delinquency.** The bidder or contractor or subcontractor, respectively, certifies that it is not delinquent in the payment of any tax administered by the Department of Revenue unless the individual or other entity is contesting, in accordance with the procedures established by the appropriate revenue Act, its liability for the tax or the amount of tax. Making a false statement voids the contract and allows the Department to recover all amounts paid to the individual or entity under the contract in a civil action.

**Bid-Rigging or Bid Rotating.** The bidder or contractor or subcontractor, respectively, certifies that it is not barred from contracting with the Department by reason of a violation of either 720 ILCS 5/33E-3 or 720 ILCS 5/33E-4.

1. A violation of Section 33E-3 would be represented by a conviction of the crime of bid-rigging which, in addition to Class 3 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be barred 5 years from the date of conviction from contacting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and : (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent on behalf of the corporation.

2. A violation of Section 33E-4 would be represented by a conviction of the crime of bid-rotating which, in addition to Class 2 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be permanently barred from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

**3. Bribery.** The bidder or contractor or subcontractor, respectively, certifies that it has not been convicted of bribery or attempting to bribe an officer or employee of the State of Illinois or any unit of local government, nor has the firm made an admission of guilt of such conduct which is a matter of record, nor has an official, agent, or employee of the firm committed bribery or attempted bribery on behalf of the firm and pursuant to the direction or authorization of a responsible official of the firm.

**4. Interim Suspension or Suspension.** The bidder or contractor or subcontractor, respectively, certifies that it is not currently under a suspension as defined in Subpart 1 of Title 44 Subtitle A Chapter III Part 6 of the Illinois Administrative Code. Furthermore, if suspended prior to completion of the work, the contract or contracts executed for the completion of this work may be canceled.

RETURN WITH BID

County DEKALB

SIGNATURES

Local Public Agency GENOA

Route 300 Blk S.  
Hadsall east side & 727 Watson Dr. to Country View Apts.

(If an individual)

Signature of Bidder \_\_\_\_\_

Business Address \_\_\_\_\_

(if a partnership)

Firm Name \_\_\_\_\_

Signed By \_\_\_\_\_

Business Address \_\_\_\_\_

Insert Names and Addresses of All Partners



(if a corporation)

Corporation Name \_\_\_\_\_

Signed By \_\_\_\_\_

President

Business Address \_\_\_\_\_

Insert Names of Officers



President \_\_\_\_\_

Secretary \_\_\_\_\_

Treasurer \_\_\_\_\_

Attest: \_\_\_\_\_

Secretary

CITY  
OF  
GENOA

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## SPECIAL PROVISIONS

The following Special Provisions supplement the “Standard Specifications for Road and Bridge Construction” adopted January 1, 2016, the latest edition of the “Manual on Uniform Traffic Control Devices for Streets and Highways,” and the “Manual of Test Procedures of Materials” in effect on the date of invitation for bids and the “Supplemental Specifications and Recurring Special Provisions” indicated on the check sheet included herein which apply to and govern the proposed improvement designated as in these Special Provisions and in case of conflict with any part or parts of said specifications, the said Special Provisions shall take precedence and shall govern.

All work described under these Special Provisions shall be performed in accordance with the applicable portion of the Standard Specification for Road and Bridge Construction (SSRBC). However, the particulars of the Special Provisions as described below shall take precedence over the SSRBC.

### LOCATION OF PROJECT

The following locations are included within this project.

300 Block S. Hadsall St. East Side & 727 Watson to Country View Apts.

Manhole #'s (See attached Map)	Length	Diameter
53 to 49	850 l.f.	8”
97 to 96	300 l.f.	8”





300 Block S. Hadsall St. East Side. MH 53 to MH 49



727 Watson Dr. to Country View Apartments MH 97 to MH 96

## DESCRIPTION OF WORK

Streets South Hadsall St. Portion and 727 Watson Dr. to Country View Apts.

Work includes the lining of an 8" diameter VCP sanitary sewer and reinstatement of laterals. Hadsall portion of sewer is located in parkway, east of existing street. Portion of Watson is located at 727 Watson to middle of Drive at Country View Apts. Manhole depths range from 3' to 8'. Streets can be temporarily closed with proper traffic control and notice. Bypass pumping can be completed to the immediate downstream manholes. Mid-day weather flows are 10 gpm and less. Multiple segments can be lined at one time. No history of backups or blockages. Grit has been found in sanitary sewer. Lining is completed to fix leaking joints to prohibit grit entering the sewer.

## MOBILIZATION

This contract contains no provisions for Mobilization. Therefore, Mobilization shall be included in the cost of the Contract.

## JOINT UTILITY LOCATING INFORMATION FOR CONTRACTORS

The contractor's attention is directed to the fact that there exists within the State of Illinois a Joint Utility Locating Information for Excavators (JULIE) system. All utility companies and municipalities which have gas mains and a number of others are a part of this system.

Instead of notifying each individual utility owner that he will be working in the area, the Contractor can call the JULIE system at 811 or (800) 892-0123, and they will notify all utility companies involved that their respective utility should be located. A minimum of 48 hours' advance notice is required, and the Contractor will have to provide the political name of the township where the work is located (as shown on the cover sheet), along with other location information such as land section and quarter section numbers.

## CONTROL OF WORK

Prior to construction, CITY staff will distribute notices to all residents whose driveway access is affected by the contractor's activities. The Contractor will not be permitted to work within the area unless the notices have been distributed.

During construction, the Contractor and/or their sub-contractor shall contact residents door to door prior to a temporary loss of access to their driveway a minimum of 24 hours but no more than 48 hours, prior to the commencement of these activities. The morning work, the Contractor will again be required to notify the residents door to door. The Contractor should provide information regarding the anticipated time that full access will be restored. Coordination between activities should allow for work to be done in a timely manner to permit access to the roadway.

**CONSTRUCTION LAY-OUT**

The Contractor will not be required to conduct the construction lay-out. The City staff will complete necessary construction layout and removal limits. The contractor is required to provide the CITY with construction staking request 72 hours in advance.

**PROTECTION OF EXISTING DRAINAGE FACILITIES**

All existing drainage structures are to be kept free of debris resulting from construction operations. All work and material necessary to prevent accumulation of debris in the drainage structures will be considered incidental to the contract. Any debris in drainage structures resulting from construction operations shall be removed at the Contractor's expense, and no extra compensation will be allowed. Should reconstruction or adjustment of a drainage structure be required by the City in the field, the necessary work and payment shall be done in accordance with Section 602 of the Standard Specifications.

During construction, if the Contractor's forces encounter or otherwise become aware of any sewers, under drains, or field drains within the right of way other than those shown on the plans, they shall inform the City representative/Engineer. The City representative/Engineer shall direct the work necessary to maintain or replace the facilities in service and to protect them from damage during construction, if maintained. Existing facilities to be maintained that are damaged because of non-compliance with this provision shall be replaced at the Contractor's expense. Should the City representative/Engineer have directed the replacement of a facility, the necessary work and payment shall be done in accordance with the appropriate sections of the Standard Specifications.

**INSURANCE**

Proper insurance shall be provided as required in Article 107.27 of the Specifications except that the City of Genoa and their agents and consultants shall be included as an additional insured or provided separate coverage with an owner's protective policy. Proper certificates of insurance shall be submitted to the City of Genoa.

**COMPETITIVE BIDDING PROCEDURE**

The City of Genoa has a bidding procedure which applies to this project.

Amount of Bid	Preference Provision
Up to \$499,999.00	5 Percent
\$500,000.00 to \$749,999.00	4 Percent
\$750,000.00 to \$999,999.00	3 Percent
141,000,000.00 to \$1,249,999.00	2 Percent
\$1,250,000.00 to \$1,499,999.00	1 Percent
Over \$1.5 million	No Preference Consideration

**RESPONSIBLE BIDDER POLICY**

The City of Genoa has adopted a responsible bidder policy which applies to this project.

**PREQUALIFICATION OF BIDDERS**

Any contractor submitting a bid shall have the minimum following work experience.

Sewer Main Diameters	Minimum Linear Footage	Duration
8"	1130 L.F.	December 2023 to April 15, 2024
Service Reinstatements	Minimum	Duration
4" to 8"	11	December 2023 to April 15, 2024

**EVALUATION OF BIDS AND AWARD OF CONTRACT**

The City reserves the right to delete certain streets and quantities of work for this project for any reason. Conversely, the City reserves the right to add streets and to extend the various quantities of work at any time for any reason.

**PROSECUTION AND PROGRESS**

The Contractor shall not begin the work to be performed under the contract without authorization from the CITY to proceed with the work.

After the award of the contract and prior to the commencement of work, a pre\*construction conference shall be attended by representatives of the CITY and Contractor. The Contractor's representatives shall include the General Superintendent to be assigned to the project. The purpose of the pre-construction conference shall be to review the general requirements of the work, to establish mutually acceptable procedures for progress schedules and to agree on a schedule of routine meetings between the CITY, and Contractor. At the time of the Pre-Construction Conference, the Contractor will be required to furnish, at a minimum, the following items:

- Written progress schedule.
- Names of Project Manager and Field Superintendent.
- Names of subcontractors and material suppliers.  
Name and contact number of person responsible for traffic control.
- Name of the contact person and emergency phone numbers of the Contractor's representative for contact after construction hours.
- Review of Project Staging, discussion of any changes proposed by Contractor.

## **WORK ZONE RESTRICTIONS**

Standard Work Hours: Monday through Friday 7:00 AM To 7:00 PM, Saturday and Sunday 8:00 AM To 7:00 PM. Additional hours up to 10:00 PM may be granted on request to the City Manager/Administrator.

## **COMPLETION DATE**

All work for this project shall be completed by April 15th, 2024. This date is based on the City of Genoa receiving proposals and awarding the contract by November 10th, 2023. In the event that all work is not completed by this date then the Contractor will be liable and shall pay to the City of Genoa liquidated damages in the amount of \$1000 dollars for each calendar day of overrun in the contract time. The liquidated damages shall accrue and be assessed until all work is completed.

## **WARRANTY**

Work shall be warranted for period of one year after final completion and final written acceptance of entire project by Engineer.

1. Locate and re-seal all renewed leakage during warranty period.
2. Contractor not responsible for leaks developing from structural failure of pipeline from settlement not attributed to his operations.

## **HOLD HARMLESS AGREEMENT**

The contractor shall indemnify and hold harmless the City of Genoa and their agents and their employees from and against all claims for personal injury or property damage, including claims against the City, their agents or servants arising out of the Illinois Structural Work Act, and all losses and expenses, including attorney's fees that may be incurred by the City defending such claims arising out of or resulting from the performance of the work and caused in whole or in part by any negligent act of omission of the contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. In any and all claims against the City, or any of their agents or servants, by an employee of a contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone whose acts any of them may be liable, the indemnification obligation under this paragraph shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the compensations acts, disability acts, or their employee benefit acts.

## **MEASUREMENT AND PAYMENT**

Contractor must comply with Illinois prevailing wage, allotments for training, and apprenticeship programs, health and welfare, insurance, vacation, and pension benefits.

Certified Payroll documentation shall be submitted for each progress payment application. The prime contractor shall collect all certifications from their subcontractors and submit all documentation together. The Certified Payroll must coincide with the dates for the particular progress payment submitted. The CITY shall hold retainage in the amount of 10% from each approved payment for all work completed by the Contractor. The retainage may be reduced to a minimum of 5% at the discretion of CITY staff. The City will hold retainage until project is completed and accepted by the CITY.

The Contractor shall guarantee that all workmanship and materials, performed, furnished and installed in the proposed improvement, are free from defects and flaws, and were installed in strict accordance with the contract documents. This guarantee shall be for a period of one (1) year from and after the date of completion and acceptance of the work as stated in the final estimate.

### **PAYMENT FOR EXTRA WORK**

Payment for extra work will be in accordance with Section 109.04 of IDOT's SSRBC. No claim for extra work will be allowed unless this work has been authorized by a representative of the City prior to the contractor beginning this work. Extra work which is approved by the City will be compensated on an agreed lump sum price or unit price. Computations to arrive at an agreed price shall be basically in accordance with these same IDOT guidelines with respect to labor, materials and equipment costs.

### **REFERENCES**

Water-Sewer Specifications refers to the Standard Specifications for Water and Sewer Main Construction in Illinois dated July 2009

IDOT Specifications or SSRBC refers to the Standard Specifications for Road and Bridge Construction in Illinois Dated January 1, 2016

ASTM F1216 – Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube.

ASTM F1743 – Standard Practice for the Rehabilitation of Existing Pipelines and Conduits by the Pulled-in-Place Installation of Cured-in-Place Thermosetting Resin Pipe (CIPP).

ASTM D5813- Standard Specification for Cured-in-Place Thermosetting Resin Sewer Pipe.

ASTM D790 – Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Material.

ASTM D2990 – Test Methods for Tensile, Compressive, and Flexural Creep and Creep – Rupture of Plastics

ASTM C109 – Test Method for Compressive Strength of Hydraulic Cement Mortars.

## **SECTION TWO – PAY ITEM SPECIAL PROVISIONS**

## MISCELLANEOUS

### TRAFFIC CONTROL AND PROTECTION

This work shall be completed in accordance with Sections 701 and 702 of the Standard Specifications and the following traffic standards: Contractor shall plan their work in order to cause the least inconvenience to the adjoining properties and to permit access to the adjoining properties.

All costs for this work shall be included in the lump sum price for **TRAFFIC CONTROL AND PROTECTION**.

## SANITARY SEWER

### TELEVISION, CLEAN & LINE SANITARY SEWERS, DIAMETER SPECIFIED

#### TELEVISION INSPECTION(S)

- A. Perform closed-circuit television inspection before installation of lining material. Camera operator to stop, turn, slowly orbit and look up each lateral encountered.
- B. Perform closed-circuit television inspection of sewers showing finished lateral connections and pipe repair, after lining. Camera operator to stop, turn, slowly orbit and look up each lateral encountered.
  - 1. Equipment:
    - a. Camera and Monitor: Color camera with rotating lens to look up laterals, capable of transmitting and receiving minimum 600 resolution lines picture; minimum 17 inch monitor located inside mobile TV studio; remote control for brilliance and focus and sewer inspection. The camera shall be specifically designed and constructed for sewer inspection. The camera shall be operative in conditions of 100 percent humidity. Focal distance shall be adjustable through a range from 1-inch to infinity. The camera shall be mounted on skids suitably sized for each pipe diameter to be investigated. Lighting for the camera shall minimize reflective glare. Camera and lighting quality shall be suitable to provide a clear, continuously in-focus picture of the entire inside peripheries of the sewer pipe for all conditions encountered during the work.
    - b. DVD: High quality color in DVD format.
    - c. Recorder: Capable of recording sound and video information; with speed and electronics standard with electronics standard with electronics industry.  
Playback: Video playback model suitable for DVD used.
    - e. Mobile Studio: Above-ground, large enough to accommodate up to 4 people for viewing while inspection is in process; with control panel operated by skilled technician; accessible to Owner or Owner's Representative at all times.
    - f. Provide all electrical wiring and power source; pay for electrical power.
    - g. Footage meter or means of locating camera with continuous display on TV DVD. The remote reading footage counter shall be accurate to at least 0.20 feet over the length of the particular section being inspected and shall be mounted over the television monitor.
    - h. Camera operator to stop, turn, slowly orbit and look up each lateral encountered.

### C. Contents of Report

1. Date and time that inspection is performed.
2. Identification of operator
3. Location
  - a. General Location.
  - b. Upstream manhole number.
  - c. Downstream manhole number.
  - d. Paved, unpaved or other.
4. Pipe Information.
  - a. Pipe diameters.
  - b. Materials.
  - c. Length, total.
  - d. Length between joints.
  - e. Depth
5. Defects in system.
  - a. Location.
  - b. Comments.
  - c. Location of laterals.
  - d. Space for inspector to draw sketch, if necessary.

D. Sewer defects or infiltration sources shall be identified on DVD recording and TV inspection form, and accurate distances from center of manhole shall be provided for each sewer defect or infiltration source, and each lateral.

E. Flow through the sewer shall be no greater than one-third of the pipe diameter.

F. Provide televising for one sewer section at a time. If entire sewer section cannot be televised from one manhole, inspection shall be attempted from other end.

G. Contractor shall avoid any pauses over 30 seconds.

H. If camera cannot pass a protruding lateral or similar obstruction, notify Owner or Engineer immediately. Attempt to TV from other end.

I. The Contractor shall turn over original DVD's and or USB with TV inspection report after completing work to receive pay requested.

J. Any out-of-focus video recordings or portions thereof, shall be rejected and the section re-televised at the Contractor's own expense.

K. The entire televised inspection process shall be available to be performed in the presence of the District's Representative.

L. All property disturbed by work shall be restored to original state at no additional compensation.

## CLEANING

### A. Equipment:

1. Provide all equipment necessary for proper rodding, bucketing, brushing and flushing of sewers.
2. Obtain water hydrant meter from the City of Genoa. Water is available at no charge.
3. Balls, scooters, high pressure water jetting equipment, brushes, swabs, bucket machines, scrapers, and augers permitted.
4. When bucket machines and buckets are used, provide properly sized flexible cable to prevent breakage when hanging cleaning equipment within sewer lines.

B. Provide 95% removal of dirt, stones, debris, roots and other materials from the sewer to be cleaned.

C. Root cut as necessary. Verify with Owner or Engineer.

D. Verify with City that heavy cleaning is necessary before heavy cleaning.

E. Deliver waste material to Wastewater Treatment Facility or landfill.

F. Remove all solids that may tend to settle out downstream.

G. All property disturbed by work shall be restored to original state at no additional compensation.

H. Remove all protruding laterals, mineral deposits, roots, debris necessary for repair of sewer.

I. If obstruction cannot be removed by conventional sewer cleaning, notify the Owner or Engineer.

J. Repair all sewers damaged by operations.

## SEWER LINING

### A. Material PIPE LINING (CURED-IN-PLACE-PIPE)

#### 1. Manufacturers:

- a. Insituform
  - b. In-Liner. National Liner.
  - c. Substitutions to be considered by Owner.
  - d. The liner tube shall consist of one or more layers of absorbent non-woven felt fabric meeting the requirements of ASTM F1216, latest revisions.
2. The liner tube shall be constructed to withstand installation pressures and curing temperatures, have sufficient strength to bridge missing pipe, and stretch to fit irregular pipe sections.
3. The wet out tube shall have a relatively uniform thickness that when compressed at installation pressures will equal or exceed the calculation minimum design CIPP wall thickness.

4. The liner tube shall be manufactured to a size that when installed will tightly fit the internal circumference and length of the original pipe.
5. The outside layer of the tube shall be coated with an impermeable, flexible membrane that will contain the resin and allow the resin impregnation ( wet out ) procedure to be monitored.
6. No material shall be included in the liner tube that may cause delamination or peeling in the cured CIPP. No dry unsaturated layers shall be evident.
7. The wall color of the interior pipe surface of CIPP after installation shall be relatively light reflective color so that a clear examination with closed circuit television inspection equipment may be made.
8. The liner tube shall be chemically resistant to withstand exposure to domestic sewage per the requirements of ASTM F1216.
9. The liner tube shall provide a watertight seal between the liner pipe and sewer.
10. The resin system shall be a corrosion resistant polyester or vinyl ester system that includes all required catalysts that when cured within the tube create a composite that satisfies the requirements of ASTM F1216 and ASTM D5813.

#### B. Installation

1. Installation shall be in accordance with ASTM F1216 and manufacturer's recommendations.
2. Notify sewer users 24 hours in advance of construction by door to door announcements.
3. Sewers shall only be lined during light rains, as many sections have heavy infiltration.
4. Coordinate with Owner to determine which inactive service laterals do not need reinstatement.
5. Provide for flow around sections of pipe designated for lining.
6. Repair broken or misaligned pipe at manhole wall with seal compatible with liner
7. Resin Impregnation: The quantity of resin used for tube impregnation shall be sufficient to fill the volume of air voids in the tube with additional allowances for polymerization shrinkage and the potential loss of resin during installation through cracks and irregularities in the original pipe wall, as applicable.
8. Tube Insertion- The wet out tube shall be positioned in the pipeline using the inversion method as defined in ASTM F1216. The tube shall be inverted through an existing manhole or approved access point and fully extend to the next designated manhole or termination point.
9. Curing shall be accomplished by utilizing hot water under hydrostatic pressure or steam pressure in accordance with the manufacturer's recommended cure schedule. A cooling down process shall be conducted that complies with the resin manufacturer's specification.
10. Install within reasonable amount of time so that residents will be minimally inconvenienced.
11. All property disturbed by work shall be restored to original state at no additional compensation.
12. Repair all sewers damaged by operations.

## BYPASS PUMPING

- A. The contractor must submit a bypass pumping plan to the City for their approval prior to commencing any work on this project.
- B. Dewater when groundwater table is such that dewatering is required to perform operations.
- C. Provide all flow controls: If required, Contractor shall use plugs or flow control devices to achieve above requirements without detrimental effects to laterals, sewer system, or sewer service.
- D. Costs for plugging or blocking, pumping, bypassing and dewatering are incidental to this Contract.

All of this work shall be completed in accordance within referenced standards and work described within the special provisions. Work will be measured by lineal foot measured along the pipe centerline from manhole wall to manhole wall for sewers lined. When lining operations are to pass through an intermediate manhole, payment lengths shall exclude length through manhole.

All costs for this work shall be included in the unit price per each **REINSTATE LATERALS.**

## **CUT PROTRUDING TAP**

- A. Cut each existing lateral connection that protrudes into existing sanitary sewer main by more than 1” or as directed by the City.

All of this work shall be completed in accordance within referenced standards and work described within the special provisions.

All cost for this work shall be included in the unit price per each **CUT PROTRUDING TAP.**