BALTIMORE COUNTY, MARYLAND
PURCHASING DIVISION
400 WASHINGTON AVENUE, ROOM 148
TOWSON, MARYLAND 21204-4665

REQUEST FOR BID NO. 1051

ON-CALL UTILITY INSPECTION AND MAINTENANCE

Due Date: 9/8/16, Time: 3:00 PM

Pre-Bid Conference: 8/18/16, Time: 1:00 PM

KATHY MADARY, C. P. M., STAFF BUYER
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EMAIL: kmadary@baltimorecountymd.gov

Amendments to solicitations often occur prior to bid opening and sometimes within as little as 48 hours prior to bid opening. It is the potential vendor's responsibility to frequently visit the Purchasing web site (www.baltimorecountymd.gov/purchasing) to obtain amendments once they have downloaded a solicitation.

BIDDER CHECK LIST

____Have you signed your bid?
____Have you signed the Procurement Affidavit?
____Have you filled out all applicable forms?
____Have you returned the original? (and required duplicate copies when required?)
____Have you signed and returned amendments?
____Have you included the bid bond, if required?
____Have you completed, signed and included all required MBE/WBE forms and documents? (if applicable)
____ Have you included and verified the complete electronic version (CD) of your bid?

BALTIMORE COUNTY, MARYLAND
REQUEST FOR BID NO. B-1051
ON-CALL UTILITY INSPECTION AND MAINTENANCE

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BALTIMORE COUNTY, MARYLAND
General Instructions for Solicitations

1. Instructions, Forms and Specifications

1.1 All bids/proposals are to be submitted on and in accordance with the forms provided by the Purchasing Division. All bids must be submitted in a sealed envelope or carton as appropriate. All bids must be clearly identified on the front of the envelope or top of the carton with the SOLICITATION NUMBER and the DUE DATE and TIME. Bid times are either Eastern Standard Time or Eastern Daylight Time, whichever prevails. Late bids will not be considered.

1.2 Responses to Requests for Bids and Requests for Proposals shall be accompanied by an executed Procurement Affidavit, as provided by the Purchasing Division. This does not apply to Requests for Quotations.

1.3 Amendments to solicitations often occur prior to bid opening and sometimes within hours prior to bid opening. All bidders are responsible for frequently visiting the Purchasing web site to obtain amendments once they have downloaded a solicitation.

1.4 Additional information or clarification of any of the instructions or information contained herein may be obtained from the Purchasing Division. The County assumes no responsibility for oral instructions or suggestions. All official correspondence in regard to this solicitation must be directed to, and will be issued by, the Purchasing Division.

1.5 Bidders finding any discrepancy in or omission from the specifications, in doubt as to meaning, or asserting that the specifications are discriminatory, shall notify the Purchasing Division in writing at once, but in no case later than five (5) business days prior to the scheduled opening of bids. Exceptions stated do not obligate the County to change the specifications. The Purchasing Division will notify all bidders in writing, by amendment duly issued, of any substantive revisions to specifications or instructions.

1.6 Unless a written exception detailing non-conformance to specifications is noted on the bid, any part number, product number, catalog number, etc., noted on the bid will be considered in full compliance with the specifications.

1.7 Submission of a bid in response to this solicitation evidences the bidder's acceptance of these General Instructions and the terms and conditions of the solicitation. Submission of a bid evidences bidder's representation and warranty that the person submitting the bid response is authorized to act for and bind the contractor.

1.8 All original and duplicate bids/proposals and other attachments, related documents and correspondence, including all follow-up documents and correspondence, shall be typed or written in English. All prices/percentages and/or other monetary figures shall be in United States dollars.

1.9 Requests for Bids and Requests for Proposals should be accompanied by an electronic version (Compact Disc) of the bid proposal in PDF format. It shall be the bidder's responsibility to verify that the electronic version is complete. The electronic version of the non-successful proposal response will be the only version retained by Baltimore County. The Compact Disc must be labeled with the bid number, the bid title, and the bidder's name submitting the response. All bids must be submitted in a sealed envelope or carton as appropriate. This does not apply to Requests for Quotation.

1.10 Issuing Officer: The sole point of contact for the County for purposes of this solicitation is the Buyer, listed on the cover page; questions regarding any aspect of the competitive process must be directed to the Buyer, in writing.

2. Award of Solicitations

2.1 Any award pursuant to Requests for Quotation and Requests for Bid is made to the lowest responsive and responsible bidder following the public opening of bids under Section 10-2-406 of the Baltimore County Code, 2003, as amended.

2.2 Awards on Requests for Quotations and Requests for Bid will be made within sixty (60) days after bid opening unless otherwise indicated in this solicitation. No bidder will be allowed to withdraw a bid during that period.

2.3 The successful bidder may be required to give security or bond, as stated in the bid document, for performance of the contract.

2.4 When there is a conflict between the unit price or percentage and the extension, the unit price or percentage will prevail as the amount of the bid.

2.5 Cash discounts will be considered in determining awards. However, cash discount offers must allow not less than 30 days to be considered in bid evaluation. A bid offering a cash discount in a period of less than 30 days will be evaluated as a bid without a discount offer; however, should that bidder obtain award by consideration of the gross price, the County shall make every effort to obtain the discount. The County will not accept any payment terms with a period of less than 30 days.

2.6 Invoices against resulting order(s) must be submitted, in duplicate, to the Office of Budget and Finance, Disbursements Section, 400 Washington Avenue, Room 148, Towson, Maryland 21204-4665. Invoices must show the vendor's Federal Tax Identification Number or Social Security Number, as appropriate, and order number and line number(s) that correspond with resulting order(s).

2.7 The County will not pay interest charges or other penalties for invoice payments.

2.8 Prices quoted shall be exclusive of all non-applicable Federal and Maryland State taxes. Tax exemption certificate will be furnished if required.

2.9 The County reserves the right to consider making payments via electronic funds transfers (EFT) on contracts for which this payment vehicle may be appropriate.

3. Reservations

3.1 The County reserves the right to reject, in whole or in part, any and all bids received, and to make a whole award, multiple awards, a partial award, or no award, to best serve the public interest.

3.2 The County may waive formalities in bids as the interests of the County may require.

3.3 The County reserves the right to increase or decrease quantities by approximately twenty (20) percent to be purchased at the prices bid.

3.4 The County reserves the right to award solicitations or place orders on a lump sum or individual item basis, or in such combination as to best serve the public interest.

3.5 The County may waive minor differences, irregularities, and technicalities in the specifications, provided they neither violate the specifications intent, materially affect the operation for which the items or services are being purchased, nor increase estimated maintenance and repair costs to the County.

3.6 At any time during normal business hours and as often as the County may deem necessary, the Contractor shall make available to and permit inspection and photocopying, by the County, its employees or agents, of all records, information and documentation of the Contractor related to the subject matter of this contract, including, but not limited to, all contracts, invoices, payroll, and financial audits.

3.7 Notwithstanding any other terms or provisions of the contract, in the event the County is temporarily or permanently prevented, restricted or delayed in the performance of any or all of the duties and obligations imposed upon or assumed by it thereunder, by act of the General Assembly of Maryland or the Baltimore County Council, by a court of competent jurisdiction or by administrative delay not due to the fault of the County (and its members and agents) shall not be liable directly or indirectly for any claims caused to or suffered by the Contractor or any other person in connection with or as a result of such prevention, restriction or delay.

3.8 The County further reserves the right to make such investigation as it deems necessary to determine the ability of bidders to furnish the required services, and bidders shall furnish all such information for this purpose as the County may request. The County also reserves the right to reject the proposal of any bidder who is not currently in a position to perform the contract, or who has previously failed to perform similar contracts properly, or in a manner acceptable to the County, all of which shall be in the County's sole discretion.

4. Delivery

4.1 Bidders shall guarantee delivery of materials in accordance with the delivery schedule stated in specifications. All items shall be delivered F.O.B. Destination/Inside Delivery, unless otherwise indicated, with delivery costs and charges included in the bid price.

4.2 The County reserves the right to charge the Contractor or vendor for each day the materials, supplies, or services are not delivered in accordance with the delivery schedule. The sum established by the specifications may be invoked at the discretion of the Purchasing Agent, said sum to be considered not as a penalty, but as liquidated damages, and deducted from final payment, or otherwise, charged to the Contractor or vendor. This remedy is not exclusive but shall be in addition to all other rights and remedies available to the County. These liquidated damages shall be in addition to any and all actual damages incurred directly or indirectly by the County, its agents, assigns, and contractors.

4.3 All bidders and vendors are to ensure that packaging materials used for this requirement are not made of non-recyclable Styrofoam (Polystyrene). Additionally, any materials used in packing to cushion, protect and ship are to be made of recycled, recyclable or biodegradable materials.

5. Competition

5.1 The name of any manufacturer, trade name, or vendor catalog number mentioned in the specifications is for the purpose of designating a standard of quality

and type, and for no other purpose unless otherwise stated in the solicitation.

5.2 A bidder may offer a price on only one unit per line item. Even though two or more units may meet the specification, bidders must determine for themselves which to offer. Submission by a bidder of prices for more than one unit shall be sufficient cause for rejection of the bid for that specific item.

5.3 Bids which show omission, irregularity, alteration of forms or additions not called for, as well as conditional or unconditional unresponsive bids, or bids obviously unbalanced, may be rejected.

5.4 All bids must be accompanied by such descriptive literature as may be called for by the specifications or proposal.

5.5 If products to be provided to the County contain any substances that could be hazardous or injurious to a person's health, a material safety data sheet (MSDS) must be provided to the Purchasing Division. This applies also to any product used by a Contractor when providing a service to the County.

5.6 Specifications are based on County needs and uses, estimated costs of operations and maintenance, and other significant and/or limiting factors to meet County requirements, and to ensure consistency with County policies. Minimum specifications, and maximum specifications where included, are not established arbitrarily to limit competition or to exclude otherwise competitive bidders.

5.7 Unless multiple or alternate bids are requested in the solicitation, these bids may not be accepted. However, if a bidder clearly indicates a base bid, it shall be considered for award as though it were the only bid submitted by the bidder.

6. Terminations

6.1 Termination for Convenience: The County may terminate a contract, in whole or in part, without cause, by providing written notice thereof to the Contractor. In the event of termination, without cause, the County shall advise the Contractor in writing of the termination date and of work to be performed during the final days prior to contract termination. The Contractor shall be paid for all reasonable costs incurred by the Contractor up to the date of termination set forth in the written notice of termination. The Contractor will not be reimbursed for any anticipatory profits, which have not been earned up to the date of termination. Payments to be provided on a lump sum basis shall be prorated by the County based on the services rendered or goods delivered up to the date of termination set forth in the written notice.

6.2 Termination for Default:

6.2.1 In addition to other available rights and remedies, the County shall have the right upon the happening of any default, without providing notice to the Contractor: 1) To terminate a contract immediately, in whole or in part; 2) To suspend the contractor's authority to receive any undisbursed funds; and/or 3) To proceed at any time or from time to time to protect and enforce all rights and remedies available to the County, by suit or any other appropriate proceedings, whether for specific performance or any covenant, term or condition set forth in the contract, or for damages or other relief, or proceed to take any action authorized or permitted under applicable law or regulations.

6.2.2 Upon termination of a contract for default, the County may elect to pay the Contractor for services provided or goods delivered up to the date of termination, less the amount of damages caused by the default, all as determined by the County in its sole discretion. If the damages exceed the undisbursed sums available for compensation, the County shall not be obligated to make any further disbursements hereunder.

6.3 Funding Out: If funds are not appropriated or otherwise made available to support contract continuation in any fiscal year, the County shall have the right to terminate the contract without prior notice to the Contractor and without any obligation or penalty.

7. Hold Harmless – Indemnification

7.1 The Contractor shall defend, indemnify and hold harmless the County, its employees, agents and officials from any and all liabilities, claims, suits, or demands including attorney's fees and court costs which may be incurred or made against the County, its employees, agents or officials resulting from any act or omission committed in the performance of the duties imposed by and performed under the terms of the contract. The Contractor shall not be responsible for acts of gross negligence or willful misconduct committed by the County.

7.2 The Contractor shall also defend, indemnify and hold harmless the County, its employees, agents and officials from any and all liabilities, claims, suits, or demands including attorney's fees and court costs which may be made against the County, its employees, agents or officials by any third party arising from the alleged violation of any third party's trade secrets, proprietary information, trademark, copyright, patent

rights, or intellectual property rights in connection with the contract.

7.3 Unless notified in writing by the County to the contrary, the Contractor shall provide defense for the County, its employees, agents and officials in accordance with this Article and in doing so the Contractor shall allow the County to participate in said defense of the County, its employees, agents and officials, to the extent and as may be required by the County and the Contractor shall cooperate with the County in all aspects in connection therewith. All filings, actions, settlements, and pleadings shall be provided to the County for comment and review prior to filing or entering thereof. No filing, action, settlement or pleading shall be filed or entered without the prior consent and approval of the County.

8. Minority/Women's Business Enterprise (MBE/WBE) and Small Business Notice: Baltimore County is seeking Minority, Woman and Small Businesses to bid on current solicitations as a prime or sub contractor. In accordance with the Executive Order dated June 4, 2009, "an overall goal of 15% of the cumulative total of all discretionary dollars spent in a fiscal year of County procurements is to be awarded to and/or performed by MBE and WBE firms." MBE/WBE's and Small Businesses are encouraged to respond to this solicitation.

9. Authority

9.1 In case of disputes as to whether an item or service quoted or delivered meets specifications, the decision of the Purchasing Agent or authorized representative shall be final and binding on both parties. The Purchasing Agent may request the recommendation in writing of the head of the using agency, the Standards and Specifications Committee, or other objective sources.

9.2 Bidders desiring to appeal a decision of the Purchasing Division must deliver written protests to the Purchasing Division within 10 days of notification of award. The Purchasing Agent or designee will review the protested decision, examine any additional information provided by the bidder and respond in writing within 10 working days of receipt of written protests.

9.3 Instructions, Specifications, and Proposals are issued, and all bids, quotations, orders, and purchases are made pursuant and subject to the provisions of the Baltimore County Charter, and Article 10, Title 2 of the Baltimore County Code, 2003, as amended, and regulations and policies established or prescribed by the Purchasing Division.

10. HIPAA: The Contractor shall comply with the Health Insurance Portability and Accountability Act (HIPAA) and shall execute a Business Associate Agreement as may be required by the County.

11. Reports: When required, reports prepared for Baltimore County should be printed on recycled and recyclable paper printed on both sides per Section 10-2-312 of the Baltimore County Code, 2003, as amended.

12. Terms of Contract

12.1 Any contract awarded pursuant to this solicitation shall be by and between the successful bidder and the County, and shall contain and incorporate, but may not be limited to, all terms and conditions of the solicitation, any amendments or changes thereto. Submission of a bid in response to this solicitation evidences the Contractor's acceptance of the terms and conditions therein.

12.2 The provisions of the contract awarded pursuant to this solicitation shall be governed by the laws and regulations of Maryland and Baltimore County.

12.3 Any litigation arising out of or relating in any way to the contract or the performance thereunder shall be brought only in the courts of Maryland, and the Contractor hereby irrevocably consents to such jurisdiction. To the extent that the County is a party to any litigation arising out of or relating in any way to the contract or the performance thereunder, such an action shall be brought only in a court of competent jurisdiction in the courts of the State of Maryland.

13. Severability: If any provisions in the contract are declared by a court or other lawful authority to be unenforceable or invalid for any reason the remaining provisions hereof shall not be affected thereby and shall remain enforceable to the full extent permitted by law.

14. Counterparts: The contract may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which when so executed and delivered shall be deemed to be an original and all of which taken together shall constitute but one and the same instrument.

15. Survival: The provisions of paragraphs 1.7 (Representations and Warranties), 4.2 (Damages), 7 (Indemnification), and 10 (HIPAA) shall survive delivery of commodities and/or performance of services.

16. No Waiver, Etc.: No failure or delay by the County to insist upon the strict performance of any term, condition or covenant of the contract, or to exercise any right, power, or remedy consequent upon

a breach thereof, shall constitute a waiver of any such term, condition, or covenant or of any such breach, or preclude the County from exercising any such right, power, or remedy at any later time or times.

17. Maryland Registration / Qualification Requirements:

17.1 Baltimore County verifies the company's status with SDAT and may require the successful bidder to submit a Good Standing Certificate (also known as a "Certificate of Status") issued by the Maryland Department of Assessment and Taxation's ("SDAT") Charter Division, and the State of Organization.

17.2 For information on registering to do business in the State of Maryland call SDAT at (410) 767-1340 or email at charterhelp@dat.state.md.us. Sole Proprietors and General Partnerships should call (410) 767-4991. You may download the SDAT forms at http://www.dat.state.md.us./sdatweb/sdatforms.html

17.3 Baltimore County requires the successful bidder to be in "good standing" (also known as Certificate of Status) with the State in which it is organized, and in the State of Maryland, under certain circumstances. Baltimore County verifies the successful bidder's status with SDAT. Non-compliance to this section may result in a delay in contract award or rejection of a bid.

18. Eligibility of Candidates for Employment:

18.1 The E-Verify program is an internet-based employment verification system that allows employers to verify employee status against Federal Social Security and immigration databases.

18.2 Baltimore County encourages employers to utilize the E-verify program, or an equivalent system, as a means to help employers determine the eligibility of new hires.

19. Warranty:

19.1. Contractor warrants for one year from acceptance, or for such longer period otherwise expressly stated in the attached solicitation, all goods, services, and construction provided. This includes a warranty against any and all defects. The contractor must correct any and all defects in material and/or workmanship that may appear during the warranty period, even if discovered after the end of the warranty period, by repairing any such defect, (or replacing with new items or new materials, if necessary), at no cost to the County and to the County's satisfaction.

19.2. Should a manufacturer's or service provider's warranty exceed the requirements stated above, that warranty will be the primary one used in the case of defect. Copies of manufacturer's or service provider's warranties must be provided upon request.

19.3. All warranties must be in effect from the date of acceptance by the County of the goods, services, or construction.

19.4. The contractor warrants that all work shall be accomplished in a workmanlike manner, and the contractor must observe and comply with all Federal, State, County and local laws, ordinances and regulations in providing the goods, and performing the services or construction.

20. **American Manufactured Goods Required for Public Works:**

20.1 The Contractor shall comply with Section 14-416 of the Maryland State Finance and Procurement Article which requires a contractor or subcontractor to use or supply American Manufactured goods in the performance of a contract for (a) constructing or maintaining a public work; or (b) buying or manufacturing machinery or equipment that is to be installed at a public work site, as the same may be amended from time to time.

20.2 This section does not apply: (a) if Baltimore County determines that: (i) the price of the American manufactured goods exceeds the price of a similar manufactured good that is not manufactured in the United States by an unreasonable amount; (ii) the item or a similar item is not manufactured or available for purchase in the United States in reasonably available quantities; (iii) the quality of the item or a similar item manufactured in the United States is substantially less than the quality of a comparably priced, similar, and available item that is not manufactured in the United States; or (iv) the procurement of a manufactured good would be inconsistent with the public interest; or (b) to emergency life safety and property safety goods.

20.3 The Contractor shall certify to Baltimore County whether the offered goods and/or services are provided in the United States.

BALTIMORE COUNTY, MARYLAND
PROCUREMENT AFFIDAVIT

A. **AUTHORIZED REPRESENTATIVE**

I HEREBY AFFIRM THAT:

I am the [*title*]_____ and I am duly authorized to represent and bind [*business name*] _____ (the "Business") and that I possess the legal authority to make this Affidavit on behalf of myself and the Business for which I am acting.

B. **AFFIRMATION REGARDING BRIBERY CONVICTIONS**

I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the Business, directly involved in obtaining or performing contracts with public bodies (as is defined in Section 16-101(f) of the State Finance and Procurement Article of the Annotated Code of Maryland), has been convicted of, or has had probation before judgment imposed pursuant to Article 27, Section 6-225 of the Criminal Procedure Article of the Annotated Code of Maryland, or has pleaded nolo contendere to a charge of, bribery, attempted bribery, or conspiracy to bribe in violation of Maryland law, or of the law of any other state or federal law, except as follows [indicate the reasons why the affirmation cannot be given and list any conviction, plea, or imposition of probation before judgment with the date, court, official or administrative body, the sentence or disposition, the name(s) of person(s) involved, and their current positions and responsibilities with the Business]:

_____

_____.

C. **AFFIRMATION REGARDING OTHER CONVICTIONS**

I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the Business, nor any of its officers, directors, partners, members, affiliates, or any of its employees directly involved in obtaining or performing contracts with public bodies, has:

(1) Been convicted under state or federal statute of a criminal offense incident to obtaining, attempting to obtain, or performing a public or private contract, fraud, embezzlement, theft, forgery, falsification or destruction of records, or receiving stolen property;

(2) Been convicted of any criminal violation of a state or federal antitrust statute;

(3) Been convicted under the provisions of Title 18 of the United States Code for violation of the Racketeer Influenced and Corrupt Organization Act, 18 U.S.C. §1961, et seq., or the Mail Fraud Act, 18 U.S.C. §1341, et seq., for acts arising out of the submission of bids or proposals for a public or private contract;

(4) Been convicted of a violation of the State Minority Business Enterprise Law, Section 14-308 of the State Finance and Procurement Article of the Annotated Code of Maryland;

(5) Been convicted of conspiracy to commit any act or omission that would constitute grounds for conviction or liability under any law or statute described in subsection (1), (2), (3), or (4) above;

(6) Been found civilly liable under a state or federal antitrust statute for acts or omissions in connection with the submission of bids or proposals for a public or private contract;

(7) Admitted in writing or under oath, during the course of an official investigation or other proceedings, acts or omissions that would constitute grounds for conviction or liability under any law or statute described above, except as follows [indicate reasons why the affirmations cannot be given, and list any conviction, plea, or imposition

of probation before judgment with the date, court, official or administrative body, the sentence or disposition, the name(s) of the person(s) involved and their current positions and responsibilities with the Business, and the status of any debarment]:

_____

_____.

D. **AFFIRMATION REGARDING DEBARMENT**

I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the Business, nor any of its officers, directors, partners, members, affiliates, or any of its employees directly involved in obtaining or performing contracts with public bodies, has ever been suspended or debarred (including being issued a limited denial of participation) by any public entity, except as follows [list each debarment or suspension providing the dates of the suspension or debarment, the name of the public entity and the status of the proceeding, the name(s) of the person(s) involved and their current positions and responsibilities with the Business, the grounds of the debarment or suspension, and the details of each person's involvement in any activity that formed the grounds of the debarment or suspension]:

_____

_____.

E. **AFFIRMATION REGARDING DEBARMENT OF RELATED ENTITIES**

I FURTHER AFFIRM THAT:

(1) The Business was not established and it does not operate in a manner designed to evade the application of or defeat the purpose of debarment pursuant to Sections 16-101, et seq., of the State Finance and Procurement Article of the Annotated Code of Maryland; and

(2) The Business is not a successor, assignee, subsidiary, or affiliate of a suspended or debarred business, except as follows: [you must indicate the reasons why the affirmations cannot be given without qualification]:

_____

_____.

F. **SUB-CONTRACT AFFIRMATION**

I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the Business, has knowingly entered into a contract with a public body under which a person debarred or suspended under Title 16 of the State Finance and Procurement Article of the Annotated Code of Maryland will provide, directly or indirectly, supplies, services, architectural services, construction related services, leases of real property, or construction.

G. **AFFIRMATION REGARDING COLLUSION**

I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the Business, nor any of its employees, have in any way:

(1) Agreed, conspired, connived, or colluded to produce a deceptive show of competition in the compilation of the accompanying bid or offer that is being submitted;

(2) In any manner, directly or indirectly, entered into any agreement of any kind to fix the bid price or price proposal of the bidder or offeror or of any competitor, or otherwise take any action to impact, restrain, or inhibit free competitive bidding in connection with the contract for which the accompanying bid or offer is submitted;

(3) Colluded with anyone to obtain information concerning the bid that would give the Business an unfair advantage over others.

H. AFFIRMATION REGARDING POLITICAL CONTRIBUTION DISCLOSURE

I FURTHER AFFIRM THAT:

The Contractor affirms that it is aware of, and will comply with, the provisions of Sections 14-101 through 14-108 of the Election Law Article of the Annotated Code of Maryland, which require that every person who makes, during any 12-month period, one or more contracts, with one or more Maryland governmental entities involving cumulative consideration, or at least $100,000.00, shall file with the State Board of Elections certain specified information to include disclosure of attributable political contributions in excess of $500 during defined reporting periods.

I. CERTIFICATION OF REGISTRATION AND TAX PAYMENT

I FURTHER AFFIRM THAT:

(1) The business was formed in the State of ***(Insert State Name)***: _____

(2) The Business is a (***please select one***)*:*

□ Corporation

□ Partnership

□ Limited Liability Company

□ Limited Liability Partnership

□ Sole Proprietor

□ Other: _____

(*If sole proprietor #3 below does not apply, continue to #4.)*

(3) Is this business registered with the Maryland State Department of Assessments and Taxation ("SDAT") in accordance with the Corporations and Associations Article of the Annotated Code of Maryland?

□Yes □ No

a. If yes, is the business in good standing in the State of Maryland, and has it filed all of its annual reports, together with filing fees? □Yes □ No

b. Registered Agent as shown in SDAT:

Name: _____

Address: _____

_____

c. If not, is the business in good standing in the formed in State of origination? □Yes □ No

(4) Except as validly contested, has the -Business -paid, or -arranged for payment of, all taxes due the State of Maryland and Baltimore County, and -filed all required returns and reports with the Comptroller of the Treasury, the State Department of Assessments and Taxation, and the Employment Security Administration, as applicable, and -paid all withholding taxes due the State of Maryland prior to final settlement?

□Yes □ No

J. CONTINGENT FEES

I FURTHER AFFIRM THAT:

The Business has not employed or retained any person, partnership, corporation, or other entity, other than a bona fide employee or agent working for the Business, to solicit or secure the Contract, and that the Business has not paid or agreed to pay any person, partnership, corporation, or other entity, other than a bona fide employee or agent, any fee or other consideration contingent on the making of the Contract.

K. **AFFIRMATION OF NONDISCRIMINATION IN EMPLOYMENT**

I FURTHER AFFIRM THAT:

During the performance of any contract awarded pursuant to the solicitation of which this affidavit is a part:

(1) The Business will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, national origin, marital status, sexual orientation, genetic information, or disability unrelated in nature and extent so as to reasonably preclude the performance of the employment, or because of the individual's refusal to submit to a genetic test or make available the results of a genetic test. The Business will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, age, national origin, marital status, sexual orientation, genetic information, or disability unrelated in nature and extent so as to reasonably preclude the performance of the employment, or because of the individual's refusal to submit to a genetic test or make available the results of genetic test. Such action shall include, but not be limited to the following: employment, promotion, upgrading, demotion or transfer, rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Business agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the owner setting forth provisions of this nondiscrimination clause.

(2) The Business will, in all solicitations or advertisements for employees placed by or on behalf of the Business, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age, national origin, marital status, sexual orientation, genetic information, or disability unrelated in nature and extent so as to reasonably preclude the performance of the employment, or because of the individual's refusal to submit to a genetic test or make available the results of a genetic test.

(3) The Business shall send to each labor union or representative of workers with which the Business has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the owner, advising the said labor union or workers' representative of these commitments, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The Business shall furnish, if requested by the County, a compliance report concerning our employment practices and policies in order for the County to ascertain compliance with the special provisions of this affidavit concerning nondiscrimination in employment.

(5) In the event of the Business's noncompliance with the nondiscrimination clause of this affidavit, the contract may be canceled, terminated, or suspended in whole or in part, and the Business may be declared ineligible for further County work.

(6) The Business shall include the special provisions outlined herein pertaining to nondiscrimination in employment in every subcontract, so that such nondiscrimination in employment provisions shall be binding on each subcontractor or vendor.

L. **FOREIGN CONTRACTS DISCLOSURES**

I FURTHER AFFIRM THAT:

(1) The Business affirms that it is aware of, and will comply with, the provisions of Sections 10-2-110 Article 10. Finance, Title 2 – Purchasing, Baltimore County Code 2003, as amended, which requires that prior to the award of a contract for services under the provisions of this title, and during the entire term of a contract award, the bidder or vendor shall disclose to the County whether any services covered by the bid or contract, including any subcontracted services, will be performed outside the United States.

(2) The Business affirms that it is aware of, and will comply with, the provisions of Section 12-111 of the Maryland State Finance Procurement Article, which requires bidders to make certain disclosures relating to subcontractors or services, regarding plans at the time the bid is submitted, to perform any services with an estimated value of $2 million or more under the contract outside the United States. This provision applies to: (1) construction-related services; (2) architectural services; (3) engineering services; or (4) energy performance contract services. The provision requires bidders to disclose:
   a. Whether the Business or any contractor that the Business will subcontract with to perform the contract has plans, at the time the bid is submitted, to perform any services required under the contract outside the United States; and
   b. If the services under the contract are anticipated to be performed outside the United States;
   c. Where the services will be performed; and
   d. The reasons why it is necessary or advantageous to perform the services outside the United States.

(3) Indicate below whether or not the Business has information to disclose. (***You must check one of these***)

[ ] The Business has no plans, at the time the bid is submitted, to perform any services under the contract outside the United States.

[ ] The Business has plans, at the time the bid is submitted, to perform services under the contract outside the United States.

i. The services will be performed in the following location: _____

ii. It is necessary or advantageous to perform the services outside the United States for the following reason(s): _____

M. **AFFIRMATION REGARDING INVESTMENT ACTIVITIES IN IRAN**

I FURTHER AFFIRM THAT:

At the time the bid/proposal is submitted, or if the contract is renewed, the Business:

i. Is not identified on the list created by the Maryland State Board of Public Works as a person, Business or entity engaging in investment activities in Iran as described in Section 17-702 of the Maryland State Finance and Procurement Article ; or

ii. Is not engaging in investment activities in Iran as described in Section 17-702 of the Maryland State Finance and Procurement Article.

If the Business is unable to make the certification, it will provide the County, under penalty of perjury, a detailed description of the Business' investment activities in Iran.

N. **ACKNOWLEDGMENT**

I ACKNOWLEDGE THAT this Affidavit is to be furnished to the County and may be distributed to units of (1) Baltimore County; (2) the State of Maryland; (3) other counties or political subdivisions of the State of Maryland; (4) other states; and (5) the federal government. I further acknowledge that this Affidavit is subject to applicable laws of the United States and the State of Maryland, both criminal and civil, and that nothing in this Affidavit or any contract resulting from the submission of this bid or proposal shall be construed to supersede, amend, modify or waive, on behalf of Baltimore County, or the State of Maryland or any unit of the State of Maryland having jurisdiction, the exercise of any right or remedy at Law or in equity with respect to any misrepresentation made or any violation of the obligations, terms and covenants undertaken by the Business with respect to (a) this Affidavit, (b) the contract, and (3) other Affidavits comprising part of the contract.

I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THIS AFFIDAVIT ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF, AFTER DILIGENT INQUIRY.

Date: _____ By: _____

Name:
Title:
(Authorized Representative and Affiant)

"PRIME" CONTRACTOR
MINORITY INFORMATION

This form is NOT applicable to Sub-Contractor requirements, and should be completed by the PRIME Contractor ONLY.

A. AUTHORIZED REPRESENTATIVE

I am the [title]_____ of [business] _____ (the "Business").

B. DEFINITIONS

I am aware that, pursuant to the June 4, 2009 Executive Order of Baltimore County, Maryland, the following words have the meanings indicated.

(A) "Minority Business Enterprise" or "MBE" means a business enterprise that is owned, operated and controlled by one or more minority group members (African American, Hispanic American, Asian American, or Native American) who have at least 51% ownership and in which the minority group members have operational and managerial control, interest in capital and earnings commensurate with their percentage of ownership.

(B) "Women's Business Enterprise" or "WBE" means a business enterprise that is owned, operated and controlled by one or more women who have at least 51% ownership and in which the women have operational and managerial control, interest in capital and earnings commensurate with their percentage of ownership.

C. INFORMATION REGARDING MINORITY STATUS

[___] The Business is a certified MBE ___ or WBE ___

[____] Maryland State Department of Transportation (MDOT) #_____

[____] City of Baltimore #_____

[____] Name Other Jurisdiction: _____ #_____

[____] The Business is not a certified MBE/WBE, however, the ownership of the Business consists of _____% minorities and _____% women (for a total of _____%), each of which has operational and managerial control, interest in capital and earnings commensurate with their percent of ownership. Please select the ethnic group of the owner(s) regardless of MBE/WBE certification:

____ African American ____ Hispanic American ____ Caucasian
____ Asian American ____ Native American ____ Other

_____ The Business anticipates utilizing subcontractors for _____% of the work of the contract requirements.

_____ The Business anticipates utilizing MBE/WBE subcontractors for _____% of the work of the contract requirements. (Complete attached MBE/WBE forms)

Date: _____ By:_____

Name:
Title:
(Authorized Representative)

Taxpayer Identification Number (TIN) and Certification
(Substitute for IRS Form W-9)
COMPLETE BOTH SIDES OF FORM

Baltimore County, Maryland
Office of Budget and Finance
400 Washington Avenue, Room 148
Towson, Maryland 21204

Certification of TIN and business name are required for all successful bidders prior to issuing a contract or purchase order. Completion of **SIDE 1** of this form is necessary to meet IRS regulations. All MBE/WBE vendors should also complete **SIDE 2**. For questions, call 410-887-3587.

SIDE 1

List your **legal business name** below, **as shown on your income tax return**. **Sole proprietors** should list their individual name as noted on your social security card. You may enter a business name on line 2. Other entities must list your business name as shown on Federal tax documents. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on the business name line (2). For **limited liability companies** (LLC) that are owned by an individual, the owner's name must be listed in the Name line (1) and the business name can be listed on the business name line (2). For **limited liability companies** that are corporations, partnerships, etc., enter the business name on Name line (1).

1. Name (as shown on your income tax return)

2. Business name, if different from above

Address

City State ZIP Code

Remittance Address, if different from above

City State ZIP Code

Contact Person Title

Phone Number ( ) - Ext: Fax Number ( ) -

E-mail address

Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1. For individuals, this is your social security number (SSN). For other entities, it is your employer identification number (EIN). Note, this is the TIN shown on your federal tax documents.

Social Security Number

			--			--				

OR

Employer Identification Number

		--							

	CHECK HERE IF YOU ARE EXEMPT FROM BACK-UP WITHHOLDING
	CHECK HERE IF YOU ARE TAX-EXEMPT, EXPLAIN:

Filing Status (Ownership) (LLC is not acceptable)

	Individual		Sole Proprietor
	Corporation		Partnership
	Other: (explain)		

CERTIFICATION:

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. person (including a U.S. resident alien).

Signature of U.S. Person	Date

Revised 04/17/13

SIDE 2

MBE / WBE Certification	
Maryland Department of Transportation (MDOT) Certification #: _____ Certification Date: _____ / _____ / _____ Pending: _____	**City of Baltimore** Certification #: _____ Certification Date: _____ / _____ / _____ Pending: _____

Business Ownership (Check Only One)					
	G	Government Entity		O	Other: _____
	H	Disabled		P	Non Profit
	MA	Minority-owned, Not small business		W	Woman-owned, Small business
	M	Minority-owned, Small business		WA	Woman-owned, Not small business
	NS	Non-minority-owned, small business		X	Woman-owned, Minority, Small business
	NL	Non-minority-owned, Large business		XA	Woman-owned, Minority, Not small business

Type of Business/Organization			
	Association		Attorney
	Government Entity		Educational Institution
	Medical Service Provider		Non-profit Organization
	Other: (explain)		Financial Institution

Ethnicity of Ownership (Check Only One)					
	A	Asian American		I	American Indian/Alaskan Native
	B	African American		N	Non-minority
	H	Hispanic American		O	Other Ethnic Group: _____

Incorporation
Incorporation State: _____ OR Date Business Started _____ / _____ / _____

Signature		
I certify that the information shown on this registration is true and correct. I will advise the Purchasing Division immediately, in writing, of any change affecting this data.		
Signature:	Title:	Date:

BALTIMORE COUNTY, MARYLAND

INSURANCE PROVISIONS

1. **GENERAL REQUIREMENTS**

1.1 Coverages Required:

Unless otherwise required by the specifications or the contract, the Contractor/Vendor shall purchase and maintain the insurance coverages listed herein.

Insurance Companies must be acceptable to Baltimore County and have an A.M. Best Rating of A-, Class X or better.

1.2 Verification of Insurance:
Before starting work on the contract or prior to the execution of the Contract on those bid, the Contractor/Vendor shall provide Baltimore County, Maryland with verification of insurance coverage evidencing the required coverages.

1.3 Baltimore County as Additional Insured:
The coverage required, excluding Worker's Compensation and Employers' Liability and Medical Malpractice Liability/Professional Liability/Errors and Omissions Liability, must include **Baltimore County, Maryland** as an additional insured.

1.4 Contractor's/Vendor's Responsibility:
The providing of any insurance herein does not relieve the Contractor/Vendor of any of the responsibilities or obligations the Contractor/Vendor has assumed in the contract or for which the Contractor/Vendor may be liable by law or otherwise.

1.5 Failure to Provide Insurance:
Failure to provide and continue in force the required insurance shall be deemed a material breach of the contract.

2. **INSURANCE COVERAGES**

2.1 General Liability Insurance

2.1.1 Minimum Limits of Coverage:
Personal Injury Liability and Property Damage Liability Combined Single Limit - $500,000 each occurrence

2.1.2 Such insurance shall protect the Contractor/Vendor from claims which may arise out of, or result from, the Contractor's/Vendor's operations under the contract, whether such operations be by the Contractor/Vendor, any subcontractor, anyone directly or indirectly employed by the Contractor/Vendor or Subcontractor, or anyone for whose acts any of the above may be liable.

2.1.3 Minimum Coverages to be Included:
(a) Independent Contractor's coverage;
(b) Completed Operations and Products Liability coverage; and
(c) Contractual Liability coverage.

2.1.4 Damages not to be Excluded:
Such insurance shall contain no exclusions applying to operations by the Contractor/Vendor or any Subcontractor in the performance of the Contract including but not limited to: (a) Collapse of, or structural injury to, any building or structure; (b) Damage to underground property; or (c) Damage arising out of blasting or explosion.

2.2 Automobile Liability Insurance

2.2.1 Minimum Limits of Coverage:
Bodily Injury Liability and Property Damage Liability
Combined Single Limit - $500,000 any one accident

2.2.2 Minimum Coverages to be Included:
Such insurance shall provide coverage for all owned, non-owned and hired automobiles.

2.3 Workers' Compensation and Employers' Liability Insurance

Such insurance must contain statutory coverage, including:
Employers' Liability insurance with limits of at least:
Bodily Injury by Accident - $500,000 each accident
Bodily Injury by Disease - $500,000 policy limit
Bodily Injury by Disease - $500,000 each employee

2.4 Other
Such other insurance in form and amount as may be customary for the type of business being undertaken by the Contractor/Vendor.

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P E R F O R M A N C E B O N D

Bond No._____

_____ _____
Principal **Business Address of Principal**

_____ **Obligee:** **BALTIMORE COUNTY, MARYLAND**
Surety A body corporate and politic

A Corporation of the State of _____ and authorized to do business in Maryland

_____ DOLLARS $_____
Penal Sum of Bond (express in words and figures)

_____ _____ **20** _____
Contract Name **Date of Contract**

_____ _____ **20** _____
Contract Number **Date Bond Executed**

KNOW ALL MEN BY THESE PRESENTS, that we, the PRINCIPAL, above-named, and SURETY, above-named, and authorized to do business in the State of Maryland, are held and firmly bound unto the OBLIGEE, above-named, in the penal sum of the amount stated above, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, THE PRINCIPAL entered into a certain contract with the OBLIGEE described and dated as shown above, and is required to provide this bond pursuant to Maryland state law and/or County law and the contract.

NOW, THEREFORE, if the aforesaid Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the OBLIGEE with or without notice to the SURETY, and during the life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the undertakings covenants, terms, conditions and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the SURETY being hereby waived, then, this obligation to be void; otherwise to remain in full force and effect.

THE SURETY FURTHER GUARANTEES that it is rated "B" or better by the A.M. Best Company, and the contract bid amount must be less than or equal to the underwriting limitation contained in the Department of Treasury Circular 570 as amended at the time of underwriting.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

In Presence of: **Individual Principal**

Witness: _____ **as to:** _____ **(SEAL)**

Print Name: _____ **Print Name:** _____

Attest: **Corporate Principal**

_____
(Name of Corporation)

Witness: _____ **By:** _____

Print Name: _____ **Print Name:** _____ **(SEAL)**

Title: _____

Attest: **Surety**

_____
(Name of Surety)

Business Address: _____

Witness: _____ **By:** _____ Affix

Print Name: _____ **Print Name:** _____ Corporate

Title: _____ Seal

Reviewed for Baltimore County Requirements

_____
Office of the County Attorney

PAYMENT BOND

Bond Number_____

_____ _____
Principal **Business Address of Principal**

_____ **Obligee:** **BALTIMORE COUNTY, MARYLAND**
Surety A body corporate and politic

A Corporation of the State of _____ **and authorized to do business in Maryland**

_____ DOLLARS $_____
Penal Sum of Bond (express in words and figures)

_____ _____ **20** _____
Contract Name **Date of Contract**

_____ _____ **20** _____
Contract Number **Date Bond Executed**

KNOW ALL MEN BY THESE PRESENTS, that we, the PRINCIPAL, above-named, and SURETY, above-named, and authorized to do business in the State of Maryland, are held and firmly bound unto the OBLIGEE, above-named, in the penal sum of the amount stated above, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, THE PRINCIPAL entered into a certain contract with the OBLIGEE described and dated as shown above, and is required to provide this bond pursuant to Maryland state law and/or County law and the contract.

NOW, THEREFORE, the condition of this obligation is such that if the aforesaid Principal shall promptly make payments to all persons supplying labor and/or material to the Principal and to any subcontractor of the Principal in the prosecution of the work provided for in said contract and any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the SURETY being hereby waived, then, this obligation to be void; otherwise to remain in full force and effect.

THE SURETY FURTHER GUARANTEES that it is rated "B" or better by the A.M. Best Company, and the contract bid amount must be less than or equal to the underwriting limitation contained in the Department of Treasury Circular 570 as amended at the time of underwriting.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

In Presence of: **Individual Principal**

Witness: _____ **as to:** _____ **(SEAL)**

Print Name: _____ **Print Name:** _____

Attest: **Corporate Principal**

_____
(Name of Corporation)

Witness: _____ **By:** _____

Print Name: _____ **Print Name:** _____ **(SEAL)**

Title: _____

Attest: **Surety**

_____
(Name of Surety)

Business Address: _____

Witness: _____ **By:** _____ Affix

Print Name: _____ **Print Name:** _____ Corporate

Title: _____ Seal

Reviewed for Baltimore County Requirements

_____
Office of the County Attorney

IF SUBMITTING BOND, THIS FORM MUST BE USED

BID BOND

Principal	Business Address of Principal
Surety	Obligee
a corporation of the State of _____ and authorized to do business in the State of Maryland	BALTIMORE COUNTY, MARYLAND, a body corporate and politic
Penal Sum of Bond (express in words and figures)	
Description of Bid _____ Contract No. _____ Proposal or Item No. _____	Date of Contract _____ Date Bond Executed _____

KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL above named and SURETY above named, are held and firmly bound unto the OBLIGEE above named in the penal sum of the amount stated above, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that if the aforementioned Principal shall be awarded the contract. The said Principal will, within the time required, enter into a formal contract and give a good and sufficient bond to secure the performance of the terms and conditions of the contract, then this obligation to be void; otherwise the Principal and Surety will pay unto the Obligee the entire Penal Sum of the Bid Bond of the said Principal as liquidated damages.

Signed and sealed _____
(Date)

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

In Presence of:

Witness

_____

INDIVIDUAL PRINCIPAL

as to _____ (SEAL)

In Presence of:

Witness

_____

_____

_____

_____

CO-PARTNERSHIP PRINCIPAL

_____ (SEAL)
Name of Co-Partnership

as to by_____ (SEAL)
as to by_____ (SEAL)
as to by_____ (SEAL)
as to by_____ (SEAL)

_____
Witness

Title_____

CORPORATE PRINCIPAL

_____
Name of Corporation

By _____

Title _____

Affix Corporate Seal

_____
Witness

Title_____

_____
Surety

By _____

Title _____

Affix Corporate Seal

_____
Business Address of Surety

NOTE: Under Corporate Principal,. this bond must be executed by either president or vice-president. Any person legally empowered to bind the corporation may execute document only if a copy of the resolution granting this right is attached.

BID REPLY LABEL

CUT ON THE DOTTED LINE AND SECURE TO THE OUTSIDE OF YOUR RESPONSE ENVELOPE OR CARTON.

REQUEST FOR BID

NO. B-1051
9/8/16, 3:00 PM
ON-CALL UTILITY INSPECTION AND MAINTENANCE

TO: BALTIMORE COUNTY, MARYLAND
PURCHASING DIVISION
400 WASHINGTON AVE, ROOM 148
TOWSON, MARYLAND 21204-4665

BALTIMORE COUNTY, MARYLAND
REQUEST FOR BID NO. B-1051
ON-CALL UTILITY INSPECTION AND MAINTENANCE

GENERAL CONDITIONS

1. SUMMARY OF CONTRACT-SCOPE.

1.1 It is the intention of these specifications that the Contractor shall furnish and the County shall purchase sanitary sewer utility infrastructure inspections and cleaning services as specified in these specifications, which the County may require during the period of time specified. These services shall be performed for agencies working under and with the Department of Public Works. The quantities shown are approximate and for the purpose of bid evaluation. Baltimore County reserves the right to order such services as may be required during the contract period, and it also reserves the right not to order such services bid upon by the contractor if such services are not required by Baltimore County. There shall be no compensation for work estimated in this solicitation but not ordered during the term of this agreement. The quantities for these items may be increased, decreased or deleted entirely from the contract by the County without negotiations. The contractor will not be allowed to submit a claim against Baltimore County for any adjustments to the contract unit price bid should the item(s) be increased, decreased or eliminated.

1.2 The scope of this contract shall be to provide tasks specified in this section on an on-call basis. Work on each task shall be done in accordance with the instructions provided by the County and with following County documents:

1.2.1 Baltimore County Standard Specifications for Construction and Material dated February 2000 and as updated periodically, herein referenced to as “Standard Specifications.”

1.2.2 Baltimore County Standard Details for Construction dated February 2000 and as updated periodically, herein referenced to as “Standard Details.”

1.2.3 Plans or design sketches as provided to the Contractor for their use.

1.3 The work to be done under this contract includes, but not limited to, provision of all labor, materials, supervision, equipment, services, incidentals, and related items necessary to complete the work in accordance with the specifications and scope of work.

1.4 Baltimore County reserves the right to extend the terms and conditions of this contract to any and all other County agencies requiring these commodities and/or services. A sub-order release will be issued against the original purchase order, confirming the contracted pricing and giving quantity and delivery requirements.

1.5 The County, at its sole discretion, may issue the Work as either single contract to a single Contractor or multiple contracts to multiple contractors. The Contractors will be responsible for the successful completion of the Work for the County.

1.5.1 **Contractor Qualification Instructions**

1.5.1.1 List five (5) projects of reasonably similar nature to this SSES project that have been completed within the past 5 years. Provide owner name, address and contact information for each project. Cumulatively, the projects must meet the following criteria: “**See Attachment 1-A**”

- Minimum gravity line cleaning and CCTV experience 8 to 24-inch diameters – 800,000 lf
- Minimum of 600,000 LF of the inspection work must be inspection of gravity sewers
- Minimum gravity pipe cleaning and CCTV experience 24 to 72 inch diameters – 200,000 LF
- Minimum of 150,000 LF of the inspection work must be inspection of gravity sewers.
- Minimum heavy cleaning 24 to 72 inch diameter gravity lines – 50,000 LF.
- Minimum CCTV/Sonar inspection – 50,000 LF. CCTV/sonar inspection is defined as any combination of CCTV inspection and sonar inspection that is performed simultaneously.

1.5.1.2 Key personnel must be experienced and trained. Submit a list of the expected staff, with qualifications, and location of the office from which the work will be performed. They must have the following credentials:

- Project Manager with a minimum of 10 years wastewater and/or stormwater inspection experience.
- Staff with GIS, PACP – compliant database management, wastewater and/or stormwater inspection quality assurance review expertise.
- Field personnel with PACP, MACP, LACP and OSHA Confined-Space Entry certification

1.5.2 Consideration will be given to teams of multiple inspection/cleaning Sub-contractors, working under the management of a single management Prime Contractor. The Prime Contractor may be an inspection or cleaning Contractor, but this is neither a requirement nor hindrance for consideration of the work. If the Prime Contractor is not an inspection and cleaning contractor, the Prime Contractor must be able to show experience in management of multiple pipeline investigation sub-contractors as detailed in this section.

1.5.3 The Prime Contractor's team shall be structured so that the work will be performed in a manner that is efficient, cost effective for the County, and responsive to all the requirements of the Work as defined in this request for bid (RFB).

1.6 **Relation of Contractor and Subcontractor**: The Prime Contractor(s) shall detail in its proposal the planned use and involvement of any Sub-Contractors, including, but not limited to, the name, address, telephone and facsimile numbers, individual contact name, and detailed description of the portion of work to be performed by the Sub-Contractor(s) and detailed explanation of reasoning for the termination or change of Sub-Contractor(s), if applicable (see below).

1.6.1 The Prime Contractor(s), however, will not be bound to use only those Sub-Contractor(s) named in the proposal. The Prime Contractor will have the option to change Sub-Contractor(s) as needed throughout the duration of the contract for the purpose of improving the performance of the Work, improving Work, quality or increasing Work production sites. The Prime Contractor, however, must secure written authorization from the County before canceling or awarding any Sub-Contract.

1.6.2 The Prime Contractor(s) shall detail in its request for authorization from the County the planned use and involvement of any new Sub-Contractor(s), including, but not limited to, the name, address, telephone and facsimile numbers, individual contract name, and a detailed explanation of reasoning for the termination or change of Sub-Contractor, if applicable.

1.6.3 The Prime Contractor(s) will be responsible for the performance of the Work and must exercise appropriate degrees of control of performance of its Sub-Contractor(s). The Prime Contractor shall include appropriate provisions in all applicable Sub-Contracts relative to the Work to bind all Sub-Contractors to the Prime Contractor by the terms of the General Conditions and other Contract Documents as applicable to the Work of the Sub-Contractors and to give the Prime Contractor the same power of termination in regards to Sub-Contracts as the County may exercise over the Prime Contractor under any provisions of the Contract Documents.

1.6.4 The Prime Contractor(s) may award up to one hundred percent of the field investigative digital imaging and cleaning work to Sub-Contractors.

1.6.5 The Contractor agrees to bind every subcontractor and every subcontractor agrees to be bound by the terms of the Agreement, the Contract Documents specified in Section 1.2, the General Conditions, the Drawings, Special Provisions, and Construction Specifications as far as applicable to his/her work unless specifically noted to the contrary in the subcontract as approved in writing as adequate by the Department of Public Works.

1.6.6 The subcontractor agrees to be bound to the Contractor by the terms of the Agreement, the Contract Documents specified in Section 1.2, Special Provisions, Construction Specifications, and to assume toward his/her all obligation and responsibilities that he/she, by those documents, assumes toward the County.

2. TERM OF AGREEMENT.

2.1 The term of the contract shall be for one (1) year. The County reserves the right to renew this contract for up to four (4) additional one-year renewal options under the same terms and conditions. The County will automatically renew the contract on each option year unless notice is given to the Contractor that the contract is not renewed.

2.2 If price adjustments are requested pursuant to the terms of the contract, the Contractor must notify the Baltimore County Purchasing Division at least ninety (90) days prior to the current terms expiration date.

2.3 The Contractor must maintain the insurance coverages required by the County while the contract is in force, including automatic renewal terms, and shall provide documentation of such insurance in a form satisfactory to the County when required.

3. METHOD OF AWARD. Award of this contract may be in whole or in part. The County reserves the right to make awards on an individual item basis, combination item basis, or lump sum basis, whichever is in the best interest of the County. In accordance with Sec. 10-2-406 of the Baltimore County Code, 2003, as amended, past performance of bidders in furnishing goods and services to Baltimore County will be considered in determining the award.

4. APPLICABLE GENERAL CONDITIONS AND TECHNICAL SPECIFICATIONS: All work performed under this Contract shall be done in strict compliance with the Special Provisions bound herewith and with the Standard Specifications and Standard Details referenced in Section 1.2, and subsequent addenda thereto, so far as the same may be applicable, a copy of the same being on file in the Office of the County Executive and the Office of the Director of Public Works for Baltimore County. The General Conditions and Special Provisions sections are in addition to the County's Standard Specifications. General Instructions for formal bids will take precedence.

5. PRICES.

5.1 Prices quoted must remain firm for the period covered by this contract, unless price escalation is herein specified. Prices quoted shall include delivery costs and charges.

5.2 The County reserves the right to solicit bids on the open market when the Contractor's proposal for any work is $25,000.00 or greater.

6. ESCALATION.

6.1 All prices offered herein shall be firm against any increase for one (1) year from the effective date of the contract. Prior to commencement of subsequent renewal terms, the County may entertain a request for escalation in accordance with the current Consumer Price Index at the time of the request or up to a maximum 5% increase on the current pricing, whichever is lower.

6.2 For purposes of this section, "Consumer Price Index" shall mean the Consumer Price Index-All Urban Consumers-United States Average-All Items (CPI-U), as published by the United States Department of Labor, Bureau of Labor Statistics.

6.3 Baltimore County reserves the right to accept or reject the request for a price increase within fourteen (14) days. If the price increase is approved, the price will remain firm for 365 days from the date of the increase.

7. ENGINEER. The term "Engineer" shall be used throughout this solicitation. The term will designate the person responsible for the administration of this agreement. The "Engineer" shall be authorized by the Director of Public Works. For any Baltimore County agency or for entities outside of the general County government (e.g., Baltimore County Board of Education, Maryland State Highway Administration) that wish to "piggyback" this agreement, the "Engineer" shall be designated by the respective department heads.

8. MATERIALS, WORKMANSHIP, PERMITS, LICENSES, INSPECTIONS.

8.1 With regard to this Contract, the Engineer, or a designated representative, will determine acceptability of all work and/or services performed. If the work and/or services are not acceptable, the Contractor will be called in to review and to correct all problem areas without additional cost to the County. Upon notification by the Engineer, or a designated representative, the Contractor will make repairs to deficient work and/or services in accordance with a schedule jointly agreed upon.

8.2 The Contractor shall not proceed with any task until all permits applicable to that task have been received. The Contractor is responsible for possession of valid copies of all applicable licenses and certifications required to proceed with and to complete the work.

8.3 The Contractor shall be responsible for the reporting and remittance of all State, Federal and local taxes, including sales taxes on material and equipment purchases, and shall hold Baltimore County harmless in the event of claims regarding taxes. Licenses and taxes shall be the responsibility of the Contractor at no additional cost to the County.

8.4 The Department of Public Works will receive and will evaluate all sewerage concerns, will provide all plans and permits required, and will schedule work through Bureau of Utilities. They will work closely with the field engineer and the Contractor for satisfactory production and improvements.

8.5 Contractor shall provide a complete, workmanlike, well-executed job in accordance with these specifications and all applicable national and local codes. Any additional code requirements by

Baltimore County shall be noted within. In cases of conflict between requirements, that requirement which is in compliance with all applicable codes and is, in the opinion of Baltimore County, more advantageous to Baltimore County, shall govern.

9. "SAMPLE" FORM CONTRACT.

9.1 A sample of the County's form contract may be found on the Baltimore County website at http://www.baltimorecountymd.gov/Agencies/budfin/purchasing/currentsolicitations.html. The vendor's submission of a bid response without identifying exceptions expressly acknowledges and formally evidences the Offeror's acceptance of all terms and conditions of the form contract. Any and all exceptions must be submitted in writing in the Offeror's bid response.

9.2 If the Offeror submits an exception, which alters the County's risk, liability, exposure in, or the intent of this procurement, the County reserves the right in its' sole and absolute discretion to deem the vendor non-responsive.

9.3 All Offeror's further understand and agree that the County will accept no vendor exceptions to the form contract at any time after submission of the bid response.

10. INQUIRIES. Any inquiries relative to this bid should be directed to Kathleen Madary, the Buyer, at 410-887-3888.

11. INVOICES.

11.1 Daily work tickets detailing the quantity of work performed under the payment unit of measure shall accompany all invoices. Invoices must be legibly prepared showing the full description of all work performed, the unit price for each payment unit of measure, the specific task (location), and job order number. Authorization to pay invoices will be given by the Engineer prior to payment of invoices. Invoices must be submitted in duplicate on a monthly basis to the Office of Finance, Disbursements Section, Courthouse, Room 148, 400 Washington Avenue, Towson, Maryland 21204. A copy of each invoice must be submitted to the Engineer. Charges for late payment of invoices are prohibited.

11.2 Baltimore County may withhold, or because of subsequently discovered evidence, nullify the whole or a part of any payment to such extent as may be necessary to protect the County from loss on account of:

11.2.1 Defective work not remedied.

11.2.2 Claims filed, or reasonable evidence indicating probable filing of claims, by parties other than the Contractor.

11.2.3 Failure of the Contractor to make payments properly to subcontractors for material or labor.

11.2.4 A reasonable doubt that the Contract can be completed for the balance then unpaid.

11.2.5 Damages to another Contractor.

11.2.6 Failure of the Contractor to submit data required within the time limits stated in the Contract Documents. When the grounds for withheld payment are removed, payment shall be made for amounts withheld because of them.

12. **CORRECTION OF WORK AFTER FINAL PAYMENT**. Neither the final certificate nor payment nor any provision in the Contract Documents shall relieve the Contractor of responsibility for faulty materials and workmanship. Unless otherwise specified, the Contractor shall remedy any defects and shall pay for any damage to other work resulting from faulty materials or workmanship that appear within the guarantee period. The County shall give notice of observed defects with reasonable promptness.

13. **ASSIGNMENT**. The Contractor shall not assign the Contract. He/she shall not sublet as a whole or sublet it by trades or other portions in an amount of more than 75% of the monetary value of the Contract. The remaining 25% shall be executed by the Contractor with labor and materials directly purchased and paid for by the Contractor. Costs for insurance, overhead, supervision, etc., may not be claimed as a portion of the 25% mentioned above. The execution of work by a subsidiary of the Contractor is not considered direct employment. The Contractor shall not assign any monies due, or to become due, to him/her under this agreement without the previous written consent of the County.

14. **LIENS**. Neither the final payment nor any part of the retained percentage shall become due until the Contractor shall deliver to the County a complete release of all liens arising out of this Contract or receipts, in full, in lieu thereof. In either case, an affidavit should be provided stating that so far as he/she has knowledge or information, the releases and receipts include all the labor and material for which a lien could be filed. The Contractor may, if any subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the County to indemnify him/her against any lien. If any lien remains unsatisfied after all payments are made, the Contractor shall refund the County all monies that the latter may be compelled to pay in discharging such a lien, including all costs and reasonable attorney's fees.

15. **MARYLAND STATE SALES TAX.**

15.1 Contractors who are performing work for the State of Maryland or any of its political subdivisions are required to pay tax on materials and supplies which will be incorporated into the work.

15.2 The Contractor must pay the tax on all equipment which he/she purchases even though it may be used on a job for the State or any of its political subdivisions.

16. **EMPLOYEEES**.

16.1 Qualifications of Employees: Only personnel thoroughly trained and skilled in the task assigned to them may be employed on any portion of work. Any employee found to be unskilled or untrained in his/her work shall be removed from the work.

16.1.1 Licensed Employees: When County, State or Federal laws require that certain personnel be licensed, then all such personnel employed on the work shall be so licensed.

16.1.2 Quantity of Labor: The Contractor shall employ on the work, at all times, sufficient personnel to complete the work within the time stated in his/her proposal.

16.1.3 Work Areas: The Contractor shall confine the operations of his/her employees to the limits as provided by law, ordinance, permits or directions of the Department of Public Works.

16.1.4 Superintendent: The Contractor shall have, at all times during its progress, a competent English speaking superintendent and all necessary assistants assigned to each task. The Superintendent will represent the Contractor. All directions given to the Superintendent shall be as binding as if given to the Contractor. Important directions shall be confirmed in writing upon request in each case. Should the Superintendent be the cause of complaint by the Engineer or his designated representatives, the

Superintendent shall be removed from the work and a new Superintendent shall be assigned to the project.

16.1.5 Discipline: The Contractor shall at all times enforce strict discipline and good order among his/her employees and shall not employ or permit to remain on the work any unfit person. He/she shall enforce all instructions relative to use of water, heat, power, no smoking, and shall control any use of fires as required by law and by the Department of Public Works.

16.1.6 Employees shall not be allowed to loiter on the work premises before or after job working hours.

17. COOPERATIVE PURCHASE.

17.1 The County reserves the right to extend all of the terms, conditions, specifications, and unit or other prices of any contract resulting from this bid to any and all public bodies, subdivisions, school districts, community colleges, colleges, and universities including non-public schools. This is conditioned upon mutual agreement of all parties pursuant to special requirements, which may be appended thereto. The supplier/contractor agrees to notify the issuing body of those entities that wish to use any contract resulting from this bid and will also provide usage information, which may be requested

17.2 The County assumes no authority, liability or obligation, on behalf of any other public or non-public entity that may use any contract resulting from this bid. All purchases and payment transactions will be made directly between the contractor and the requesting entity. Any exceptions to this requirement must be specifically noted in the bid/proposal response.

18. MINORITY AND WOMEN BUSINESS ENTERPRISE REQUIREMENTS: The resulting minority and women business participation requirement for this contract is **15%**.

18.1 Each Contractor must comply with all Minority and Women Business Enterprises (M/WBE) participation requirements. Included with this solicitation package are copies of the County's M/WBE policy and provisions and M/WBE participation schedule forms. Form A-1 must be completed, executed, and **returned to the Purchasing Division with the bid** if a goal has been assigned. To request M/WBE participation forms, contact the buyer on the solicitation. Forms B-1, C-1, D-1 and E-1 must be submitted along with the bid for the applicable assigned task.

18.2 M/WBE participation levels are to be met with respect to each assigned task unless a waiver is granted by the County for good cause shown.

18.3 The Prime Contractor shall make a genuine good faith effort to comply with the Baltimore County Minority Business program's minimum 15% subcontracting goal. However, the percentage requirement may vary. The Prime Contractor shall make a good faith effort to obtain minority subcontractor participation even if the Prime Contractor has the capability to complete the work with its own workforce. This good faith effort is also applicable to Prime Contractors who are themselves, minority-owned or woman owned firms.

18.4 All prime contractors and MBE/WBE sub-contractors are required to report monthly to the County through an online MBE/WBE Compliance Portal (PRISM). The portal can be found under *Compliance Reporting for Prime Contractors and Sub-Contractors* at www.baltimorecountymd.gov/go/mwbe . The contractor must provide a contact person and contact information for the MBE/WBE compliance reporting. If the contractor cannot submit his/her report on time, he/she will notify the County MBE/WBE office and request additional time to submit the report. Failure of the contractor to report in a timely manner may result in a finding of noncompliance. The County in its sole discretion may require additional reports regarding

MBE/WBE. Questions regarding the use of this system can be directed to the MBE Office at mwbe@baltimorecountymd.gov or call 410-887-3407.

19. INSURANCE.

19.1 The successful vendor will be required to provide verification of insurance coverage in accordance with the attached requirements. The successful vendor will have fifteen (15) calendar days to comply with this requirement, excluding County holidays and non-work days, if applicable.

19.2 The Insurer must maintain the insurance coverage required by the County while this agreement is in force, including automatic renewal terms, and shall provide documentation of such insurance in a form satisfactory to the County when required.

19.3 In the event the vendor changes their insurance carrier, new verification of insurance coverage must be provided to the County by the new insurance carrier within ten (10) days of the change of policy.

20 BID DEPOSIT REQUIREMENTS.

20.1 Bid deposit shall be required when indicated on bid proposal. Failure to submit such check or bond when required will nullify bid.

20.2 When specified, bids must be accompanied by either a Certified Check, Cashier's Check, Treasurer's Check or U.S. Money Order for five percent (5%) of the amount of the bid; or a Bid Bond for five percent (5%) of the amount of the bid, executed on the attached approved form. Only the bid bond provided by the County will be acceptable and must be completed by a surety company duly licensed under the Laws of the State of Maryland.

20.3 Checks or money orders will be returned to unsuccessful bidders upon the award of the solicitation, and to successful bidders upon execution of the contract(s) and the meeting of bond requirements, if applicable.

20.4 Nonperformance by a successful bidder, or his failure to execute the agreement or meet bond requirements within fifteen (15) calendar days after the award, may result in his deposit being forfeited to the County as liquidated damages.

20.5 The successful bidder shall be required to give both a performance and payment bond, each in the amount of the contract, conditioned that he shall comply in all respects with the terms and conditions of the agreement and his obligations thereunder, including the specifications.

21. PRE-BID CONFERENCE.

21.1 A pre-bid conference will be held on **Thursday, August 18, 2016 at 1:00 p.m**. in the Purchasing Division, Courthouse, 400 Washington Avenue, Room 148, Towson, MD 21204. The purpose of the conference is to clarify any parts of the solicitation and answer questions, which may be pertinent to the request.

21.2 Any significant changes to the solicitation as a result of the discussions at the pre-bid conference will be posted on the web site at: www.baltimorecountymd.gov/purchasing.

22. CONTRACT DRAWINGS – DESIGN INTENT.

22.1 Contract Drawings to be followed for this Contract shall be those approved drawings on file at the office of the Engineer. The Contract Drawings contain information as to amount, location, dimension, and detail of the work to be performed in accordance with the Specifications. No

deviation shall be permitted from the Contract Drawings and Specifications unless authorized in writing by the Engineer. Deviation by the Contractor from the Contract Documents without the Engineer's prior written approval shall be at the Contractor's risk and expense, including the expense of removal and restoration if so ordered.

22.2 Any discrepancies found between the Drawings and Specifications or any inconsistencies in the Drawings or Specifications shall be immediately reported to the Engineer, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. Work done by the Contractor after his discovery of such discrepancies, inconsistencies, or ambiguities prior to corrections directed by the Engineer shall be done at the Contractor's risk. In the case of discrepancy or omission, the Engineer will determine the intent of the design in issuing clarifying or corrective instructions.

22.3 In order to fulfill the requirements of the Contract, conformance is required with both the Contract Drawings and Specifications. The Contractor is not released from responsibility for performing work shown on the Contract Drawings but not included in the Specifications or vice versa; mention of work in either part is sufficient to include it under the Contract. In all cases, the decision of the Engineer will be final.

23. SUBSTITUTION OF EQUIPMENT OR MATERIALS.

23.1 Whenever a material, article, or process is specified or described by using the name of a proprietary product or the name of a particular vendor or manufacturer followed by the phrase "or equal," the specific item mentioned shall be understood as establishing type, function, dimension, appearance, and quality desired and is to be the basis upon which bids are prepared.

23.2 Equipment or materials other than those specified will be permitted provided that, in the opinion of the Engineer, such equipment is equal to or better than that specified. Any such decision of the Engineer with respect to approval or disapproval of any equipment or material proposed to be substituted as an "or equal" is final, and the Contractor shall have no claim of any sort by reason of such decision.

23.3 If the Contractor proposes to provide equipment or materials as "or equal" to those specified, it shall be his/her responsibility to furnish complete, specific, detailed information from the manufacturer or supplier of such equipment or material establishing conformance with the requirements of the Contract Specifications. This shall consist of an item-by-item comparison of the Contract Specification requirements with the equipment or material proposed to be furnished. In the event the Contract Specifications mention a model number or other designated manufacturer in lieu of the detailed description and manufacturer, an item-by-item comparison shall be furnished of the equipment specified under the Contract and that proposed to be substituted. The Contractor shall bear the burden of responsibility of demonstrating that the equipment or material to be substituted is equal to, or of higher quality than, that specified. Submission of incomplete, insufficient, or irrelevant data as evidence of compliance with this provision shall be grounds for denial of the Contractor's request.

23.4 All requests for approval of equipment and materials other than specified shall be submitted by the bidders to the Baltimore County Department of Public Works, Bureau of Utilities, in writing no less than fourteen (14) calendar days prior to the opening of bids for approval. If approved by the Department of Public Works, all bidders will be notified through an addendum to these Specifications no less than seven (7) days prior to the opening of bids. Upon extension of the opening date of the bids, the deadline for approval of equal or substitute equipment shall not be extended but shall remain fixed relative to the original date of the bid opening. Requests for changes to equipment or material must be made by the prime bidders, and requests for such changes by manufacturers or suppliers will neither be considered nor approved.

23.5 After the opening of bids, following approval of a request for a change to equipment or materials, the Contractor shall provide the County with a credit equal to the difference between the net cost to the Contractor of the article submitted and the lowest cost to the Contractor of the article specified. The Contractor shall submit these figures accompanying each substitute submittal; no request for substitution of equipment or materials will be considered without such figures.

23.6 The Engineer may, at his/her discretion, authorize use of substitute items or materials at greater, lesser, or equal cost to those specified when required due to the Contractor's inability to obtain specified equipment or materials in a timely manner where unreasonable delays to the progress of the work may result.

23.7 In the case of the two previous paragraphs, the Contractor shall submit a written request for permission to use substitute equipment or materials; the Contractor must furnish full information as to the costs of the items or materials specified as well as to the costs of the substitute items or materials. Such information shall be of sufficient detail to permit verification by the Engineer of the costs submitted. If approved by the Engineer, written authorization for credit to the County or payment to the Contractor will be made based upon the cost difference between the specified item and the substitute item.

23.8 All decisions of the Engineer with regard to credits to the County, payments to the Contractor, or equipment and materials to be substituted shall be final.

24. FIRE HYDRANT UTILIZATION.

24.1 Fire hydrant permits must be obtained if water is required from a hydrant. No water is to be drawn from a public fire hydrant except through a meter. Applications are made through the Department of Permits and Licenses. All costs are considered incidental to the cost of items bid.

25. GUARANTEE.

25.1 The Contractor shall guarantee all materials and equipment furnished and work performed for a period of one (1) year from the date of conditional acceptance of any item. The Contractor warrants and guarantees that the completed work is free from all defects due to faulty materials, equipment, and workmanship and is in every way fit for the use intended including, but not necessarily limited to, the following:

25.1.1 Against all faulty or imperfect materials and equipment, subsidence of fill, backfill and embankment, vegetative stabilization, and against all imperfect, careless and/or unskilled workmanship.

25.1.2 That work performed under this Contract, including all mechanical and electrical equipment, appurtenances and every part thereof, shall operate, with due care and maintenance, in a satisfactory and efficient manner in accordance with the requirements of these Contract Documents.

25.1.3 Where manufacturer's equipment warranties required elsewhere herein are in effect for a period longer than the Contractor's guarantee period, the County shall be named beneficiary of said warranties; and the Contractor shall furnish the County with a copy of said warranty.

25.1.4 That all structures and equipment designed to hold or convey water or prevent the entrance of water shall be watertight and leakproof at every point in accordance with their intended use.

25.1.5 No use or acceptance by the County of any part of the work, nor failure to use same, nor any repairs, adjustments, corrections or replacements made by the County due to the Contractor's failure to comply with any of his Contract obligations, or other corrections made by the County shall modify in any way the guarantee obligations of the Contractor under the Contract Documents.

25.1.6 The Contractor shall promptly make corrections as necessary by reason of such defects including damage to other parts of the work resulting from such defects. The Contractor agrees to replace, with proper workmanship, materials and equipment and to correct and repair, without cost to the County, any work which does not operate satisfactorily nor performs as specified, does not conform to the Contract Documents or is otherwise improper or imperfect. Exceptions will be made only for damage resulting from direct negligence of County personnel or that due to normal wear and tear. In the event the Contractor fails to properly perform such repairs or corrections or other work made necessary by such defects, the County may do so and shall charge the Contractor for costs incurred.

26. ELECTRONIC VERSION SUBMITTAL.

26.1 In accordance with the General Instructions for Solicitations, #1.9, Instructions, Forms and Specifications, responses to Requests for Bids and Requests for Proposals shall be accompanied by an electronic version (CD) of the bid proposal in PDF format. The CD must be labeled with the bid number, the bid title, and the bidders' name submitting the response. All bids must be submitted in a sealed envelope or carton as appropriate. This does not apply to Requests for Quotations.

BALTIMORE COUNTY, MARYLAND
REQUEST FOR BID NO. B-1051
ON-CALL UTILITY INSPECTION AND MAINTENANCE CONTRACT

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BALTIMORE COUNTY, MARYLAND
REQUEST FOR BID NO. B-1051
ON-CALL UTILITY INSPECTION AND MAINTENANCE CONTRACT

GENERAL SPECIFICATIONS

1. DEFINITIONS.

1.1. CMMS. The County's computerized maintenance management system.

1.2. CMMS Work Order: An electronic record of planned and/or completed Work. The electronic record is created, edited and closed in the County's computerized maintenance management system.

1.3. COUNTY: The person(s) responsible for the administration and technical aspects of the executed agreement, employed by Baltimore County Department of Public Works. The "County" shall be authorized by the Director of Public Works.

1.4. CONTRACTOR: In addition to the definition provided in the Standard Specifications, the term will designate the person responsible for the execution of the services and materials for Baltimore County, as described in the agreement, and employed by the company which has been awarded the Contract to perform the Work outlined in the agreement. Contractor shall also include all subContractors that are to provide services and/or materials for this Contract.

1.5. EMERGENCY WORK: Work that is assigned by the County to the Contractor and will be completed before any other previously-assigned Work is attempted. The County will identify and designate Emergency Work prior to assigning the Work to the Contractor. Emergency Work shall be completed by the completion date agreed upon by the County and the Contractor. Payment for Emergency Work shall be made based on the unit costs shown on the price sheets. No additional payment shall be made for Emergency Work.

1.6. INSPECTOR: An authorized representative of the County, assigned to make any or all necessary inspections of the Work performed and materials furnished by the Contractor.

1.7. PROJECT: Any Work included, either directly or indirectly, as part of the executed agreement.

1.8. PURCHASING AGENT: The term "Purchasing Agent" shall be used throughout this solicitation. The term will designate the person within the Baltimore County Purchasing and Disbursement Division responsible for procuring and processing this Contract.

1.9. WORK AREA: Any location where Work is to be performed by the Contractor, including but not limited to, any laydown or storage areas, parking areas, and areas of restoration, as a direct result of the Work.

1.10. WORK ORDER: The Purchase Order, signed by the County, which instructs the Contractor regarding the Work to be performed as part of this Project.

1.11. WORK: The tasks necessary to complete the Project, as described in these Contract Documents, including but not limited to, any direct or indirect tasks. Work will also be defined to include any direction from the County.

1.12. WORK ORDER MAPS: The electronic files from the County's geographic information system that will be provided to the Contractor which graphically show the geographic location of each asset assignment and describe the Work for the assigned asset.

1.13. INSPECTOR DAILY REPORT (IDR): The County's standard form that is used by the County's inspectors to record work type and quantity. The form is used to base all invoiced work type and quantity.

2. LOCATION OF WORK AND EXISTING CONDITIONS.

2.1 The Work Areas shall be any location within the boundaries of Baltimore County, Maryland.

3. WORK, SCHEDULE, INTERRUPTIONS, DELIVERY, INSTALLATION, PROPERTY PROTECTION.

3.1. Work and the delivery, repair and/or installation of material can be accomplished during the weekdays Monday through Friday, excluding the following County holidays unless authorized in writing by the County:

New Year's Day	Columbus Day
MLK, Jr. Birthday	General Election Day (each even year)
President's Day	Veteran's Day
Memorial Day	Thanksgiving Day and the Day After
Independence Day	Christmas Day
Labor Day	

3.2. Work around the holidays shall be at a schedule agreed to by the County. Normal work hours will be between 7:00 a.m. and 5:00 p.m Monday through Friday. This time range may be unilaterally adjusted by the County based on conditions at the site, such as but not limited to traffic, noise and community concerns. The Contractor may request to work during low flow periods (e.g. night time) as a means of accomplishing flow control. The Contractor must receive written approval from the County prior to performing Work during the times requested.

3.3. The Contractor may submit to the County a request to work weekends. No Work shall be planned or performed during the weekend without receiving from the County prior approval.

3.4. The Work described in this specification shall be done with the least inconvenience to Baltimore County Government. Vehicles must have egress capabilities at all times. The amount of time that normal operations are interrupted shall be kept to an absolute minimum and shall be coordinated with the user agency at (410) 887-7415.

3.5. The Contractor is responsible to protect all existing and newly installed work, materials, equipment, improvements, utilities, structures, and vegetation at all times during the course of this Contract. Any property or incidentals damaged during the course of this Contract shall be repaired or replaced to the satisfaction of the County and the property owner.

3.6. For each Work Order, the County shall approve the Work Order schedule as proposed by the Contractor. This work schedule shall be established with regard to constraints placed by property owners, utility company work schedules, the number of working days estimated, weather forecasts, availability of equipment, materials and labor sufficient to complete the Work and other considerations.

3.7. At the beginning of each working day, the Contractor shall e-mail to the County the location of each field crew.

4. PROGRESS SCHEDULE REQUIREMENTS.

At the County's sole discretion, the progress schedule requirements described herein may be waived for Emergency Work.

Replace Section GP-8.04 of the February 2000 Standard Specifications with the following:

A. GENERAL

1. Scheduling of Work is the responsibility of the Contractor. The Contractor must take all reasonable action to avoid or to mitigate the effects of delays including, but not limited to, rescheduling or resequencing the work, accepting other work, and reassigning personnel. When the Contractor is responsible for any delays, the County may order the Contractor to accelerate construction, work overtime, add additional shifts or manpower, work on weekends, or to do anything else reasonably necessary to complete the work on time, at no additional cost to the County.

2. For each work order, the Contractor shall submit to the County for review and approval a Baseline Schedule, Monthly Progress Schedules, and any required Recovery Schedules as outlined in these specifications.

3. Failure of the Contractor to comply with the requirements of this section shall be grounds for determination by the County that the Contractor is not prosecuting the work with due diligence as to ensure completion of the Work within the time specified in the Contract Documents or as agreed upon with the County after execution of the Contract. The County may terminate the Contractor's right to proceed with the Work, or any separable part thereof, in accordance with Section GP-8.08 of these General Provisions.

4. The Contractor does not have the unilateral right to complete the work late and pay liquidated or other damages.

B. BASELINE SCHEDULE

1. For each work order, the Contractor shall submit to Baltimore County a detailed Baseline Schedule indicating the time allocated by the Contractor for performance of each portion of the Work. The schedule shall show commencement of Work from the date the Notice to Proceed is issued. The schedule shall show completion of the Work within the Contract time as specified in the Contract Documents or as agreed upon with the County after execution of the Contract.

2. The submitted Baseline Schedule shall be properly and reasonably sequenced to show the order of performing the various tasks of Work. The schedule shall clearly identify the sequencing restraints and the critical

activities necessary to complete the work on time and shall list proposed workdays, holidays and any special non-work days.

3. The submitted Baseline Schedule shall list the dollar value for each Work item and shall show the Contractor's labor requirements for achieving each Work item. The schedule shall also include a list of submittals related to material and equipment fabrication orders, permits, easements and any other work tasks requiring submittals. Each necessary submittal shall be shown on the schedule as a separate Work activity with necessary dates of submittal, anticipated review and response time, anticipated dates of re-submittal if necessary, and anticipated dates for final review and approval.

4. Within 14 calendar days after the County reviews and rejects or conditionally approves the submitted Baseline Schedule, the Contractor shall make all necessary corrections and resubmit the corrected schedule. Baltimore County may decline to issue Notice to Proceed until the Contractor submits the required schedule and the County approves it.

C. SUBSEQUENT MONTHLY PROGRESS SCHEDULES

1. Within 30 days after the County issues Notice to Proceed, and on monthly basis thereafter, the Contractor shall submit a revised Monthly Progress Schedule accurately updated to reflect all revisions to the previously submitted schedule including actual commencement dates of listed work activities, actual work activities completed to date, and any sequence changes made or planned for the order of work activities and their effect on the critical path for completion of the whole project. The sequencing changes shall show extension of times granted by Baltimore County and any delays or early completion of work activities.

2. The Contractor shall meet with the County, or its designated attendee, at least once a month to discuss in detail the Contractor's updating of the Monthly Progress Schedule and the necessity for revision or correction in the schedule.

3. Within 10 calendar days after the County reviews and rejects or conditionally approves the submitted Monthly Progress Schedule, the Contractor shall make all necessary corrections and resubmit the corrected schedule.

4. The Contractor shall submit the required Monthly Progress Schedule whether or not the Contractor submits an application for payment each month. Baltimore County may decline to process any pending payment requests for this project until the Contractor submits the required schedule and the County approves it.

D. RECOVERY SCHEDULES

1. Within 10 calendar days after the work order falls behind schedule or is alleged by either party to be behind schedule, the Contractor shall furnish to the County, at no additional cost, a revised schedule hereinafter called a "Recovery Schedule". The Recovery Schedule shall show how the Contractor will finish the project by the Contract completion date.

2. The Recovery Schedule shall include all of the information required in these specifications.

E. LOGICAL SEQUENCING AND LAYOUT OF THE SUBMITTED SCHEDULES (CPM SCHEDULES)

1. Unless the Contract Documents expressly permit the Contractor to use a schedule other than a Critical Path Method (CPM) schedule, the submitted Baseline Schedule, the subsequent Monthly Progress Schedules, and any required Recovery Schedules shall all be CPM schedules.

2. CPM schedules are required to assure adequate planning and execution of the work and in evaluating the progress of the work and the impact on the schedule events, which could affect the completion date.

3. The submitted CPM schedules shall clearly designate the Substantial Completion Date of the project. This is the date when the construction project or specified part thereof is sufficiently completed, in accordance with the Contract Documents, such that the project or specified part thereof can be used to accomplish the purposes for which it was intended.

4. Logic or network diagrams shall show the order and interdependence of activities and the sequence in which work is to be accomplished as planned by the Contractor. These diagrams must show how the start of a given activity is dependent on preceding activities and how its completion restricts the start of the following activities.

5. At a minimum, the following information shall be furnished for each work activity:

   i. Activity number
   ii. Description of activity
   iii. Activity numbers for any predecessor and successor activities
   iv. Relationships with preceding activities
   v. Activity duration in Calendar days
   vi. Percent of activity completed
   vii. Early start date (by calendar date)
   viii. Early finish date (by calendar date)
   ix. Actual start date (by calendar date)
   x. Actual finish date (by calendar date)
   xi. Float or slack (by calendar date)

6. The Monthly Progress Schedules and any required Recovery schedules shall show the activities or portion of the activities completed during the reporting period and their total dollar value as basis for the Contractor's periodic request for payment. For each activity, the update shall state the percentage of work actually completed and the progress along the critical path in terms of days ahead or behind the allowable dates.

7. The Monthly Progress Schedules and any required Recovery schedules shall include a comments section summarizing the updated analysis for the project as a whole, describing problems with work activities, and explaining proposed corrective actions.

8. Approved change orders shall be reflected as new activities or as change in logic and/or time framing of existing activities. They shall be shown on the

updated schedule that immediately follows a receipt of a Change Order Approval from the County.

F. FORM OF SCHEDULE SUBMITTAL

1. All schedules, including the Baseline Schedule, the Monthly Progress Schedules, and any required Recovery schedules shall be submitted in MS Excel, MS Project or Oracle Primavera format.

5. SECURING MATERIALS, TOOLS, EQUIPMENT AND JOB SITE SAFETY.

5.1. It shall be the sole responsibility of the Contractor and each subContractor performing services for this Contract to safeguard their own materials, tools, and equipment. Baltimore County shall not assume any responsibility for vandalism and/or theft of materials, tools, and/or equipment.

5.2. All Work shall be done in a safe manner and comply with all governing regulations concerning safety. This shall include, but not be limited to OSHA, MOSHA, etc. All Work being performed for and/or on Baltimore County property shall fully conform to all local, state, and Federal Safety regulations.

5.3. Adequate barricades shall be erected and maintained completely around all staging areas where equipment and materials are stored and used. The Contractor shall be responsible for keeping the staging area neat, clean and a minimal local inconvenience.

5.4. If requested by the County, all existing mechanical and electrical systems and mechanisms within areas affected by proposed Work shall be checked by the Contractor in the presence of the County for proper operation before and after completion of the Work.

5.5. The Contractor is solely responsible for planning and maintaining site safety at all times.

6. SUMMARY OF WORK

6.1. The Special Provisions and Baltimore County Standard Specifications are hereby made a part of the Contract. In case of any conflict with the (2000) “Standard Specifications, General Provisions” or applicable Amendments, these Special Provisions shall govern. All Work to be performed under this Contract shall be done in strict compliance with the Baltimore County Standard Specifications for Construction and Materials, dated February 2000 and applicable Amendments.

6.2. The primary purpose of this Contract is to inspect and clean portions of the Baltimore County sanitary and stormwater collection systems. References to pipe in this Contract shall be understood to mean pipes in sanitary and/or stormwater systems. References to manholes and structures shall be understood to include buried structures and appurtenances related to the sanitary and stormwater collection systems.

6.3. The Work includes pipes and structures that could be located in developed areas, roadways and/or in right of ways.

6.4. In general, the County will assign cleaning and inspection Work by sewershed; however, the County may assign Work for individual pipe and/or manholes/structures.

At no time shall the Contractor restrict customers from using their sanitary sewers in a normal and reasonable manner. The anticipated Work include, but is not limited to:

i. Clean and inspect pipe
ii. Inspect and/or GPS survey manholes/structures.
iii. Smoke testing
iv. Dyed water testing and dyed water flooding
v. Any combination of the above

6.5. Contractor must maintain and have a working knowledge of ESRI GIS.

6.6. All Work shall be performed in accordance to the requirements of the Technical Specifications.

7. QUANTITIES.

The County reserves the right to alter the quantities of Work to be performed and to increase or decrease the amount of Work at any time. The Contractor shall perform the Work as altered, increased or decreased by the County. Payment for such increases or decreased quantity will be made in accordance with the instruction to Bidders. No allowance will be made for any change in anticipated profits nor shall such changes be considered as waiving or invalidating any conditions or provisions of the Contract and Bond.

8. ADJUSTMENTS TO FLOW.

Any Contractor representative who makes a decision regarding the control of flow or makes the adjustments that control flow shall be a licensed wastewater operator as defined and certified by the Maryland Board of Waterworks and Waste Systems.

9. WORK COORDINATION.

9.1. The Contractor shall coordinate their Work with third parties (such as public utilities and telephone company et al.) in areas where such parties may have rights to underground property or facilities, and request maps or other descriptive information as to the nature and location of such underground facilities or property.

9.2. The Contractor shall also coordinate their Work with owners of private and public property, such as SHA and MTA, where access is required for the performance of the Work. The Contractor is responsible for obtaining right of access permits, as needed to complete the Work. Obtaining right of access permits and completing safety training for the Contractor's workers are considered incidental to the Work.

9.3. Supplement Section GP-5.05 of the January 2000 Standard Specifications with the following:

The Contractor shall conform to the "Maryland High Voltage Line Act" and shall contact the affected utility owner prior to start of construction.

Work performed by a utility owner shall be paid for by the County. Payment shall be made directly to the utility owner. The Contractor shall coordinate with the utility owner any construction activity.

Work near an MTA Railroad Track:

1. The Contractor shall obtain Right of Entry Permit for any Work within MTA's Right of way.
2. The Contractor shall obtain Railroad Protective Liability (RRP) insurance for any Work within 50 feet of an MTA Railroad Track.
3. The Contractor shall contact MTA and obtain permits for any Work performed on MTA property or affects MTA operations.
4. All other terms and conditions of Section GP-5.05 shall remain unchanged and in full force and effect.

10. CONDITIONS AT THE SITE.

Nothing in these contract documents or Work Order Maps shall be construed as a guarantee that existing utilities are in the location indicated on the maps or that they actually exist, or that other utilities are not within the area or the operations.

11. PROGRESS MEETINGS.

The Contractor will attend with the County monthly progress meetings throughout the duration of the Contract. Representatives of the Contractor, subContractors and suppliers who attend the progress meetings shall be qualified and authorized to act on behalf of the entity each represents. Progress meetings shall be held at the County's office.

12. SCHEDULING OF WORK/WORK ORDER PROCEDURES.

12.1. The County will assign Work under this Contract via Work Orders that will be issued to the Contractor. Work Orders will be assigned as follows:

1. The County will provide to the Contractor the draft Work Order Maps and a scope of work. The Work Order Maps will show the location of each asset. The scope of work will include a description of the work, estimated quantity and cost, based on the Contractor's unit prices, for each asset included in the Work Order. It is understood that the estimated cost may not include any or all contingencies required to complete the Work.

2. Within ten (10) business days from issue of a Work Order, the Contractor shall submit to the County, for review and approval, the following:

    a. A Baseline Schedule as defined in Section 4 of these specifications.
    b. A list of assets that require traffic control to complete the Work. The Contractor shall submit to the County the number of traffic control setups that are anticipated to complete the Work.
    c. A list of assets that require contingent Work or Work that is not listed in the price sheets. The Contractor shall submit to the County the total estimated quantity for each contingent Work type that is anticipated to complete the Work.
    d. Revised cost estimate. It is understood that the estimated cost may not include all contingency Work. Additional contingent Work may be approved by the County Inspector.

3. Within five (5) working days from receipt of Contractor's submittal, the County will:

    a. Review the revised Work Order. The County will issue to the Contractor a notice to proceed once the Work Order has been approved by the County; or

b. Provide to the Contractor comments/questions for the Contractor to address.

4. The Contractor shall begin Work for the approved Work Order within (10) working days after receipt of notice to proceed.

12.2. The schedule that is included with the approved Work Order will become the Baseline Schedule for coordinating, scheduling and monitoring the Work and evaluating time extension requests. The Contractor shall be liable for liquidated damages in accordance with Section 13 of these specifications for any unapproved delay in completing any Work Order.

13. LIQUIDATED DAMAGES DUE TO WORK DELAY.

13.1. Within seven (7) calendar days of determining that an event and/or field condition will delay completion of a Work Order, the Contractor shall submit to the County a description of the event/field condition, an explanation of the reasons for the delay, the anticipated duration of the delay, all actions taken or to be taken to prevent or mitigate the delay or the effect of the delay and the timetable by which those measures will be implemented. Furthermore, the Contractor is required to state what steps are being taken to ensure completion and shall supply any and all documentation available to show what steps have already been taken. Contractor shall also comply with all other County statutes, regulations and requirements in connection with any such manner.

13.2. The County shall have sole responsibility to accept the Contractor's delay justification and revised Recovery Schedule. If, in the County's opinion, the Contractor's delay justification and/or Recovery Schedule end date are unacceptable, the Contractor shall complete all Work by the Baseline Schedule end date

13.3. If a delay of performance is, in the sole discretion of the County, acceptable, the Recovery Schedule, as provided by the Contractor, shall become the Baseline Schedule. Extensions of a completion date based on a particular event shall not automatically extend any other Work Order completion date. In the event of a dispute regarding application of this Special Provision to a delay in performance, the Contractor shall comply with all County statutes, regulations, and requirements and shall have the burden of proving by preponderance of the evidence that the delay is necessary to complete the Work.

13.4. The Contractor is also notified that copies of any reports, plans, permits, and documents related to this Contract shall be maintained for a period of 5 years from the date of Award.

13.5. In the event the Contractor fails to achieve QA-accepted final inspection (as defined in the Specifications) as required by the Baseline Schedule, the Contractor shall pay to the County a liquidated damage in the amount of Eight Thousand Dollars ($8,000.00) for each day that the Work is not completed after the Schedule of Record end date. The Contractor agrees that:

i. These Liquidated Damages are a reasonable estimate of the County's damages solely due to the public's loss of use of the Project during the delay period and are not a penalty.

ii. It is very difficult, if not impossible, to accurately measure the damages to the County due to the public loss of use of the Project during the delay period.

iii. Notwithstanding GP8.09 of the Baltimore County Standard Specifications for Construction, in addition to the damages due to the public's loss of use of the Project during the delay period, the County is likely to incur additional direct costs during the delay period, including but not limited to, costs for construction management, consultants, architectural services, office trailer and supplies, utilities, County employees' time, County vehicles, and such other costs that the County will incur to continue administration of the construction and the Contract during the delay period, all which will be monitored by the County, and if so required by the County, the Contractor shall pay such actual damages incurred during the delay period. THE PARTIES HERETO UNDERSTAND AND AGREE THAT CONTRACTOR'S OBLIGATION TO PAY THE COUNTY FOR ACTUAL DAMAGES DURING THE DELAY PERIOD SHALL BE IN ADDITION TO THE CONTRACTOR'S OBLIGATION TO PAY THE LIQUIDATED DAMAGES DUE TO THE PUBLIC'S LOSS OF USE OF THE PROJECT.

13.6. The County shall have the right, but not the obligation, to deduct the Liquidated Damages due to the public's loss of use of the Work, and the County's actual costs and costs to continue administration of the Work and the Contract, from any monies due or any monies that may become due to the Contractor.

14. CMMS DATA ENTRY.

14.1. The County will provide to the Contractor remote access to the County's CMMS and will provide two training sessions for CMMS data entry and query.

14.2. At the end of each work week, the Contractor shall create CMMS Work Orders listing each asset that is planned to be inspected and/or cleaned during the following week and the type of work for each asset. The Contractor may be required to create in the CMMS multiple Work Orders to identify all planned work.

14.3. At the end of each work day, the Contractor shall edit and/or close the CMMS Work Orders that they have created. At a minimum, the edited/closed CMMS Works Orders shall identify for each asset:

i. The facility ID of the assets where Work has been completed.
ii. The type of Work that has been completed.
iii. The date that the Work was completed.

14.4. Each day, prior to mobilizing any crew to a Work Order Area, the Contractor shall review the County's CMMS to confirm that the County has not completed the assigned Work. The Contractor shall remove from their Work Order scope of work any Work that the County has completed and shall assign to their crew other Work in the Work Order. The Contractor shall not be paid for any Work that the County has previously completed.

14.5. Creating and editing CMMS Work Orders shall become effective the working day after the Contractor has access to the County's CMMS and has received both training sessions.

14.6. After receiving access to the County's CMMS and receiving all training sessions, the Contractor will be responsible to contact and coordinate with the County's Office of Information Technology to address any technical issues regarding access/data entry to the CMMS.

14.7. Payment for CMMS Data Entry shall be per working day up to a maximum of two (2) hours per day. The Contractor shall include with each invoice the timesheets for the data entry work. Payment shall be made only for days when the Contractor has at least one (1) CCTV or cleaning crew mobilized and working on a Work Order for the entire work day. The County reserves the right to audit the Contractor's CMMS Work Orders to confirm that the Work Orders were created and are correct. The Contractor will not be paid for any day when the County's audit identifies CMMS Work Orders that are not correct and/or were Work Orders are not closed/open within the timeframe described herein.

14.8. Within 7 calendar days of auditing the CMMS Work Orders, the County shall notify the Contractor of any incorrect CMMS Work Orders. Within 3 calendar days of receipt of County audit comments, the Contractor shall correct and the CMMS Work Order(s). The County may complete CMMS Work Order correction that the Contractor has not completed within the aforementioned 3 calendar day time period. If the County completes the CMMS Work Order correction, a liquidated damage in the amount of One Thousand Dollars ($1,000) per edited CMMS Work Order will be assessed to the Contractor. The Contractor agrees that these Liquidated Damages are a reasonable estimate of the County's damages.

14.9. The County shall have the right, but not the obligation, to deduct the Liquidated Damages due to the County's actual costs and costs to continue administration of the Work and the Contract, from any monies due or any monies that may become due to the Contractor.

15. INSPECTION OF WORK.

15.1. General

The County shall have the right to inspect the Work while in progress and again upon completion. Any Work not performed to the complete satisfaction of the County shall be rejected and the Contractor shall correct the Work at no additional expense to the County.

15.2. Contractor's Duties

The Contractor is responsible for all materials, equipment, methods, and procedures in execution of the Work.

15.3. Corrections

The Contractor shall correct, to the satisfaction of the County, any Work or material found to be defective or of deficient quality. Such corrections shall be made by the Contractor at no additional expense to the County.

15.4. Right of Entry

Representatives of Baltimore County, the Department of Environment, Protection and Sustainability (DEPS), the Maryland Department of the Environment (MDE) and others as may be identified by the County shall have access to the Work wherever it is in preparation of progress. The Contractor shall provide proper facilities for each access and inspection.

16. SUPPLEMENTAL REQUIREMENTS.

16.1. Storage

The Contractor shall secure adequate storage to accommodate the required equipment, vehicles, and materials for the period of performance of the Contract.

16.2. Utilities

The Contractor shall pay all power company installation and use charges for the electrical energy that is utilized for the inspection and cleaning related power and light. The Contractor shall make his own arrangements at his own expenses for obtaining the water supply necessary for cleaning purposes.

16.3. Maintenance of Work Site

In the event the Contractor fails to remedy any unsatisfactory situation, within twenty-four hours after receipt of written notice from the County describing the unsatisfactory conditions, the County may immediately proceed with adequate forces and equipment to maintain the project, and the entire cost of this maintenance will be deducted from the monies otherwise due the Contractor under the Contract.

16.4. Clean-Up, Demolition and Debris Removal and Disposal

At the end of each day's operation, the Contractor shall be responsible to remove all debris, clear the work site, and clean affected work areas. The Contractor shall keep the premises free of debris and unusable materials resulting from the Work and as Work progresses; or upon request by the Engineer, shall remove such debris and materials from County property. Upon completion of the Work, all excess material and rubbish shall be removed from the job site and disposed of properly. The Contractor shall leave all disturbed areas as they were prior to beginning the Work.

The Contractor shall transport and dispose of all materials removed from the Work area. Disposal shall be at no cost to the County, and in a manner consistent with all applicable codes and regulations.

16.5. Access Roads

Streets, roads and drive ways used by the Contractor for access to and from the Work Order Area shall be protected from damage caused by the normal traffic of vehicles used for the Work. Any such damage caused by the Contractor shall be immediately repaired by the Contractor at no additional cost to the County.

16.6. Tree and Plant Protection

The Contractor shall preserve and protect existing trees and plants in and adjacent to the Work Order Area as designated by the County.

Reasonable care shall be taken during inspection and cleaning work to avoid damage to vegetation. Ornamental shrubbery and tree branches shall be temporarily tied back where appropriate to minimize damage. Trees which receive damage to branches shall be trimmed of those branches to improve the appearance of the tree. Tree trunks receiving damage from equipment shall be treated with a tree dressing.

17. MAINTENANCE OF TRAFFIC.

17.1. The Contractor is responsible to submit for and obtain Maryland SHA traffic control permit(s) for all Work on state highways. All Work, materials, time and incidentals necessary to submit for and obtain Maryland SHA traffic control permit(s) is considered incidental to the Work.

17.2. Supplement Section 104 of the Standard Specifications with the following:

Appropriate work zone traffic control and sufficient flagmen shall be provided throughout the Contract. A minimum single lane of traffic, utilizing flaggers, is required to be maintained at all times on all roadways. For major traffic routes, the traffic flow must be maintained in each direction at all times. Alternate flow may be allowed with use of flagmen and appropriate work zone traffic devices.

All existing driveway access must be maintained at all times. Local traffic must have access to adjoining properties at all times. Where commercial properties have more than one entrance to the establishment, the Contractor may close one entrance at a time, providing that the first closed entrance is fully completed and opened to traffic prior to commencement of Work in the second entrance, and prior notice has been given to the owner at least one week in advance. At locations where only one entrance exists, the Contractor will confine his Work to not more than one-half (1/2) of the entrance to completion before Work continues through the remainder of the entrance.

The Contractor must provide and maintain traffic controls in accordance with Baltimore County's standard maintenance of traffic control requirements. All Work, materials, time and incidentals necessary to submit for and obtain County traffic control permit(s) is considered incidental to the Work.

Except for Work on State Highways and County road closures, the cost for maintenance of traffic is considered incidental to the Work. For State Highways or County road closures, payment for maintenance of traffic shall be made at the unit bid price for each particular traffic control Work.

The Contractor is responsible for road closure signs and proper marking of detour routes during the work period. These roads are to be marked to the satisfaction of the County prior to the commencement of Work.

The Contractor shall notify the Bureau of Engineering, Traffic Engineering Section at least two (2) weeks prior to the closing of any street.

The Contractor must coordinate their work sequence so that there will be a minimum inconvenience to the travelling public. The County reserves the right to restrict the Contractor's operation at any time on any road where, in the opinion of the County, undesirable traffic conditions exists.

Plastic drums used for County road closures or maintenance of traffic on SHA roads shall be used in accordance with Section 104.12 of the Standard Specifications. Payment for plastic drums used for County road closures or maintenance of traffic on SHA roads shall be per each maintenance of traffic setup.

Traffic control cones used for County road closures or maintenance of traffic on SHA roads shall be used in accordance with Section 104.14 of the Standard Specifications. Payment for traffic cones shall be per each maintenance of traffic setup.

For the purposes of maintaining traffic during County road closures or work located on SHA roads, a maintenance of traffic setup is defined as placement and removal of all traffic control devices necessary to complete the Work. A traffic setup shall include all traffic control needed for Work on a contiguous length of road and for a duration of a single work day. The County reserves the right to review and approve each setup to ensure maximum work production.

Maintenance of traffic on interstates is not anticipated.

The Contractor is responsible for the fabrication, installation and maintenance of all traffic control devices. Said devices shall be in accordance with the Manual on Uniform Traffic Control Devices. Also, the Contractor may be required to furnish additional signs should conditions warrant. Regarding the control of traffic through Work Areas, Part 6" Temporary Traffic Control" of The Manual on Uniform Traffic Control Devices (Latest Edition) shall be utilized.

For Work performed within Maryland State Highway Administration (MSHA) rights-of-way, the Contractor shall adhere to the provision of a permit secured from MSHA. It shall be the responsibility of the Contractor to ensure that all lights, signs, barricades, etc., are maintained in accordance with Part VI of the U.S. Department of Transportation/Federal Highway Administration Manual on Uniform Traffic Control Devices and the State Highway Administration standards, and its latest official rulings on requests.

On heavily traveled County roads, Baltimore County shall be notified at least forty-eight (48) hours prior to beginning any Work in order to schedule a field inspection of the traffic control devices. All construction and materials for the traffic control devices shall be in accordance with the standards contained in the Manual on Uniform Traffic Control Devices. Vehicular traffic shall be maintained at all times with no Work performed by men or equipment in the roadway during peak hours of 7:30 a.m. to 9:00 a.m. and from 3:30 p.m. to 6:30 p.m. unless approved by the County. Travel lanes shall be a minimum of ten (10) feet in width. When only one lane is open, flagmen and the appropriate signing shall be provided. The roadway shall be reopened to two lanes at night. Type II barricades shall be used to mark channelizing devices at night along the construction area. All signs that do not apply will be covered. All cones and flagmen shall be moved accordingly as Work progresses. All construction signing shall not obstruct existing Traffic Control Devices. If the road is to be closed, a detailed detour plan shall be submitted. If temporary parking restrictions will be required, the Contractor will be responsible for installing signs and for notifying at least one day in advance all affected residents. The Contractor must contact the County's Engineer/ Representative before any parking restrictions are enacted.

Vehicles shall not be parked in a manner that will impede traffic or impair sight distance. Equipment and materials will not be allowed to remain in the median of a divided highway when not in use. Private automobiles and nonessential vehicles shall not be parked in the right-of-way. Mud and debris tracked or spilled on the roadway shall be promptly removed. Precautions shall be taken, particularly in freezing temperatures, to keep water off the traveled roadway. Equipment and material or their placement that may mar the roadway or surfaced shoulder shall not be placed thereon without surface protection. Any equipment or materials which can damage the roadway surface, sidewalks, or driveways must immediately be removed and any equipment with oil and hydraulic leaks must be shut down until repaired and any spillage immediately cleaned up.

All other terms and conditions of Section 104 shall remain unchanged and in full force and effect.

18. DATA MANAGEMENT.

The acceptable file formats are as follows:

- For video imaging: *.mpeg4 or *.h254 with a mp4 container, resolution of at least 640x480, minimum of 25000 kb/s constant bitrate or a level 24 CRF
- For still images: *.jpg
- For SL-RAT data: *.csv
- For reports and spreadsheets: *.docx and *.xlsx
- Other file and data formats would require prior approval by the County.

Submittals shall be grouped by Work Order.

The County shall reject manhole/structure, CCTV or CCTV/sonar data deliveries that are not MACP- or PACP/LACP-compliant. The Contractor shall correct and resubmit to the County for review and approval all rejected work at no cost to the County. The Contractor shall complete a quality assurance review of all data before submitting the data to the County.

The Contractor shall submit data to the County every week.

The Contractor agrees that Baltimore County shall have the property rights to all the submitted data, information and images.

19. PAYMENTS.

Supplement Section GP-8.06 of the January 2000 Standard Specifications with the following:

PAYMENTS

Supplement Section GP-9 of the January 2000 Standard Specifications with the following:

Time and Material Work: Included in this Contract are bid items for labor hours, equipment and materials that may be needed to complete assigned Work Orders not covered by the unit rate costs.

Measurement of an item of Work will be by the unit indicated in the Bid Schedule, which is part of this Contract. Payment will include all necessary and incidental related Work not specified to be included in any other bid item.

Whenever possible, the Contractor is to provide Work under the various bid items. If this is not possible, the County will review and approve Work to be completed on a time and materials basis.

Labor rates are assumed to include small tools, powered and non-powered. The County shall not pay the hourly rate for any break and/or lunch time or downtime due to equipment failures.

Payment items shall be as follows for time and materials Work. Each labor category shall be paid for by the hour, with regular time and overtime applicable. Overhead and profit shall be included in the hourly rate.

1. Crew Chief- Day-to-day supervisor for all Contractor's workers.

2. Skilled Laborer -equipment operators such as CCTV or sonar truck operators and cleaning truck operators.
3. Unskilled Laborer - Helpers to Skilled Laborers and all other labor requiring no special skills or experience or the exercise of discretion or independent judgment.
4. Pay Differential for special hours – Pay Differential is a means to compensate the Contractor for any additional costs that may be associated with working during non-standard work hours (Monday- Friday 7:00 AM to 5:00 PM). The multiplier factor shall be between 1.00 and 1.50 and will only be applied to work hours that occur between 5:00 PM and 7:00 AM, County holidays, and weekends.
5. Equipment - Equipment to be used for approved Time and Material Work during this agreement will be reimbursed using the equipment listed in the "Rental Rate Blue Book for Construction Equipment, Vol. 2" as published by the Machinery Information Division of K-111 Directory Corp., latest edition. Equipment shall be paid for by the hour using the Blue Book (as referenced) formula: weekly hourly rental rate (weekly rate divided by 40) plus regional map adjustments plus estimated operating costs per hour. Overhead and profit, fuel, repairs, oil, vital fluids, maintenance, incidentals and all items of cost required for full operation of the equipment are pre-calculated in the Blue Book rating system. Only one hourly rate applies.

The County shall not pay time and material for the cost of:

1. Estimating price quotes for Work Orders
2. Field reconnaissance
3. Coordination with County personnel
4. Locating and/or accessing manholes/structures
5. Review and/or approving inspector daily reports
6. QA review of inspection data
7. Maintaining and/or repairing equipment
8. Travel time to and/or from Work Order Area
9. Loading debris containers
10. Travel time to haul and dispose of debris

The Contractors cannot sub-contract all or any portion of the time and materials work assigned under this agreement. All Work must be performed by the Contractors' work forces. The only exception to this requirement is for Work not within the trade contracted by this agreement or to achieve M/WBE participation. For services outside of the contracted trade, sub-contracting is allowed and the Contractors must bind the subContractors by the same terms, conditions, responsibilities, and obligations assumed by said Contractors to the County. If the County in its sole judgment comes to the decision that the price for any subContractor's services is unreasonably high, the subContractor will be rejected. The Contractor must provide two other quotes for the subcontracted services in question. If the lowest price for all three quotes is still too high, the County in its sole judgment, may elect to re-scope the job, choosing other means and methods to accomplish the same task:

Baltimore County shall pay only for actual time spent to complete the Work.

The Contractor shall come prepared to the job site with the correct materials and parts needed for the Work. The County shall not pay any time and materials cost if the Contractor finds that they need materials or parts not anticipated in the original scope of work and time is needed to go to the closest supply house to pick up that part or material.

If the Contractor foresees that they will exceed the Time and Material original estimate, the Contractor must notify the County and receive County approval to proceed with the additional Work. The County will not pay for additional Work if the Contractor performs the Work without the County's approval.

20. NON-PAYMENTS.

No additional or separate payment shall be made to mobilize for any item list in the Bid Sheet. Mobilization shall be included in the unit price for each item unless specified otherwise.

Required items of Work and incidentals necessary for the satisfactory completion of the Work which are not specifically listed in the Bid, and which are not specified in this section to be measured or to be included in one of the items listed in the Bid, shall be considered as incidental to the Work. All costs thereof, including Contractor's overhead costs and profit, shall be considered as included in the unit prices bid for the various Bid items.

21. FIELD CREW AVAILABILITY.

By bidding this Work, the bidder is agreeing to provide an adequate number of crews in order to perform the Work with due diligence, as specified in their approved Work Order schedule.

22. EROSION AND SEDIMENT CONTROL.

Furnishing, installing and/or removing erosion and sediment control is not anticipated to complete any Work.

23. CLEARING.

23.1. General

Clearing operations shall begin no more than five working days before beginning Work for any area.

Materials to be cleared and removed from the Work Area include, but are not limited to, vegetation, trees, tree branches, roots, shrubbery, gardens and miscellaneous debris to the minimum practicable extent to complete the Work. The Contractor shall limit clearing to a single lane work route and accurately determine limitations of existing easement or right-of-way and keep Work activity within such limits.

Payment for Clearing shall be made at the labor unit rates that are included in the prices sheets.

23.2. Disposal of Waste Materials

Unless property owner requests complete removal, the Contractor shall cut tree trunks and limbs, over two inches in diameter, into 48 inch lengths and neatly stack within area having the same property ownership as that on which the tree originally grew.

On undeveloped property, distribute brush, trees and limbs less than two inches in diameter, within the Work Area from which it was cut. On developed property, remove all such clearing waste and properly dispose of it off-site.

Tree cutting is prohibited on private property unless the Contractor obtains approval from the property owner.

24. LOCATING MANHOLES/STRUCTURES.

24.1. The Contractor shall attempt to locate all manholes/structures needed for pipe/manhole/structure access prior to determining that the manhole is buried. At a minimum, the Contractor shall complete an attempt to locate all manholes/structures using a metal detector and metal probe. The Contractor will complete a thorough search of the manhole/structure. At a minimum, the Contractor's foreman/crew chief shall complete a search of the manhole prior to determining the manhole cannot be located. Cursory field searches performed from a vehicle are not acceptable. The Contractor shall also review manhole inspection reports, CCTV inspection videos, County GIS and/or record drawings as needed to locate manhole/structures.

24.2. The Contractor shall make a minimum of two separate inspection attempts at different times of the day before designating a manhole/structure as Could Not Access due to private property or parked car. For manholes/structures located on private property or under a parked car, the Contractor shall attempt to contact the property owner at least twice before abandoning the inspection.

24.3. A liquidated damage in the amount of Three Thousand Three Hundred Dollars ($3,300) per manhole will be assessed to the Contractor if, within thirty (30) minutes of arriving on site, County personnel locate a manhole that could not be located by the Contractor. The Contractor may accompany County personnel during the field search. The County shall not pay the Contractor for any time that the Contractor's representatives accompany County personnel. The Contractor agrees that:

i. These Liquidated Damages are a reasonable estimate of the County's damages solely due to the public's loss of use of the Project during the delay period and are not a penalty.

ii. It is very difficult, if not impossible, to accurately measure the damages to the County due to the public loss of use of the Project during the delay period.

iii. Notwithstanding GP8.09 of the Baltimore County Standard Specifications for Construction, in addition to the damages due to the public's loss of use of the Project during the delay period, the County is likely to incur additional direct costs during the delay period, including but not limited to, costs for construction management, consultants, architectural services, office trailer and supplies, utilities, County employees' time, County vehicles, and such other costs that the County will incur to continue administration of the construction and the Contract during the delay period, all which will be monitored by the County, and if so required by the County, the Contractor shall pay such actual damages incurred during the delay period. THE PARTIES HERETO UNDERSTAND AND AGREE THAT CONTRACTOR'S OBLIGATION TO PAY THE COUNTY FOR ACTUAL DAMAGES DURING THE DELAY PERIOD SHALL BE IN ADDITION TO THE CONTRACTOR'S OBLIGATION TO PAY THE LIQUIDATED DAMAGES DUE TO THE PUBLIC'S LOSS OF USE OF THE PROJECT.

24.4. The County shall have the right, but not the obligation, to deduct the Liquidated Damages due to the public's loss of use of the Work, and the County's actual costs and costs to continue administration of the Work and the Contract, from any monies due or any monies that may become due to the Contractor.

25. <u>DAMAGE CAUSED BY CONTRACTOR'S ACTIVITIES</u>.

25.1. Any damages that are caused by the Contractor's operations shall be immediately repaired by the Contractor at no cost the County. Damages that are not repaired by the Contractor may be repaired by the County and the costs will be deducted from money due to the Contractor.

25.2. Under no circumstances shall sewage, silt or solids be dumped onto the ground, ditches, catch basins or storm drains.

26. DOCUMENTATION OF WORK.

Before the end of each working day, the County Inspector shall record on the County's daily inspection report, the type and amount of Work that was performed during the day. The Contractor's representative must sign the form to certify that the correct work type and amount was completed. With the exception of pipeline footage that is cleaned and/or inspected, the inspector daily report shall be used as the basis for all invoice quantities. Payment for pipeline footage that is cleaned and/or inspected shall be based on the County QA-approved footage.

27. SANITARY SEWER OVERFLOWS AND BASEMENT BACKUPS.

27.1. Any sanitary sewer overflow (SSO) or basement backup caused by the Contractor's Work shall be verbally reported to the County within 45 minutes of SSO and/or basement backup occurrence or notification to the Contractor that a SSO or basement backup has occurred. The Contractor shall e-mail to the County a sewage overflow report within 24 hours after the SSO or basement backup began. Failure to report to the County or submit a sewage overflow report within the specified time frame shall be considered a Breach of Contract. The Contractor shall pay $2,000 to the County for each SSO and/or basement backup that is not properly reported to the County within the specified time frame. The Contractor shall be responsible for all costs, penalties associated with SSOs and basement backups. A summary of the penalties is shown below. These penalties do not include all costs that may be incurred by the Contractor.

Summary of SSO/Basement Backup Penalty

SSO/Basement Backup Volume	Amount
Less than 100 gallons	$125
100 to 2,499 gallons	$750
2,500 to 9,999 gallons	$1,250
10,000 to 99,999 gallons	$4,500
100,000 to 999,999 gallons	$10,000
1 million or more gallons	$15,000

27.2. The Contractor is responsible to investigate the impacts of an SSO and to provide immediate clean-up activities including cleaning of private property resulting from a SSO or basement backup. The County will provide mitigation and clean-up activities, if, in the County's sole opinion, the Contractor's efforts are inadequate. The County shall charge the Contractor for those activities at rates up to and including Blue Book rates. Costs associated with fines, penalties or County Work activities shall be deducted from any remaining/future payment due the Contractor.

All forms shall be e-mailed to the County. After Contract award, the County shall provide to the Contractor the e-mail distribution list.

The e-mail subject line should be as follows: P18: SSO Discharge at <street name>. The Contractor shall also notify the Baltimore County Bureau of Utilities Dispatch at (410-887-5210).

28. POTENTIAL SANITARY SEWER OVERFLOWS AND BASEMENT BACKUPS.

28.1. While performing the Work, the Contractor may discover field conditions/pipe defects which, in the County and/or Contractor's opinion, may result in an imminent sanitary sewer overflow or basement backup or endanger public safety. By the close of business of the day that the field conditions/pipe defects are identified, the Contractor shall e-mail to the County a photograph, short description and location of the condition/defect and create a CMMS Work Order to have the condition/defect repaired by the County.

28.2. In general, the County considers the following pipe defects may result in an imminent sanitary sewer overflow or basement backup and should be reported to the County:

i. Partially/fully collapsed pipe
ii. Partial/fully collapsed manholes/inlets
iii. Sink holes
iv. Missing manhole/inlet covers
v. Loose manhole/inlet frames
vi. Exposed sewers/laterals at or along streams

END SECTION

BALTIMORE COUNTY, MARYLAND
REQUEST FOR BID NO. B-1051
ON-CALL UTILITY INSPECTION AND MAINTENANCE CONTRACT

TECHNICAL SPECIFICATIONS

33 01 30.13 MANHOLE/STRUCTURE INSPECTION

33 01 30.16 PIPELINE INSPECTION

33 01 30.51 PIPE AND MANHOLE/STRUCTURE CLEANING AND POST-CLEANING CONFIRMATION INSPECTION

33 01 30.73 SMOKE AND DYED WATER TESTING

33 01 30.80 FLOW CONTROL

33 01 30.13 MANHOLE/STRUCTURE INSPECTION

33 01 30.13.01 DESCRIPTION

The Work covered by this section consists of providing all labor, equipment, materials and supplies, and performing all operations necessary to complete manhole and structure inspections in accordance with NASSCO MACP Level 2 guidelines. Work also includes GPS survey of select manholes and/or structures.

It is anticipated that all inspection Work will be completed without any manned entry; however, any necessary manned entry shall conform to all applicable laws and regulations for confined space entry.

Within 30 calendar days of receiving the inspection data, the County shall notify the Contractor if the submitted work has been accepted or rejected. Within 30 calendar days of receipt of an inspection rejection by the County, the Contractor shall correct and resubmit to the County the revised inspection data and/or photographs. The County may complete any manhole inspection that the Contractor has not resubmitted within the aforementioned 30 calendar day time period. If the County completes the manhole inspection, the Contractor will not be paid for any Work that has been completed or that is planned to be performed and shall reimburse the County for all costs expended to complete the Work. Reimbursement payment shall be deducted from the next Contractor invoice.

Payment shall be made after the inspection has been completed, inspection photograph/data have been submitted to the County and the County's quality assurance review has been approved.

33 01 30.13.01.01 Reference

All applicable requirements of other portions of the Contract Documents apply to the Work of this Section.

33 01 30.13.01.02 Submittals

1. **Inspection database:** For each inspected manhole/structure, the Contractor shall submit to the County an inspection database. The database shall conform to the most current MACP Level 2 guidelines. The submittal shall include all required MACP data fields and optional data fields listed below:

Surface Accessibility Rating
Evidence of Inflow (cover)
Chimney Sound (yes/no)
Chimney Deteriorated (yes/no)
Chimney Needs Rehabilitation
Chimney Needs Immediate Attention
Wall Sound (yes/no)
Wall Deteriorated (yes/no)
Wall Needs Rehabilitation
Wall Needs Immediate Attention
Wall Hole Size
Channel Sound (yes/no)
Channel Unfinished (yes/no)
Channel Deteriorated (yes/no)
Channel Needs Immediate Attention
Bench Sound (yes/no)
Bench Deteriorated (yes/no)
Bench Needs Immediate Attention
Connection Type: Possible Illicit Connection
Connection Type: Crossover
Drop Connection Depth

The Contractor shall submit the inspection database via external hard drive. The Contractor is responsible for providing the external hard drive.

2. **Inspection photograph**: Electronic images shall be 320 pixels x 240 pixels, 36 pixels/inch, jpg format. At a minimum, each manhole inspection shall include the following images:

   a. Placard showing manhole ID
   b. Landscape photograph showing the manhole cover and an identifiable landmark (i.e. house number or street sign) and a sign that shows the manhole ID and date of inspection.
   c. Photograph looking down into the manhole and showing the entire wall circumference. Multiple pictures that show sections of the circumference are acceptable.
   d. Photograph of the entire circumference of the exterior manhole chimney (when manhole cover is raised above existing grade).
   e. Photograph of the manhole frame and cover.
   f. Photograph of all observed structural and/or O&M defect.
   g. Photograph of all recorded defects and/or observations.
   h. Photograph of the entire circumference of all pipe seals

   The Contractor shall submit the inspection photographs via external hard drive. The Contractor is responsible for providing the external hard drives. Inspection photographs shall be submitted with the corresponding inspection database.

3. **GPS survey data:** For each manhole/structure that is surveyed, the Contractor shall submit to the County the survey data via external hard drive. The Contractor is responsible for providing the external hard drive.

4. The Contractor shall include with each submittal a geodatabase or spreadsheet that lists the ID of all manholes/structures that are included in the Work Order and, for each asset the:

    a. Submittal ID
    b. Could not locate/access status
    c. Work status (i.e. complete, pending, removed from scope, etc.)

5. The Contractor shall complete a quality assurance review of all data prior to submitting to the County the data for review. The Contractor shall include with each submittal a signed certification letter stating that the data has been reviewed for completeness and correctness.

6. The Contractor shall maintain copies of all submitted electronic files and reports for reference by the County for the duration of the project.

33 01 30.13.02 DEFINITIONS

1. **GPS survey:** Real-time kinematic (RTK) survey to record horizontal and vertical coordinates. Survey datum shall be Maryland State Plane Coordinate System and NAVD88.

2. **MACP, Level 2:** Manhole Assessment and Certification Program. A standardized inspection guideline created by the National Association of Sewer Companies (NASSCO).

3. **Manhole/Structure:** A sewer or stormwater manhole or other structure associated with the wastewater or stormwater collection system such as a valve vault, diversion structure or storm drain inlet. Inspections shall be completed in accordance with the most recent NASSCO MACP guidelines.

33 01 30.13.03 MATERIALS/EQUIPMENT

Manhole inspection equipment shall be specifically made for use in wastewater applications and produce a clear, high-quality picture. Generic cameras/videos on telescoping poles are not acceptable.

33 01 30.13.04 CONSTRUCTION REQUIREMENTS

33 01 30.13.04.01 General

The Contractor is responsible for notifying the property owner when access onto private property is required.

33 01 30.13.04.03 Pre-Inspection Cleaning

Pre-inspection cleaning is not necessary. The Contractor shall notify the County if the manhole/structure and or incoming or outgoing pipes require cleaning to complete the inspection. The County will authorize the

Contractor to clean the manhole/structure and/or pipe(s) or the County shall clean the manhole/structure and/or pipe(s) and notify the Contractor when the cleaning work has been completed. Payment for the Contractor to clean the manhole/structure and/or pipe shall be in accordance with Section 33 01 30.51, Pipe and Manhole/Structure Cleaning.

33 01 30.13.04.03 Buried/Inaccessible Manholes/Structures

The County will utilize its own resources to locate and make accessible manholes that could not be located by the Contractor. Once a manhole is made accessible, the County may elect to complete the manhole inspection. The Contractor will not be paid for any Work that has been completed or is planned to be completed if the County completes the manhole inspection.

33 01 30.13.04.04 Manhole/Structure Re-Inspection

The Contractor shall revise and resubmit to the County all inspection work that has not passed the County's QA review at no additional cost to the County. The County shall not pay for any mobilization or re-mobilization fee associated with revising inspection work including recording new photographs.

The Contractor shall complete all manhole/structure inspection work within 30 calendar days after the County makes a manhole/structure accessible and/or after a manhole/structure and/or pipe(s) have been cleaned. The County shall not pay for any mobilization or re-mobilization fee associated with the re-inspection work.

33 01 30.13.04.05 GPS Survey.

For each assigned manhole/structure, the Contractor shall submit to the County the following electronic data:

1. Manhole ID
2. Date of survey
3. Horizontal coordinates of the center of the manhole/structure cover
4. Elevation of manhole/structure cover

33 01 30.13.04.06 Quality Assurance Review

All submitted inspection data will be subject to the County's Quality Assurance review. Inspections may be rejected for any of the following reasons:

1. Photograph quality
2. Missing photographs
3. Missing inspection data

Following are examples of acceptable and rejected inspection photographs/data.

Photograph of Manhole ID, SSA and Date of Inspection

Photograph A

Photograph B

Photograph	Rejected	Accepted	Reason
A		X	Photograph shows MH ID, SSA and date of inspection
B	X		Photograph does not show SSA or date of inspection

Landscape Photograph

Photograph C

Photograph D

Photograph	Rejected	Accepted	Reason
C		X	Photograph shows the MH cover and background area for location verification
D	X		Photograph does not have enough of the background for location verification

Manhole Frame/Adjustment

Photograph E

Photograph F

Photograph	Rejected	Accepted	Reason
E and F		X	Two photographs capture 180 degree of MH frame

Pipe Connections

All pipe connections must be shown in one photograph. The discharge pipe must face the 6 o'clock position.

Photograph G

Photograph H

Photograph	Rejected	Accepted	Reason
G		X	Photograph is clear and shows all pipe connections (discharge pipe is at the 6 o'clock position)
H	X		Photograph is not clear. If clear photographs are not possible, state reason in the manhole inspection comment field. As an example, comment field for this manhole inspection should state that crew waited 5 mins for steam to dissipate.

Manhole Chimney/Frame Adjustment

Photograph I

Photograph J

Photograph	Rejected	Accepted	Reason
I		X	Photograph clearly shows the connection between the manhole frame and wall (no adjustment exists)
J	X		It is a poor chimney or frame adjustment photo which does not allow to make an accurate assessment. The photograph should be zoomed out and head on.

Manhole Wall

Photograph K

Photograph L

Photograph	Rejected	Accepted	Reason
K and L		X	Photograph clearly shows 180 degrees of MH wall

Pipe Seal

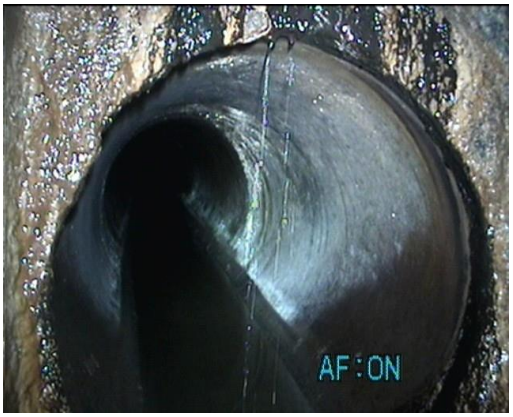
Photograph M

Photograph N

Photograph	Rejected	Accepted	Reason
M		X	Clearly shows entire circumference of pipe seal
N	X		Photograph shows only a portion of the pipe seal. If field conditions do not allow for a photograph of the entire pipe seal circumference, state reason in the comment field of the inspection database

Drop Connection

Photograph O



Photograph P

Photograph	Rejected	Accepted	Reason
O		X	Clearly shows entire circumference of pipe seal
P	X		Photograph shows only a portion of the pipe seal. If field conditions do not allow for a photograph of the entire pipe seal circumference, state reason in the comment field of the inspection database

Manhole Cover

Photograph Q

Photograph	Rejected	Accepted	Reason
Q		X	Clearly shows the entire cover

Defect Observations

Photograph R

Photograph	Rejected	Accepted	Reason
R		X	Infiltration defect is clearly shown

33 01 30.13.05 MEASUREMENT AND PAYMENT

Measurement for Manhole/Structure Inspection shall be on the basis of each manhole/structure inspected, regardless of manhole/structure depth, size or location. Payment for Manhole/Structure Inspection shall be per each manhole/structure inspected in accordance with NASSCO MACP Level 2 guidelines and QA-approved and shall include all mobilization, travel time, coordination with County personnel, traffic control on County roads (excluding road closures), locating and accessing manholes/structures, inspection, coordination with property owners, recording photographs, data, data submissions/resubmissions, data corrections, and all other Work not included under other items, necessary to complete the Work as specified.

It is anticipated that manhole/structure inspection Work Orders will be assigned per County sewershed; therefore, Work for multiple manholes and/or structures will be located within a limited geographic area. The County will not pay for any mobilization costs associated with manhole/structure inspection Work Orders that are located in a single County sewershed. The County will pay a single lump sum mobilization payment per manhole/structure inspection Work Order when manhole and/or structure inspection work is located in multiple County sewersheds. Payment for mobilization shall be made at the lump sum cost included in the schedule of prices.

Measurement for Manhole/Structure GPS Survey shall be on the basis of each manhole/structure that is surveyed, regardless of manhole/structure depth, size or location. Payment for Manhole/Structure GPS Survey shall be per each manhole/structure that is surveyed and QA-approved and shall include all mobilization, travel time, coordination with County personnel, confined space entry, traffic control on County roads (excluding road closures), GPS survey, locating and accessing manhole/structure, coordination with property owners, data submissions/resubmissions, data corrections, NASSCO MACP Level 2 inspection and all other Work not included under other items, necessary to complete the Work as specified.

It is anticipated that manhole/structure GPS survey Work Orders will be assigned per County sewershed; therefore, Work for multiple manholes and/or structures will be located within a limited geographic area. The County will not pay for any mobilization costs associated with manhole/structure survey Work Orders that are located in a single County sewershed. The County will pay a single lump sum mobilization payment per manhole/structure GPS survey Work Order when manhole and/or structure survey Work is located in multiple County sewersheds. Payment for mobilization shall be made at the lump sum cost included in the schedule of prices.

END OF SECTION

33 01 30.16 PIPELINE INSPECTION

33 01 30.16.01 DESCRIPTION

The Work covered by this section consists of providing all labor, equipment, materials and supplies for closed-circuit television (CCTV, pre-inspection light cleaning required), sonar inspections (no pre-inspection cleaning required), Sewer Line Rapid Assessment Tool (SL-RAT) inspection (no pre-inspection cleaning required) and combined CCTV/sonar inspections (no pre-cleaning inspection required) of sewer and/or stormwater pipe and CCTV inspection of sewer house laterals. All CCTV and CCTV/sonar inspections shall be completed in accordance with the most recent NASSCO PACP and LACP guidelines, Version 6.0.1 or newer. It is anticipated that all inspection work will be completed without any manned entry; however, any necessary manned entry shall conform to all applicable laws and regulations for confined space entry.

The Contractor may complete a side wall scan inspection in lieu of a CCTV inspection. No additional payment shall be made for side wall scan inspections.

Light cleaning as defined in Section 33 01 30.51, Pipe and Manhole/Structure Cleaning is considered incidental to CCTV inspection.

The Contractor is responsible for completing the follow-up cleaning/inspection Work that is needed based on the SL-RAT score and detailed in these specifications. Payment for follow-up cleaning/inspection Work shall be made at the cleaning and/or inspection contract unit price for the Work. All follow-up cleaning/inspection Work for each sewer must be completed within 30 calendar days of completing the SL-RAT inspection for the respective sewer. The County may complete any follow-up cleaning/inspection Work that the Contractor does not complete within the aforementioned 30 calendar day time period. If the County completes the follow-up cleaning/inspection Work, the Contractor will not be paid for any SL-RAT and/or follow-up Work that has been completed or that is planned to be performed and shall reimburse the County for all costs expended to complete the Work. Reimbursement payment shall be deducted from the next Contractor invoice.

Within 30 calendar days of receiving the inspection data, the County shall notify the Contractor if the submitted work has been accepted or rejected. Within 30 calendar days of receipt of an inspection rejection by the County, the Contractor shall correct and resubmit to the County the revised inspection video/data. The County may complete any inspection that the Contractor has not resubmitted within the aforementioned 30 calendar day time period. If the County completes the inspection Work, the Contractor will not be paid for any Work that has been completed or that is planned to be performed and shall reimburse the County for all costs expended to complete the Work. Reimbursement payment shall be deducted from the next Contractor invoice.

Payment shall be made after the inspection has been completed, inspection video/data have been submitted to the County and the County's quality assurance review has been approved.

33 01 30.16.01.01 Reference

All applicable requirements of other portions of the Contract Documents apply to the Work of this Section.

33 01 30.16.01.02 Submittal

1. **PACP and LACP Operator Certification:** After award of Contract and prior to assignment of the first Work Order, the Contractor shall submit to the County a copy of the current NASSCO PACP and LACP certifications for all CCTV inspection operators who will be performing the Work.

2. **CCTV Inspection Video and Data:** For each inspected pipe, the Contractor shall submit to the County a CCTV video inspection and associated PACP/LACP-compliant database. The database shall be provided in NASSCO PACP/LACP version 6.0 or higher. The Contractor shall submit the inspection database via external hard drive. The Contractor is responsible for providing the external hard drive.

3. **Sonar Inspection Video and Data:** For each inspected pipe, the Contractor shall submit to the County a sonar video inspection. The Contractor shall submit the inspection video via external hard drive. The Contractor is responsible for providing the external hard drive. For each inspected pipe, the Contractor shall submit to the County an inspection spreadsheet, which includes the following information:

    a. Segment ID
    b. Date of inspection
    c. Length of inspection
    d. Pdf copy of the inspection report. The report shall include a graphical representation of the pipe that shows the type and location of all recorded observations and an estimated quantity of debris.

4. **SL-RAT Inspection Data:** For each pipe where a SL-RAT inspection has been completed, the Contractor shall submit to the County the unedited original SL-RAT inspection file. Copies of the file in Excel format will not be accepted.

5. All CCTV and sonar/CCTV inspections shall include an audio track recorded by the inspection operator during the actual inspection work describing the parameters of the pipe or lateral being inspected (i.e. location, depth, diameter, pipe material) and describing defects and unusual conditions observed during the inspection.

6. The Contractor shall include with each submittal a geodatabase or spreadsheet that lists the ID of all pipe that are included in the Work Order and, for each pipe the:

    a. Submittal ID
    b. Could not locate/access status
    c. Work status (i.e. complete, pending, removed from scope, etc.)

7. The Contractor shall complete a quality assurance review of all data prior to submitting to the County the data for review. The Contractor shall include with each submittal a signed certification letter stating that the data has been reviewed for completeness and correctness.

8. The Contractor shall maintain copies of all submitted electronic files and reports for reference by the County for the duration of the project.

9. All submitted inspection videos shall be continuous from the starting to ending manholes with the exception of reverse inspections.

33 01 30.16.02 DEFINITIONS

1. **CCTV Inspection:** An inspection method that uses a CCTV video technology to locate and code structural and operational/maintenance observations and defects in accordance with the most recent NASSCO PACP/LACP guidelines.

2. **CCTV/Sonar Inspection:** An inspection method that uses CCTV technology to record visual observations above the water line and acoustical sonar technology to record observations below the water line and combines data from both inspection technologies to produce one inspection video file.

3. **LACP:** Lateral Assessment and Certification Program. A standardized inspection guideline for inspecting laterals created by the National Association of Sewer Companies (NASSCO)

4. **Miscellaneous CCTV Inspections:** Noncontiguous CCTV inspection Work that is located in multiple sewersheds. Outstanding Work from previously assigned Work Orders will not be considered miscellaneous CCTV inspections.

5. **Off-Road Inspections:** Pipe inspection work where the beginning and ending manholes are not located in a paved area such as a sidewalk, alley, driveway or road.

6. **On-Road Inspections:** Pipe work where either the beginning or ending manholes are located in a paved area such as a sidewalk, alley, driveway or road.

7. **PACP:** Pipeline Assessment and Certification Program. A standardized inspection guideline created by the National Association of Sewer Companies (NASSCO).

8. **Side Wall Scanning Inspection:** Inspection method that uses one or multiple cameras to capture a continuous 360 degree image of the wall of the pipeline. Inspection data shall allow for a fold flat view and a perspective view of the pipeline.

9. **SL-RAT Inspection:** Inspection method using the Sewer Line Rapid Assessment Tool (SL-RAT) as manufactured by InfoSense, Inc. The

Contractor shall complete the follow-up cleaning/inspection Work based on the SL-RAT score as noted below.

SL-RAT Score	Required Follow-Up Work
0 – 3	CCTV inspect (including pre-inspection light cleaning)
4 - 6	CCTV inspect (including pre-inspection light cleaning)
7 - 10	None

10. **Sonar Inspection:** Acoustical sonar inspection used to record observations and determine debris levels that are below the water level.

33 01 30.16.03 MATERIALS/EQUIPMENT

33 01 30.16.03.01 CCTV Inspection Equipment.

The Contractor shall use a color pan and tilt camera or a side wall scanning (panoramic) camera that is specifically designed and constructed for the inspection work. The CCTV equipment must produce a video using a radial viewing, pipe inspection camera that pans 275 degrees and rotates 360 degrees. The camera shall be capable of operating in 100% humidity conditions. The footage counter shall measure the pipe length to within +/- two (2) feet of the measured linear footage between the center of the manholes as measured along the existing pipe centerline. Use a camera with camera height adjustment so that the camera lens is always centered at one-half the inside diameter, or higher, in the pipe being inspected. Lighting for the pan and tilt camera or side wall scanning camera shall provide a clear picture of the entire periphery of the existing pipe. The camera, television monitor, and other components of the video system shall be capable of producing picture quality to the satisfaction of the County; and if unsatisfactory, equipment shall be removed and replaced with adequate equipment. No payment will be made for inspections that are not QA-approved by the County.

33 01 30.16.03.02 Sewer Lateral CCTV Inspection Equipment.

The Contractor shall use a self-leveling type camera that is capable of producing a color picture and is specifically designed and constructed for the inspection work. The lateral camera must be capable of launching from the mainline sewer. The camera shall be capable of operating in 100% humidity conditions. The footage counter shall measure the lateral length to within +/- two (2) feet of the measured linear footage between the center of the sewer main and edge of building as measured along the existing lateral centerline. Lighting for the camera shall provide a clear picture of the entire periphery of the existing lateral. The camera, television monitor, and other components of the video system shall be capable of producing picture quality to the satisfaction of the County; and if unsatisfactory, equipment shall be removed and replaced with adequate equipment. No payment will be made for an unsatisfactory inspection

33 01 30.16.03.03 Sonar Inspection Equipment

The sonar system shall be designed to provide accurate dimensional data on debris level, pipe deformation, offsets, and other observations/defects that are below the waterline. A sonar inspection of a fully or partially flowing line shall provide a two-dimensional profile of the interior pipe wall.

Sonar equipment must be specifically adapted for use in sewers and/or storm drains using high frequency sound waves to locate and map irregularities within the pipes creating continuous sonar images recorded in “real time” mode with continuous sonar images. Sonar equipment shall have either one (1) or two (2) sonar heads, (minimum requirement is for one profiling sonar head) one head shall be profiling sonar head with a narrow beam to provide cross sectional scans; the sonar head or heads shall be equipped with operating/monitoring computer and associated hardware. The sonar equipment shall be capable of supporting a range of frequencies to provide clear inspection data in varying flow conditions. The sonar inspection at all times shall be free of electrical interference and provide a clear, stable image.

The sonar equipment must utilize digital, multi-frequency profiling sonar in order to model the pipe under submerged and partially submerged conditions. The uniform travel speed shall not exceed 30 feet per minute. Any means of propelling the inspection equipment through the pipe that would exceed maximum travel speed or produce non-uniform or jerky movements will not be acceptable. The inspection equipment shall pause as necessary to clearly show debris or pipeline defects. If no defects or debris exist during the sonar inspection the data shown in the report shall use intervals not greater than 20 feet.

33 01 30.16.04 CONSTRUCTION REQUIREMENTS

33 01 30.16.04.01 General

1. The Contractor is responsible for notifying the property owner when access onto private property is required.

2. Each CCTV and/or sonar inspection video shall show at a minimum the Owner’s name, Contractor name, date of inspection, pipe size and material, pipe identification, ongoing footage counter and reason for inspection.

   All inspections shall include an audio track recorded by the inspection operator during the actual inspection work describing the parameters of the pipe being inspected (i.e. location, depth, diameter, pipe material) and describing connections, defects and unusual conditions observed during the inspection.

3. The depth of flow in the pipe being inspected shall not exceed the following allowable limits:

   a. For 6”-10” pipes, flow depths shall not exceed 20% of the pipe diameter.
   b. For 12”-24” pipes, flow depth shall not exceed 25% of the pipe diameter
   c. For pipes 27” and larger, flow depth shall not exceed 30% of the pipe diameter

   If flow depths equal to or less than the above listed limits cannot be achieved, the Contractor shall submit to the County a written request for inspecting that pipe at the lowest possible flow depth explaining the reasons why a depth equal to or less than the maximum allowable limit could not be achieved. The County, at its sole discretion, may approve or reject such request

4. All CCTV and/or sonar inspection videos shall locate each sewer service connection entering the pipe.

5. If observed structural defects such as broken or collapsed pipe preclude the Contractor from completing the inspection, the Contractor shall immediately inform the County. The Contractor shall attempt to complete the inspection by televising from the other manhole. The reverse inspection shall immediately follow the initial inspection.

6. If a protruding pipe tap precludes the Contractor from completing the inspection, the Contractor shall attempt to complete the inspection by televising from the other manhole. The reverse inspection shall immediately follow the initial inspection. If a reverse setup cannot be performed, the CCTV operator shall provide an explanation in the comments field of the CCTV inspection database.

7. If operation and maintenance defects such as debris, roots or grease preclude the Contractor from completing the inspection, the Contractor shall immediately contact the County Inspector to obtain approval to complete heavy or specialty cleaning. After heavy or specialty cleaning is completed, the Contractor shall complete the CCTV inspection. Payment shall be made for the total inspection footage (i.e. pre- and post-heavy cleaning).

8. It shall be the Contractor's responsibility to remove materials and equipment that has been lodged in the pipe due to the Contractor's activities.

9. The Contractor may submit to the County a request to re-assign previously-assigned outstanding Work to a new Work Order. The County shall not pay a mobilization fee for the new Work Order. All unit prices associated with the original Work Order shall apply to the new Work Order.

33 01 30.16.04.02 CCTV Inspections

1. The Contractor shall complete light cleaning of all pipe prior to performing a CCTV or side wall scanning inspection of the pipe. Light cleaning prior to inspection is not needed for pipe where a CCTV/sonar or sonar inspection will be performed. Light cleaning shall be completed in accordance with Section 33 01 30.51, Pipe and Manhole/Structure Cleaning.

2. Manual winches, power winches, TV cable, and powered rewinds or other devices that do not obstruct the camera view or interfere with proper documentation of the sewer conditions may be used to move the camera through the pipe.

3. If utilizing a camera with side wall scanning capabilities, pausing and panning of each lateral is not necessary during the inspection if the image clearly depicts the inside of the lateral for post processing.

4. Camera operator shall slowly pan and tilt up at beginning and ending manholes.

5. When the water level reaches half of the pipe height, the Contractor shall attempt to pull the water away from the CCTV camera using a hydraulic jetter nozzle. The CCTV inspection video shall show the jetter nozzle. If the jetter nozzle is not successful to pull the water, the Contractor shall code in the inspection database the sag in accordance with PACP standard guidelines and continue the inspection to the ending manhole.

33 01 30.16.04.03 Sewer Lateral Inspections

1. Pre-inspection cleaning is not required to complete the Work.

2. Flow control of the lateral is not anticipated to complete the Work, Flow control of the sewer main may be necessary. Flow control of the sewer main up to 1 MGD is considered incidental to the Work.

3. The Contractor shall make at least one attempt to complete the Work during minimum flow hours or by pulling a hydraulic jet nozzle in front of the camera before determining that Flow Control over 1 MGD is needed.

4. All inspections shall begin at the lateral connection to the main sewer and end at the edge of building, unless otherwise directed by the County.

5. Each inspection video shall show at a minimum the gravity sewer's Owner name, Contractor name, date of inspection, property address, pipe size and material, pipe identification (Owner's manhole numbers at both ends), ongoing footage counter and reason for inspection.

33 01 30.16.04.04 Off-Road Inspections

1. When Contractor equipment must travel off-road, the Contractor shall use equipment such as All-Terrain Vehicles and other low ground pressure equipment/tires/tracks to minimize disturbances.

2. Vegetation clearing for off-road inspections shall be paid for separately.

3. Access roads will not be constructed under this Contract. If, prior to Contractor mobilization, it is determined that an access road is necessary to complete the Work, the County will construct an access road and the Contractor will complete the assigned Work; otherwise, the Work will be removed from the Contractor's Work Order.

33 01 30.16.04.05 Buried/Inaccessible Manholes/Structures

1. If approved by the County Inspector, the Contractor may begin an inspection at the next accessible manhole/structure. The Contractor will be paid for inspecting both pipe segments.

2. The County will locate and make accessible manholes that could not be located by the Contractor. Once a manhole is made accessible, the County may elect to complete the CCTV/sonar inspection. The Contractor will not be paid for any Work that has been completed or is planned to be completed if the County completes the CCTV/sonar inspection.

33 01 30.16.04.06 Flow Control

1. The Contractor shall maintain flow up to 1 MGD at no cost to the County. Flow control above 1 MGD shall be completed in accordance with Section 33 01 30.80, Flow Control.

2. The Contractor shall make at least one attempt to complete the Work during minimum flow hours or by pulling a hydraulic jet nozzle in front of the camera prior to determining that Flow Control over 1 MGD is needed.

3. It is the Contractor's responsibility to confirm anticipated flow depths prior to mobilization. Field visits to confirm flow depths are considered incidental to the Work. If water depths exceed the requirements set in these specifications, the Contractor may be required to re-inspect the pipe. Re-mobilization and re-inspection is considered incidental to the Work.

4. A video made while floating the camera is not acceptable unless approved by the County.

33 01 30.16.04.07 Pipeline Re-Inspection

1. The Contractor shall revise and resubmit to the County all inspection work that has not passed the County's QA review at no cost to the County. The County shall not pay for any mobilization or re-mobilization fee associated with revising or re-inspecting the Work including recording new CCTV and/or sonar video inspections.

2. The Contractor shall complete all CCTV and/or sonar inspection work within 30 calendar days after the County makes a manhole/structure accessible and/or after a manhole/structure and/or pipe(s) have been cleaned. The County shall not pay for any mobilization or re-mobilization fee associated with the re-inspection work.

33 01 30.16.04.08 Quality Assurance Review

1. All submitted inspection data will be subject to the County's Quality Assurance review. Inspections may be rejected for any of the following reasons:

    A. Video quality
    B. Incorrect or missing PACP/LACP codes
    C. Submission of non-PACP/LACP compliant database

    Following are examples of acceptable and rejected inspections.

Miscellaneous Camera Underwater (MCU) and Miscellaneous Water Level (MWL)

Video A

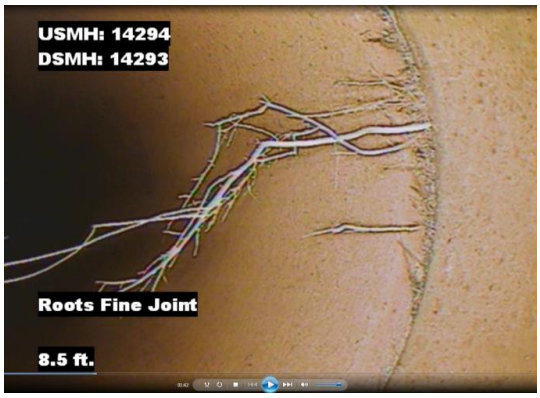
Video B

Video	Rejected	Accepted	Reason
A	X		The sag start and end distances are not recorded in the CCTV database. Video that is underwater is not a reason for rejection.
B		X	Defect was coded as MWL. This is acceptable; however, the preference is to code this defect as MWLS.

Where the water level is higher than required in these specifications, the CCTV inspection video must show the hydraulic jetter head traveling ahead of the inspection camera.

Roots at Joints

Video C



Video D

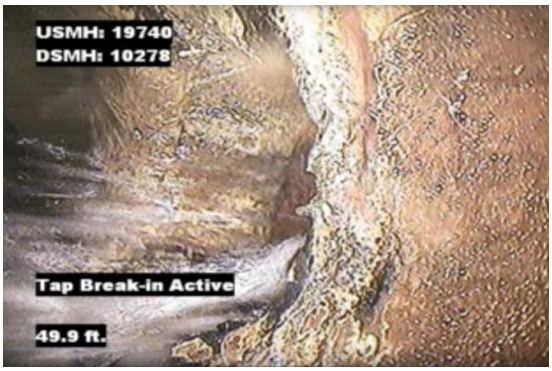
Video	Rejected	Accepted	Reason
C	X		Jetter and/or root cutter are not visible to indicate that the Contractor tried to cut the roots. If unable to cut roots, state reason as a MGO
D		X	Coded correctly as RFJ. Video shows root cutter.

Tap Defects

Video E

Video F

Video	Rejected	Accepted	Reason
E	X		Root ball in tap was not coded. Tap should be coded as defective (TFD) and root ball lateral (RBL) with percentage of blockage
F	X		Medium roots at tap (RMC) was not coded. Tap should be coded as defective (TFD) and root medium at connection (RMC) with percentage of blockage. Root cutter should have been used. If unable to cut roots, state reason as a MGO



Video G

Video H

Video	Rejected	Accepted	Reason

G	X		Correctly coded as TF. Clock position was not recorded.
H		X	Correctly coded as TBA

Video I

Video	Rejected	Accepted	Reason
I	X		The tap was coded incorrectly. This should have been TFD with “DAGS 90%” recorded in either the comments section or as a MGO

Attached Deposits

Video J

Video K

Video	Rejected	Accepted	Reason
J	X		The accumulation of attached grease (DAGS) on pipe wall is too thick. If unable to remove DAGS, state reason as a MGO and show on video hydraulic nozzle attempting to clean the pipe.

K	X		The encrustation (DAE) on the pipe wall is too thick. If unable to remove DAE, state reason as a MGO and show on video hydraulic nozzle attempting to clean the pipe.

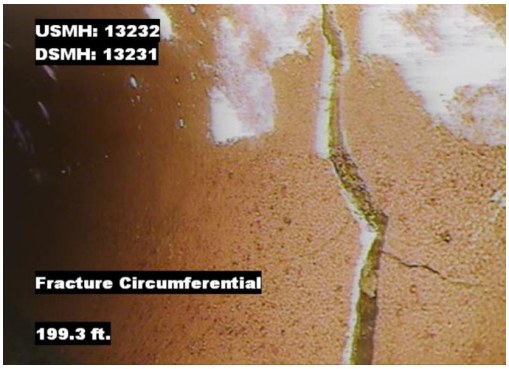
Cracks

Video L

Video M

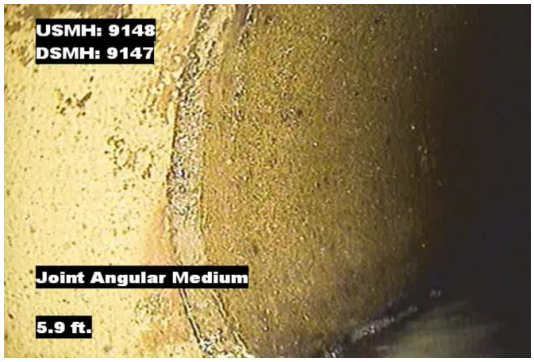
Video	Rejected	Accepted	Reason
L		X	Coded correctly as CL
M		X	Coded correctly as CC

Video N



Video O

Video	Rejected	Accepted	Reason
N	X		Defect is incorrectly coded. Should be coded as CM
O		X	Defect is correctly coded as FC.



Video P

Video Q

Video	Rejected	Accepted	Reason
P		X	Coded correctly as JAM
Q		X	Coded correctly as JOM

Broken Pipe

Video R

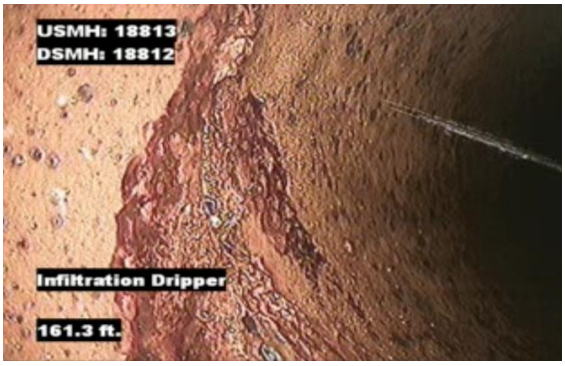
Video	Rejected	Accepted	Reason
R		X	Correctly coded as B

Hole in Pipe

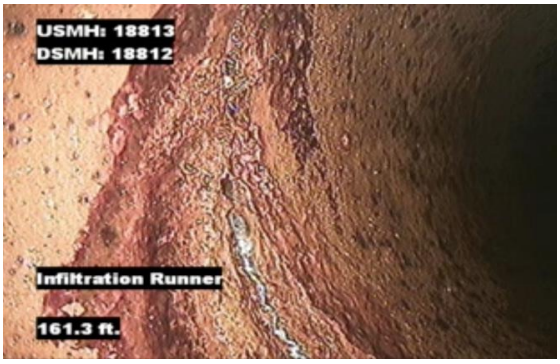
Video S

Video	Rejected	Accepted	Reason
S		X	Correctly coded as HVV

Infiltration Defects



Video T



Video U

Video	Rejected	Accepted	Reason
T		X	Correctly coded as ID
U		X	Correctly coded as IR

General Observations

Video V

Video W

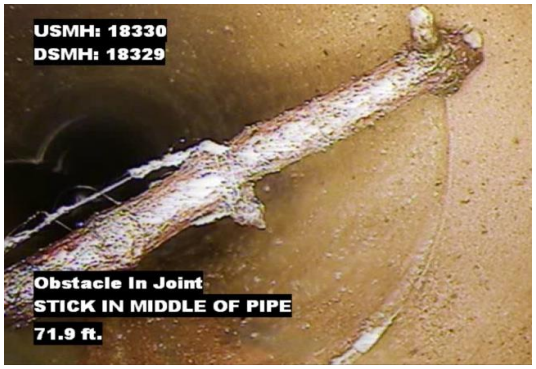
Video	Rejected	Accepted	Reason
V	X		Coded as rock and sand deposit (DSGV). With this amount of debris, it appears that cleaning was not adequately completed. If field

			conditions or inspector do not allow adequate cleaning, state reason as MGO
W	X		Defect not coded. Should be coded as lining failure defective (LFD)

Video X

Video Y

Video	Rejected	Accepted	Reason
X	X		Defect not coded as a defective point repair (RPRD). Material change not coded.
Y	X		Channel defect not coded. Should be coded as MGO, Mortar Missing in Brick Channel



Video Z

Video	Rejected	Accepted	Reason
Z	X		The pipe is not properly cleaned. If obstacle could not be removed, state reason as MGO

Any inspection with the following observed defects that are incorrectly coded or are not coded will be rejected:

Sewer Condition Identification

Structural Defect Description			PACP Acronym
Group	**Descriptor/Modifier**	**Value/Clock Reference**	
Lining Failure	Detached	---	LFD
Surface Damage	---	---	S
	Aggregate Missing	---	SAM
	Aggregate Visible		SAV
	Reinforcement Visible	---	SRV
	Reinforcement Projecting	---	SRP
	Reinforcement Corroded	---	SRC
	Missing Wall	---	SMW
	Corrosion	---	SCP
Hole	---	---	H
	Soil Visible	---	HSV
	Void Visible	---	HVV
Deformed	---	---	D
	Vertical	---	DV
	Horizontal	---	DH
Buckling	---	---	K
Collapse	---	---	X
	Pipe	---	XP
	Brick	---	XB
Weld Failure	Longitudinal	---	WFL
	Circumferential	---	WFC
	Multiple	---	WFM
	Spiral	---	WFS
	Unidentified	---	WFZ
Fracture	Multiple	---	FM
	Hinge	---	FH
Broken	---	---	B
	Soil Visible	---	BSV
	Void Visible	---	BVV
Brickwork	Missing	---	MB
	Dropped Invert	Large	DI
	Missing Mortar	Large	MM
Infiltration	Gusher	---	IG
	Runner	---	IR
Joint Offset	--	Medium	JOM
	---	Large	JOL
Miscellaneous Features	Camera Underwater	---	MCU
	Water Level	20%	MWL
	Water Level Sag	20%	MWLS
Obstacle	---	---	OB
	Brick or Masonry	---	OBB
	Pipe Material	---	OBM
	Protruding	---	OBI
	Wedged	---	OBJ
	Through Connection	---	OBC
	External Cable	---	OBP
	Built into Structure	---	OBS
	Construction Debris	---	OBN
	Rocks	---	OBR
	Other		OBZ

2. Abandoned inspections due to the presence of a drop connection must have a reverse inspection completed. An abandoned inspection due to the presence of a drop connection with no submitted reverse inspection will not be accepted.

3. All submitted SL-RAT inspection data will be subject to the County's Quality Assurance review. The Contractor shall re-inspect all sewers with a rejected SL-RAT inspection at no cost to the County.

4. The County reserves the right to complete independent SL-RAT inspections and compare the results with the Contractor's SL-RAT inspection data. If the follow-up Work differs between the independent and Contractor's SL-RAT scores, the Contractor shall not be paid for the SL-RAT inspection Work or for the follow-up Work that has been completed or that is planned to be performed and shall reimburse the County for all costs expended to complete the SL-RAT inspection and follow-up Work. Reimbursement payment shall be deducted from the next Contractor invoice.

33 01 30.16.05 MEASUREMENT AND PAYMENT

Measurement for CCTV Inspection (on- and off-road) shall be on the basis of linear foot per pipe diameter range inspected as measured from the center of the beginning and ending manholes along the centerline of the inspected pipe. Payment for CCTV Inspection shall be per linear foot inspected (using CCTV or side scan technology) and QA-approved and shall include all mobilization, travel time, coordination with County personnel, traffic control on County roads (excluding road closures), confined space entry, pre-inspection light cleaning, locating and accessing manholes/structures, coordination with property owners, flow control up to 1 MGD, videos, data, data submissions/resubmissions, data corrections and all other Work not included under other items, necessary to complete the Work as specified.

It is anticipated that CCTV inspection Work Orders will be assigned in a single County sewershed; therefore, Work for multiple pipes will be located within a limited geographic area. The County will not pay for any mobilization costs associated with CCTV inspection Work Orders that are located in a single County sewershed. The County will pay a single lump sum mobilization payment per CCTV inspection Work Order when CCTV inspection Work is located in multiple County sewersheds. Payment for mobilization shall be made at the lump sum cost included in the schedule of prices.

Measurement for Miscellaneous CCTV Inspection (on- and off-road) shall be on the basis of per hour beginning when the Contractor inserts into the pipe the inspection equipment and ending when the inspection equipment reaches the ending manhole. On-site hours will be monitored by a County inspector. Payment for Miscellaneous CCTV Inspection shall be per hour spent inspecting the pipe. Payment will not be made until the County has reviewed and QA-approved the inspection video. Payment shall include all travel time, coordination with County personnel, traffic control on County roads (excluding road closures), confined space entry, pre-inspection light cleaning, locating and accessing manholes/structures, coordination with property owners, flow control up to 1 MGD, videos, data, data submissions/resubmissions, data corrections and all other Work not included under other items, necessary to complete the Work as specified.

Payment for Miscellaneous CCTV Inspection, On-Road shall be based on a single three (3)-man crew. Payment for Miscellaneous CCTV Inspection, Off-Road shall be based on a single four (4)-man crew. The County will a pay single lump sum mobilization payment per Miscellaneous CCTV (on- or off-road) Work Order. Payment for mobilization shall be made at the lump sum cost included in the schedule of prices.

Measurement for Sonar Inspection (on- and off-road) shall be on the basis of liner foot per pipe diameter range inspected as measured from the center of the beginning and ending manholes along the centerline of the inspected pipe. Payment for Sonar Inspection shall be per linear foot inspected and QA-approved and shall include all mobilization, travel time, coordination with County personnel, traffic control on County roads (excluding road closures), confined space entry, locating and accessing manholes/structures, coordination with property owners, flow control up to 1 MGD, videos, data, data submissions/resubmissions, data corrections and all other Work not included under other items, necessary to complete the Work as specified.

It is anticipated that sonar inspection Work Orders will be assigned in a single County sewershed; therefore, work for multiple pipes will be located within a limited geographic area. The County will not pay for any mobilization costs associated with sonar inspection Work Orders that are located in a single County sewershed. The County will pay a single lump sum mobilization payment per sonar inspection Work Order when sonar inspection Work is located in multiple County sewersheds. Payment for mobilization shall be made at the lump sum cost included in the schedule of prices.

Measurement for CCTV/Sonar Inspection (on- and off road) shall be on the basis of liner foot per pipe diameter range inspected as measured from the center of the beginning and ending manholes along the centerline of the inspected pipe. Payment for CCTV/Sonar Inspection shall be per linear foot inspected and QA-approved and shall include all mobilization, travel time, coordination with County personnel, traffic control on County roads (excluding road closures), confined space entry, locating and accessing manholes/structures, coordination with property owners, flow control up to 1 MGD, videos, data, data submissions/resubmissions, data corrections and all other Work not included under other items, necessary to complete the Work as specified.

It is anticipated that CCTV/sonar inspection Work Orders will be assigned in a single County sewershed; therefore, Work for multiple pipes will be located within a limited geographic area. The County will not pay for any mobilization costs associated with CCTV/sonar inspection Work Orders that are located in a single County sewershed. The County will pay a single lump sum mobilization payment per CCTV/sonar inspection Work Order when CCTV/sonar inspection Work is located in multiple County sewersheds. Payment for mobilization shall be made at the lump sum cost included in the schedule of prices.

Measurement for Sewer Lateral Inspection shall be on the basis of each lateral inspected regardless of the sewer main or lateral pipe size or length of lateral pipe. Payment for Sewer Lateral Inspection shall be per each lateral inspected and QA-approved and shall include all travel time, coordination with County personnel, traffic control on County roads (excluding road closures), confined space entry, locating and accessing manholes/structures, coordination with property owners,

flow control of the sewer main up to 1 MGD, videos, data, data submissions/resubmissions, data corrections and all other Work not included under other items, necessary to complete the Work as specified.

It is anticipated that sewer lateral inspections will be requested on an as-needed emergency basis. The County will pay the Contractor a single lump sum mobilization line item per sewer lateral inspection Work Order. Payment for mobilization shall be made at the lump sum cost included in the schedule of prices.

Measurement for SL-RAT Inspection (on- and off road) shall be on the basis of each pipe inspected. Payment for SL-RAT Inspection shall be per each pipe inspected and QA-approved and shall include all mobilization, travel time, coordination with County personnel, traffic control on County roads (excluding road closures), locating and accessing manholes/structures, coordination with property owners, data, data submissions/resubmissions, data corrections and all other Work not included under other items, necessary to complete the Work as specified. Payment for follow-up cleaning/inspection Work shall be made at the cleaning and/or inspection contract unit price for the Work.

It is anticipated that SL-RAT inspection Work Orders will be assigned in a single County sewershed; therefore, Work for multiple pipes will be located within a limited geographic area. The County will not pay for any mobilization costs associated with SL-RAT inspection Work Orders that are located in a single County sewershed. The County will pay a single lump sum mobilization payment per SL-RAT inspection Work Order when SL-RAT inspection Work is located in multiple County sewersheds. Payment for mobilization shall be made at the lump sum cost included in the schedule of prices.

END OF SECTION

33 01 30.51 PIPE AND MANHOLE/STRUCTURE CLEANING AND POST-CLEANING CONFIRMATION INSPECTION

33 01 30.51.01 DESCRIPTION

The Work covered by this section consists of providing all labor, equipment, materials and supplies, and performing all operations necessary to complete pipe and manhole/structure cleaning, including cleaning of internal and external drop connections and the introduction into pipe of grease inhibitor chemicals. Work also includes collecting and removing from the pipe and/or manhole/structure all debris that has accumulated from cleaning activities and hauling of debris to an appropriate waste facility. It is anticipated that all Work will be completed without any manned entry; however, any necessary manned entry shall conform to all applicable laws and regulations for confined space entry. All post-cleaning confirmation CCTV inspections shall be completed in accordance with Section 33 01 30.16, Pipeline Inspection. All Work shall be completed in accordance with the most recent NASSCO PACP guidelines, Version 6.0.1 or newer.

Pipe light cleaning is considered incidental to pipe inspection Work. Post-cleaning CCTV, sonar and/or CCTV/sonar inspections and associated data are considered incidental to pipe and manhole/structure cleaning Work.

Within 30 calendar days of receiving the post-cleaning inspection data, the County shall notify the Contractor if the submitted work has been accepted or rejected. Within 30 calendar days of receipt of a post-cleaning confirmation inspection rejection by the County, the Contractor shall re-clean the pipe and resubmit to the County the revised post-cleaning confirmation inspection video/data. The County may complete any cleaning and/or inspection that the Contractor has not resubmitted within the aforementioned 30 calendar day time period. If the County completes the cleaning and/or inspection Work, the Contractor will not be paid for any Work that has been completed or that is planned to be performed and shall reimburse the County for all costs expended to complete the Work. Reimbursement payment shall be deducted from the next Contractor invoice.

Payment shall be made after the sewer/drop connection post-cleaning confirmation CCTV video inspection and/or manhole/structure post-cleaning confirmation photograph has been completed, inspection video/data have been submitted to the County and the County's quality assurance review has been approved.

33 01 30.51.01.01 Reference

All applicable requirements of other portions of the Contract Documents apply to the Work of this Section.

33 01 30.51.01.02 Submittal

1. **Drop Connection Post-Cleaning Confirmation Inspection and Data:** For each drop connection that is cleaned, the Contractor shall submit to the County a CCTV video inspection and associated database as confirmation that drop connection cleaning work is completed. The Contractor shall

submit the inspection database via external hard drive. The Contractor is responsible for providing the external hard drives.

2. **Post-Cleaning Confirmation CCTV Inspection Video and Data:** For each pipe that requires cleaning (light, heavy or specialty cleaning), the Contractor shall submit to the County a CCTV video inspection and associated PACP-compliant database of the pipe after all cleaning work is completed. The Contractor shall submit the inspection database via external hard drive. The Contractor is responsible for providing the external hard drives.

3. The Contractor shall include with each submittal a geodatabase or spreadsheet that lists the ID of all pipe that are included in the Work Order and, for each pipe the:

    1. Submittal ID
    2. Could not locate/access status
    3. Work status (i.e. complete, pending, removed from scope, etc.)

4. The Contractor shall complete a quality assurance review of all data prior to submitting to the County the data for review. The Contractor shall include with each submittal a signed certification letter stating that the data has been reviewed for completeness and correctness.

33 01 30.51.02 DEFINITIONS

1. **Cleaning Pass:** An uninterrupted pass of a hydraulic flusher or root cutter between the beginning and ending manhole. If debris and/or a root/grease obstruction prevent the flusher/root cutter from traveling the entire pipe length from beginning to ending manhole, the Contractor shall continue cleaning or heavy cleaning, if directed by the County. The County will not consider a pass to have been completed if the flusher/root cutter cannot pass debris deposition and/or a root/grease obstruction.

2. **Drop Connection Cleaning:** Cleaning activities necessary to remove from the drop pipe, elbow fitting and drop pipe/main sewer connection all debris, root intrusions and/or grease blockages. Drop connection cleaning work will require a minimum of one pass of a root cutter and hydraulic flusher. All debris must be captured and removed from the drop pipe, main sewer and/or manhole.

3. **Pipe Light Cleaning:** Pipe cleaning activities necessary to remove from the pipe between the beginning and ending manholes/structures, including benches, all debris, root intrusions and/or grease blockages after up to three (3) passes with a hydraulic flusher and root cutter have been completed. At least one (1) of the three (3) passes must be made with a root cutter. The minimum flow rate for light cleaning of pipe 15 inch diameter and smaller shall be 80 gallons of water per minute (gpm). The minimum flow rate for light of pipe larger than 15 inch diameter shall be 120 gpm. All debris must be removed from the pipe, including any debris that may have been washed up into any service connections (does not include known pre-existing conditions in service connections), drop connections or the manhole/structure bench.

4. **Pipe Heavy Cleaning:** Pipe cleaning activities necessary to remove from the pipe between the beginning and ending manholes/structures all debris, root intrusions and/or grease blockages after up to six (6) passes with a hydraulic flusher, high-velocity hydro-cleaning equipment, mechanical/hydraulic spinner nozzle and root cutter have been completed. At least one (1) of the six (6) passes must be made with a root cutter. Heavy cleaning is a separate line item to clean a pipe that is not cleaned to the County's specifications after light cleaning has been completed. Heavy cleaning will not be approved for payment unless one of the following requirements is met:

    a. The Contractor submits to the County a CCTV video from inside the pipe that shows at least four (4) attempts to remove debris/blockage using a jet nozzle and root cutter.
    b. The Contractor obtains written County approval prior to heavy cleaning the pipe.

    All debris must be removed from the pipe, including any debris that may have been washed up into any service connections (does not include known pre-existing conditions in service connections), drop connections or the manhole/structure bench.

    Payment shall not be made until the pre- and post-heavy cleaning inspection videos are submitted to and approved by the County.

5. **Off-Road Pipe Cleaning:** Pipe cleaning work where the beginning and ending manholes are not located in a paved area such as a sidewalk, alley, driveway or road.

6. **Off-Road Manhole/Structure Cleaning:** Manhole cleaning activities to remove from the manhole walls, steps and benches all sludge, rocks, debris, roots and/or grease and other solid and semi-solid material. This work does not include removing from the manhole/structure bench any debris, roots and/or grease that is collected from pipe light, heavy or specialty cleaning activities. This work includes manhole/structure cleaning work where the manhole/structure is not located in a paved area such as a sidewalk, alley, driveway or road.

7. **On-Road Pipe Cleaning:** Pipe cleaning work where either the beginning or ending manholes are located in a paved area such as a sidewalk, alley, driveway or road.

8. **On-Road Manhole/Structure Cleaning:** Manhole cleaning activities to remove from the manhole walls, steps and benches all debris, roots and/or grease. This work does not include removing form the manhole/structure bench any debris, roots and/or grease that is collected from pipe light, heavy or specialty cleaning activities. This work includes manhole/structure cleaning work where the manhole/structure is located in a paved area such as a sidewalk, alley, driveway or road.

9. **Specialty Cleaning:** Pipe cleaning work that, in the opinion of the County, cannot be adequately completed by heavy cleaning activities. Specialty cleaning is a separate line item to clean a pipe that is not cleaned to the

County's satisfaction after light or heavy cleaning work has been completed.

Specialty cleaning will not be approved for payment unless both of the following requirements are met:

a. The Contractor submits to the County a CCTV video from inside the pipe that shows at least seven (7) attempts to remove debris/blockage using a jet nozzle and root cutter and/or shows the pipe conditions (i.e. flow rate, flow depth, debris/obstruction, etc.) that preclude light/heavy cleaning.
b. The Contractor obtains written County approval prior to specialty cleaning the pipe.

Specialty cleaning activities shall remove from the pipe between the beginning and ending manholes/structures, all debris, root intrusions and/or grease blockages, including any debris that may have been washed up into any service connections (does not include known pre-existing conditions in service connections), drop connection or the manhole/structure bench. Prior to proceeding with specialty cleaning activities, the Contractor shall submit to the County the proposed means and methods for cleaning the pipe and the estimated hours and cost to complete the Work. Upon review and approval of the Contractor's submission, the County will forward to the Contractor written approval for specialty cleaning.

Specialty cleaning work will require an unlimited amount of passes of a mechanical/hydraulic spinner nozzle, mechanically powered cleaning equipment such as porcupines, cutters and bucket machines, clamshells and/or heavy duty power rodders. All debris must be removed from the pipe, including any debris that may have been washed up into any service connections (does not include known pre-existing conditions in service connections), drop connections or the bench wall of the manholes/structures.

Payment shall not be made until the pre- and post-specialty cleaning inspection videos are submitted to and approved by the County.

33 01 30.51.03 MATERIALS/EQUIPMENT

33 01 30.51.03.01 Cleaning Equipment

1. It is at the Contractor's discretion which type of equipment shall be used to meet the County's performance criteria specified in these specifications. The Contractor's selection of equipment type shall not adversely affect the environment or the Work Order schedule or costs. The County reserves the right to remove Work from the Work Order that the County deems is being improperly performed.

2. The County may allow the use of saw and cutters that are specifically designed and manufactured for the material and/or size of pipe to be cleaned. The equipment shall be subject to approval by the County.

3. Pipe cleaning equipment shall have a selection of two or more high-velocity nozzles that are properly sized for the pipe that will be cleaned. The nozzles shall be capable of producing a scouring action from 15 to 45 degrees in all size lines designated to be cleaned.

4. Manhole/structure cleaning equipment shall consist of a high-velocity gun for washing and scouring manhole walls and floor. The gun shall be capable of producing flows from a fine spray to a solid stream. The equipment shall carry its own tank, auxiliary engines, pumps, and hydraulically driven hose reel.

5. Rodding equipment machine shall be capable of rodding distances of up to 750 feet in one setup. The machine shall have the ability to spin the rod either clockwise or counterclockwise and be able to be pushed straight out or pulled back without rotating the machine. It shall also be capable of pulling pipe-size swabs or brushes back through the pipe for cleaning and flushing purposes.

6. Heavy-duty bucket machines may be used on dragline work to clean the pipeline with buckets, brushes, scrapers, swabs or other similar devices in order to effectively remove the debris and provide a clean sewer for the inspection. The equipment used will be subject to approval by the County.

7. Hydraulically-propelled pipe pigging equipment shall be a movable dam-type and be constructed in such a way that a portion of the dam may be collapsed at any time during the cleaning operation to protect against surcharging the pipe. The movable dam shall be equal in diameter to the pipe being cleaned and shall provide a flexible scraper around the outer periphery to insure removal of grease. If cleaning balls or other equipment, which cannot be collapsed, are used, special precautions to prevent pipe surcharging shall be taken.

33 01 30.51.03.02 Hauling Equipment

All vehicles used for debris hauling shall have watertight bodies and are properly equipped and fitted with seals and covers to prohibit material spillage or drainage. Vehicles shall be cleaned as often as necessary to prevent deposit of material on roadways.

33 01 30.51.03.03 Grease Inhibitor Chemical

1. The grease inhibitor chemical must be a blend of surfactants, solvents and/or amino acids that are capable of liquefying sewer grease and indefinitely maintain grease in a liquid state.

2. The chemical shall contain no petroleum solvents and must be completely biodegradable.

3. The chemical shall have a liquid form, be colorless and must be dispersible in cold or hot water.

4. The chemical shall not cause harm to human health or the environment beyond its intended use.

5. The grease inhibitor chemical shall be mixed with water to form a grease inhibitor solution. The solution shall consist of no less than 1 percent (1%) grease inhibitor chemical by volume.

6. When mixed with water, the chemical must change the color of the solution from clear to a distinct color to provide evidence that the chemical and water have been properly mixed.

7. Chemical shall be dispersed using a rotating or spinning nozzle with a spray angle of 30 and 90 degrees.

33 01 30.51.04 CONSTRUCTION REQUIREMENTS

33 01 30.51.04.01 General

1. The Contractor is responsible for notifying the property owner when access onto private property is required.

2. Pipe cleaning shall be performed from the downstream manhole/structure to the upstream manhole/structure unless site condition preclude this setup. Alternative setups shall be approved by the County.

3. The Contractor shall immediately notify the County if the Contractor believes that cleaning work will cause a pipe collapse or overflow/basement backup.

4. Passing material from pipe to the adjacent pipe shall not be permitted. The Contractor shall collect and remove all debris that is loosened as a result of the sewer cleaning operations.

5. Potable water to be used for pipe cleaning work may be obtained from County fire hydrants. The Contractor shall be responsible for obtaining all necessary fire hydrant permits. No water shall be drawn from a public fire hydrant except through a Baltimore County issued water meter. Fire hydrant permit applications are made through the Department of Public Works Bureau of Utilities. The Contractor shall provide all piping, hoses, valves, or connections necessary to complete the Work. All vehicles involved with water use operations shall be inspected by the Bureau of Utilities. The Contractor shall install a backflow device either on the hydrant or downstream of the meter. Access to fire hydrants for the purpose of fire protection shall be maintained at all times.

6. If structural defects such as broken or collapsed pipe preclude the Contractor from completing the cleaning work, the Contractor shall submit to the County a post-cleaning confirmation CCTV inspection video that clearly shows the structural defect blockage. The Contractor shall attempt to complete the inspection by completing a reverse inspection (i.e. televising from the other manhole). The reverse inspection shall immediately follow the initial inspection.

7. If operation and maintenance defects such as debris, roots or grease preclude the Contractor from completing the cleaning work, the Contractor shall submit to the County the CCTV video evidence that light cleaning was completed and immediately contact the County Inspector to obtain approval to complete heavy cleaning or specialty cleaning. After heavy or specialty cleaning is completed, the Contractor shall complete the post-cleaning confirmation CCTV inspection.

8. If, based on the initial light cleaning and CCTV inspection, it is determined that additional/supplemental cleaning is necessary, the County Inspector may direct the Contractor to disregard heavy cleaning and immediately begin specialty cleaning.

9. When manned entry is required to remove debris, such as boulders, from the manhole/structure, all laborers shall be actively working to remove debris. Payment will not be made for laborers who are not actively assisting with removing debris.

10. It shall be the Contractor's responsibility to remove materials and equipment that has been lodged in the pipe due to the Contractor's activities.

11. The Contractor may submit to the County a request to re-assign previously-assigned outstanding Work to a new Work Order. The County shall not pay a mobilization fee for the new Work Order. All unit prices associated with the original Work Order shall apply to the new Work Order.

33 01 30.51.04.02 Off-Road Cleaning

1. When Contractor equipment must travel off-road, the Contractor shall use equipment such as All-Terrain Vehicles and other low ground pressure equipment/tires/tracks to minimize disturbances.

2. Vegetation clearing for off-road inspections shall be paid for separately.

3. It is anticipated that no access roads are necessary to complete any cleaning work. If, prior to Contractor mobilization, it is determined that an access road is necessary to complete the Work, the County will construct an access road and the Contractor will complete the assigned Work; otherwise, the Work will be removed from the Contractor's Work Order.

33 01 30.51.04.03 Buried/Inaccessible Manholes/Structures

1. The County may approve access to and/or cleaning of an adjacent pipe segment to clean the assigned pipe cleaning Work. In such cases, the Contractor shall be paid for the Work completed on the assigned and adjacent pipe segment.

2. The County will locate and make accessible manholes that could not be located by the Contractor. Once a manhole is made accessible, the County may elect to complete the cleaning Work. The Contractor will not be paid for any Work that has been completed or is planned to be completed if the County completes the cleaning Work.

33 01 30.51.04.04 Flow Control

1. The Contractor shall maintain flow up to 1 MGD at no additional cost to the County. Flow control above 1 MGD shall be completed in accordance with Section 33 01 30.80, Flow Control.

2. The Contractor shall make at least one attempt to complete the Work during minimum flow hours or by pulling a hydraulic jet nozzle in front of the camera before determining that Flow Control over 1 MGD is needed.

3. Sewage that is diverted during cleaning operations shall be returned to the sanitary system.

33 01 30.51.04.05 Drop Connection Cleaning

1. Cleaning shall begin from the manhole and proceed up the drop pipe.

2. The Contractor shall use a root cutter that is no more than 2 inches smaller than the pipe diameter.

33 01 30.51.04.06 Cleaning Precautions

The Contractor shall take all precautions necessary to avoid damage to public or private property that is adjacent to or served by the pipe. The Contractor is responsible for all repairs to public or private property, including basement backups, as a result of the Contractor's operations at no additional costs to the County.

33 01 30.51.04.07 Debris Containers

1. Collected debris shall be removed from the pipe and/or manhole/structure and deposited into suitable watertight containers.

2. The Contractor shall not be allowed to accumulate over multiple days any debris silt and/or liquid waste, sludge on site. All materials shall be removed from the site at least once a day at the end of each workday.

3. Sufficient number of containers must be available at all times to receive the debris removed from pipes and manholes/structures.

4. Site conditions may not accommodate the container to be sited immediately adjacent to the manhole/structure from which debris is being raised; therefore, double handling of the debris may be necessary. The Contractor shall provide for such double handling to be carried out safely and efficiently and at no cost to the County.

5. The Contractor is responsible for hauling and disposing of all materials that are removed from the pipe and/or manhole/structure. Hauling and disposal costs are considered incidental to the Work.

33 01 30.51.04.08 Debris Hauling

The Contractor shall keep the haul route and Work area(s) neat and clean and reasonably free of odor, and shall bear all responsibility and cost for the cleanup of any spill which occurs during transport. The Contractor shall immediately clean any spill. If the Contractor fails to immediately clean such spill, the County shall have the right to clean or arrange for its cleanup and charge the Contractor with all costs including administrative costs and overhead incurred by the County in connection with such cleanup and retains the right to deduct those costs from moneys due to the Contractor.

33 01 30.51.04.09 Acceptance of Drop Connection Work

Acceptance of drop connection cleaning Work shall be when all debris, root intrusions and/or grease blockages have been removed from the drop pipe/connection. The Contractor shall submit to the County a post-cleaning CCTV inspection video of the drop pipe and drop connection as visual evidence that the drop pipe connection was properly cleaned. The County may complete a visual post-cleaning inspection to confirm that the cleaning has been satisfactorily completed. If the County determines that the cleaning is unsatisfactory, the Contractor shall be required to re-clean the drop connection at no cost to the County until the cleaning is shown to be satisfactory. Payment will not be made until the final post-cleaning CCTV inspection video has been submitted to the County and approved by the County.

33 01 30.51.04.10 Acceptance of Pipe Cleaning Work

1. All submitted post-cleaning CCTV inspection videos will be subject to the County's Quality Assurance review.

2. The County will not consider a pipe to be cleaned until the post-cleaning CCTV inspection video confirms that the cleaning operations restored the pipeline to at least 98% of the pipe's cross-sectional area. If the CCTV inspection shows the cleaning to be unsatisfactory, the Contractor shall re-clean and re-inspect the pipe until the post-cleaning CCTV inspection shows a clean pipe. Re-cleaning and re-inspection work shall be completed at no additional cost to the County. Payment will not be made until the final post-cleaning CCTV inspection video has been submitted to the County and approved by the County.

3. Depending on flow conditions, the Contractor may submit to the County a request to complete a post-cleaning sonar or CCTV/sonar inspection in lieu of a post-cleaning CCTV inspection. Requests and approvals shall be made on a case by case basis.

33 01 30.51.04.11 Acceptance of Manhole/Structure Cleaning Work

Acceptance of manhole/structure cleaning Work shall be when all surfaces, including manhole walls, steps and benches, are clean and free of all sludge, rocks, debris, roots and/or grease and other solid and semi-solid material are completely removed. The Contractor shall submit to the County a post-cleaning landscape picture of the manhole as visual evidence that the manhole was properly cleaned. The County may complete a visual post-cleaning inspection to confirm that the cleaning has been satisfactorily completed. If the County determines that the cleaning is unsatisfactory, the Contractor shall be required to re-clean the manhole/structure until the cleaning is shown to be satisfactory at no cost to the County. Payment will not be made until the final post-cleaning inspection picture has been submitted to the County and approved by the County.

33 01 30.51.04.12 Grease Inhibitor Cleaning

1. Grease inhibitor chemical shall be delivered as specified below:

Pipe Diameter	Minimum Number of Chemical Injection Passes
6-10 inch	1
12 inch and larger	2

2. The grease inhibitor chemical shall be mixed with water to form a grease inhibitor solution. The solution shall consist of no less than 1% grease inhibitor chemical by volume.

3. The grease inhibitor solution shall be introduced into the sewer by the Contractor's high pressure hydraulic sewer cleaning equipment at a pressure of 1,500 to 2,000psi.

4. The Contractor shall introduce the grease inhibitor solution to adequately and completely coat the entire expose pipe wall for the entire length of the sewer.

5. The Contractor shall begin introducing the inhibitor solution at the downstream manhole and continue introducing the solution to the upstream manhole.

6. The Contractor shall wait no less than 10 minutes and no more than 15 minutes before pulling the hydraulic hose back to the downstream manhole. To clean pipes with encrusted grease, the County may direct the Contractor to wait up to 72 hours after the grease inhibitor solution has been introduced into the sewer before completing hydraulic jetting. The Contractor shall engage hydraulic jetting at a pressure of 750 to 1,000 psi when pulling the hose back to the downstream manhole.

7. The Contractor shall not complete a post-cleaning confirmation inspection as part of the Grease Inhibitor Cleaning Work. The County may assign to the Contractor separate Work for CCTV inspection (including pre-inspection light cleaning) for sewers where grease treatment has been applied.

33 01 30.51.05 MEASUREMENT AND PAYMENT

Measurement for Pipe Heavy Cleaning (on- and off-road) shall be on the basis of linear foot per pipe diameter range cleaned as measured from the center of the beginning and ending manholes along the centerline of the cleaned pipe. Payment for Pipe Cleaning shall be per linear foot cleaned and inspected and QA-approved and shall include all mobilization, travel time, coordination with County personnel, traffic control on County roads (excluding road closures), confined space entry, collection, removal, hauling and disposal of all debris, post-cleaning inspections, locating and accessing manholes/structures, coordination with property owners, flow control up to 1 MGD, videos, data, data submissions/resubmissions, data corrections and all other Work not included under other items necessary to complete the Work as specified.

It is anticipated that pipe heavy cleaning Work will be assigned on an as-needed basis in a single County sewershed; therefore, Work for multiple pipes will be located within a limited geographic area. The County will not pay for any mobilization costs associated with pipe heavy cleaning Work that is located in a single County sewershed.

Measurement for Drop Connection Cleaning (on- and off-road) shall be on the basis of each drop connection that is cleaned. Payment for Drop Connection Cleaning shall be per each drop connection cleaned and inspected and QA-approved and shall include all mobilization, travel time, coordination with County personnel, traffic control on County roads (excluding road closures), confined space entry, collection, removal, hauling and disposal of all debris, post-cleaning inspection, locating and accessing manholes/structures, coordination with property

owners, flow control up to 1 MGD and all other Work not included under other items necessary to complete the Work as specified.

It is anticipated that drop connection cleaning Work will be assigned on an as-needed basis in a single County sewershed; therefore, Work for multiple pipes will be located within a limited geographic area. The County will not pay for any mobilization costs associated with drop connection cleaning Work that is located in a single County sewershed.

Measurement for Manhole/Structure Cleaning (on- and off-road) shall be on the basis of each manhole/structure that is cleaned. Payment for Manhole/Structure Cleaning shall be per each manhole/structure cleaned and inspected and QA-approved and shall include all mobilization, travel time, coordination with County personnel, traffic control on County roads (excluding road closures), confined space entry, collection, removal, hauling and disposal of all debris, post-cleaning inspection, locating and accessing manholes/structures, coordination with property owners, flow control up to 1 MGD and all other Work not included under other items necessary to complete the Work as specified.

It is anticipated that manhole/structure cleaning Work Orders will be assigned in a single County sewershed; therefore, Work for multiple manhole/structure cleaning will be located within a limited geographic area. The County will not pay for any mobilization costs associated with manhole/structure cleaning Work Orders that are located in a single County sewershed. The County will pay a single lump sum mobilization payment per manhole/structure cleaning Work Order when manhole/structure cleaning Work is located in multiple County sewersheds. Payment for mobilization shall be made at the lump sum cost included in the schedule of prices.

Measurement for Pipe Specialty Cleaning (on- and off-road) shall be on the basis of per hour beginning when the Contractor inserts cleaning equipment in the manhole/structure and ending when the last of the debris has been placed in the debris container. Payment for Pipe Specialty Cleaning shall be per hour spent cleaning the pipe and removing debris. Payment will not be made until the County has reviewed and approved the post-cleaning inspection. Payment shall include all mobilization, travel time, coordination with County personnel, traffic control on County roads (excluding road closures), confined space entry, collection, removal, hauling and disposal of all debris, including manual removal of debris such as boulders, that cannot be vacuumed from the manhole/structure and manually loading the debris into the debris container, post-cleaning inspections, locating and accessing manholes/structures, coordination with property owners, flow control up to 1 MGD, videos, data, data submissions/resubmissions, data corrections and all other Work not included under other items necessary to complete the Work as specified.

Payment for Pipe Specialty Cleaning, On-Road shall be based on a single three (3)-man crew. Payment for Pipe Specialty Cleaning, Off-Road shall be based on a single four (4)-man crew.

The County shall pay only for actual time spent to complete the Work. The County will not pay for work stoppages, such as lunch breaks, or work delays.

Measurement for Grease Inhibitor Cleaning (on- and off-road) shall be on the basis of linear foot per pipe segment up to 24-inch diameter where grease inhibitor

solution is introduced from beginning to ending manhole as measured from the center of the beginning and ending manholes along the centerline of the treated pipe. The pipe linear footage that is recorded in the County's geographic information system may be used in lieu of field measurements. Payment for Grease Inhibitor Cleaning shall be per liner foot where grease inhibitor solution is introduced and shall include all mobilization, travel time, coordination with County personnel, traffic control on County roads (excluding road closures), confined space entry, collection, removal, hauling and disposal of all debris, locating and accessing manholes/structures, coordination with property owners, flow control up to 1 MGD, sewer cleaning, furnishing grease inhibitor chemical, mixing all chemicals and water, introducing grease inhibitor solution and all other Work not included under other items necessary to complete the Work as specified.

If the grease inhibitor cleaning requires specialized equipment or modification of existing Contractor equipment, the cost of such equipment and/or modifications is considered incidental to Grease Inhibitor Cleaning.

It is anticipated that grease inhibitor cleaning Work Orders will be assigned in a single County sewershed; therefore, Work for multiple pipes will be located within a limited geographic area. The County will not pay for any mobilization costs associated with grease inhibitor cleaning Work Orders that are located in a single County sewershed. The County will pay a single lump sum mobilization payment per grease inhibitor cleaning Work Order when grease inhibitor cleaning Work is located in multiple County sewersheds. Payment for mobilization shall be made at the lump sum cost included in the schedule of prices.

END OF SECTION

33 01 30.73 SMOKE AND DYED WATER TESTING

33 01 30.73.01 DESCRIPTION

The Work covered by this section consists of providing all labor, equipment, materials and supplies, and performing all operations necessary to complete smoke testing, dyed water tests and dyed water floods. It is anticipated that all Work will be completed without any manned entry; however, any necessary manned entry shall conform to all applicable laws and regulations for confined space entry.

Flow control is not anticipated to perform the smoke testing. Flow control up to 1 MGD is considered incidental to the Work for dyed water tests and dyed water floods. The Contractor shall make at least one attempt to complete the Work during minimum flow hours or by pulling a hydraulic jet nozzle in front of the camera before determining that Flow Control over 1 MGD is needed

The cost for recording dyed water test photographs is considered incidental to the Work. If a dyed water test requires a CCTV video inspection, the cost for the CCTV video inspection, pre-inspection light cleaning and flow control up to 1 MGD will be paid for under Miscellaneous CCTV Inspection. Mobilization for the CCTV inspection is considered incidental to the Work. CCTV video inspection and associated mobilization for dyed water floods is considered incidental to the Work.

Within 30 calendar days of receiving the inspection data, the County shall notify the Contractor if the submitted work has been accepted or rejected. Within 30 calendar days of receipt of a test rejection by the County, the Contractor shall correct and resubmit to the County the revised test video/data. The County may complete any test that the Contractor has not resubmitted within the aforementioned 30 calendar day time period. If the County completes the test Work, the Contractor will not be paid for any Work that has been completed or that is planned to be performed and shall reimburse the County for all costs expended to complete the Work. Reimbursement payment shall be deducted from the next Contractor invoice.

Payment shall be made after the smoke and/or dyed water tests/floods have been completed, inspection data/pictures have been submitted to the County and the County's QA-review has been approved.

33 01 30.73.01.01 Reference

All applicable requirements of other portions of the Contract Documents apply to the Work of this Section.

33 01 30.73.01.02 Submittals

1. **Smoke Test Inspection Data and Photographs**: For each smoke test observation, the Contractor shall submit to the County the County's standard smoke/dye test summary spreadsheet and associated photographs. The Contractor shall submit the spreadsheet, photographs, video and/or database via external hard drive. The Contractor is responsible for providing the external hard drives.

2. The County will provide to the Contractor an electronic copy of the smoke/dye test summary spreadsheet.

   The following fields in the summary spreadsheet shall be populated by the Contractor:

   a. Date
   b. SSA
   c. Facility ID
   d. Address where observed defect is located
   e. Deficiency code
   f. Tributary area (length and width)

   A smoke/dye test summary sheet must be submitted for pipes that do not have any defects.

   Electronic images shall be 320 pixels x 240 pixels, 36 pixels/inch, jpg format. At a minimum:

3. **Dyed Water Test Inspection Data and Photographs:** For each pipe that has been dyed water tested, the Contractor shall submit to the County a smoke/dye test summary spreadsheet and photographs of each recorded observation that shall include photographs of a positive or negative test. The Contractor shall submit the spreadsheet and photographs via external hard drive. The Contractor is responsible for providing the external hard drives.

   The following fields in the summary spreadsheet shall be populated by the Contractor:

   a. Facility ID
   b. SSA
   c. Date
   d. Address
   e. Dye Test (yes or no)
   f. US MH
   g. DS MH
   h. PIC Att (yes or no)
   i. CCTV (yes or no)

   A smoke/dye test summary sheet must be submitted for pipes that do not have any defects.

   Electronic images shall be 320 pixels x 240 pixels, 36 pixels/inch, jpg format. At a minimum:

4. **Dyed Water Flood Inspection Data and Video:** For each pipe where a dyed water flood has been completed, the Contractor shall submit to the County a smoke/dye test summary spreadsheet and associated CCTV inspection video and PACP-compliant database. The Contractor shall submit the spreadsheet, database and video via external hard drive. The Contractor is responsible for providing the external hard drives.

The following fields in the summary spreadsheet shall be populated by the Contractor:

a. Facility ID
b. SSA
c. Date
d. Address
e. Dye Test (yes or no)
f. US MH
g. DS MH
h. PIC Att (yes or no)
i. CCTV (yes or no)

A smoke/dye test summary sheet, CCTV database and inspection video must be submitted for pipes that do not have any defects.

5. The Contractor shall include with each submittal a geodatabase or spreadsheet that lists the ID of all pipe that are included in the Work Order and, for each pipe the:

a. Submittal ID
b. Could not locate/access status
c. Work status (i.e. complete, pending, removed from scope, etc.)

6. The Contractor shall complete a quality assurance review of all data prior to submitting to the County the data for review. The Contractor shall include with each submittal a signed certification letter stating that the data has been reviewed for completeness and correctness.

33 01 30.73.02 DEFINITIONS

1. **Dyed Water Test:** Introduction into a manhole/structure of fluorescent dyed water and recording/photographing locations/connections in a pipe where the dyed water is entering.

2. **Dyed Water Flood:** Partially filling with dyed water a section of storm drain pipe or flooding an area above a suspected source of inflow and completing a CCTV inspection to identify and locate sources of infiltration/inflow. A plug or sandbags are inserted into the storm drain pipe to partially fill the pipe with dyed water. Furnishing, installing and removing plugs and/or sandbags is considered incidental to the Work.

3. **Smoke Testing:** Introduction into a pipe of non-toxic smoke candles or smoke fluid and recording/photographing locations where the smoke is visually observed above grade.

4. **Test Area:** Street where the pipe to be smoke tested is located and one neighborhood block beyond the street in all directions.

33 01 30.73.03 MATERIALS/EQUIPMENT

33 01 30.73.03.01 Smoke Testing Equipment

1. Blowers

The Contractor shall provide a portable blower designed and built specifically for the use of smoke testing. The blower shall be self-contained and be capable of producing a minimum of 4,500 cubic feet of air per minute (cfm) when working as a blow-in ventilator and 4,000 cfm when working as a suction ventilator.

The base of the blower shall have appropriate adapters and seals to make a good connection to the manhole without excessive loss of smoke.

2. Smoke Production

Smoke fluid and smoke candles shall produce a chemical reaction to generate continuous smoke for the duration of the test and can be controlled by the Contractor. The smoke shall be white to gray smoke, leave no residue and shall be non-toxic and non-explosive.

Each smoke candle shall be capable of producing adequate volume of smoke when used alone or in combination with a number of candles for the duration of the test.

At all times, the field crew shall have in their possession the smoke fluid/candle MSDS sheet(s) and shall provide to requestor a copy of the MSDS sheet(s).

33 01 30.73.04 CONSTRUCTION REQUIREMENTS

33 01 30.73.04.01 Public Notification for Smoke Testing

1. The Contractor shall distribute Baltimore County's standard smoke test notification door hanger on each door of each building located in the test area. The Contractor shall also notify the local police and fire stations of the planned smoke tests. Notifications shall be distributed three (3) calendar days prior to smoke testing.

2. Door hanger printing and distribution is considered incidental to the Work.

33 01 30.73.04.02 County Notification for Smoke Testing

1. The day of testing and prior to starting any test for that day, the Contractor shall contact:

Baltimore County Fire Department dispatch (410-307-2016)
Tina Glab - tglab@baltimorecountymd.gov
Sharon Ganzler - sganzler@baltimorecountymd.gov
Kevin Chaney - kchaney@baltimorecountymd.gov
Kim Williams - kimwilliams@baltimorecountymd.gov
Karon Tipton - ktipton@baltimorecountymd.gov
Jim Freeland - jfreeland@baltimorecountymd.gov
Rodney Turner - rturner@baltmorecountymd.gov
James Resch - jresch@baltimorecountymd.gov

Local fire house

2. For each contact noted above, the Contractor shall provide each day the locations where smoke tests will be performed for the day and Contractor contact information.

3. Once smoke testing for the day has been completed, the Contractor shall contact the County Bureau of Utilities to notify them that all tests have been completed.

4. It shall be the Contractor's responsibility to keep adequate records for all notifications and to produce them upon request by the County.

33 01 30.73.04.03 Smoke Testing after Rainfall

1. Smoke testing shall be performed only during dry weather. Each day before the inspection crews begin work, the Contractor will review the weather conditions from the previous calendar day.

2. If the rainfall intensity was equal to or greater than 0.15 in/hr for a duration of one (1) hour or the total daily rainfall was equal to or greater than 0.5 inches, smoke testing will be delayed for a minimum of one calendar day.

33 01 30.74.04.04 Performing Smoke Testing

1. Testing shall consist of a central manhole, where the blower will be positioned, and an upstream and downstream manhole and the pipe between them. Inspection lengths shall not exceed 1,000 linear feet with a single blower.

2. Recording observations will not begin until a smoke plume is visible emanating from the plumbing vents of houses that are located the farthest away from the smoke testing machine.

3. The Contractor shall provide, install and remove temporary plugs, sandbags, or flow barriers as required to contain an adequate volume of smoke within the section of pipe being tested, or to limit the extent of pipe subjected to pressurized smoke. The Contractor shall monitor the resulting surcharged pipe at the manhole/structure upstream of the pipe section that is being tested and prevent overflow conditions from occurring by removing the flow barriers.

4. Any sanitary sewer overflow or basement backup that is caused by the Contractor's Work shall be immediately reported to the County and cleaned up by the Contractor at no cost to the County, as required in these specifications.

5. Prior to placing any smoke into a manhole/structure, the Contractor shall evacuate the system with a blower to ensure that any collection of explosive gas and any odor that may be introduced into the adjacent properties have been dispersed prior to pressurizing the pipe with smoke. Removing the covers of all manholes/structures in the run, then

placing a vacuum on the manhole where the blower is located, or, then blowing air into the manhole may accomplish evacuation.

6. Recorded observations shall be referenced and dimensioned to permanent landmarks or house or lot numbers.

33 01 30.74.04.05 Smoke/Dye Test Summary Sheet and Observations

1. The Contractor shall complete a smoke/dye test summary sheet for each location where a smoke test observation is recorded. Below is a copy of the County's standard smoke/dye test summary sheet.

Baltimore County Smoke/Dye Test Summary Sheet

DATE: _____ SSA: _____

FACILIY ID	LEAK NO.	ADDRESS	DEFICIENCY CODE	TRIB AREA (length|width in ft)		PONDING Y/N	PLUMBING INS	IN-HOUSE REPAIR	DYE TEST Y/N	WO #	PIC L Y/N	PIC Z Y/N	CCTV Y/N

Comments:

Smoke Defect Codes

Cleanout Cap		**Sidewalk**	
Sunken/Funneling	CO1	Smoke along Edge	SWE
Broken Nut	CO2	Sinking	SWS
Not Located	CO3	Cracked	FH
Under Ground	CO4	Undetermined	
Missing	CO5		
Drains		**Stand Pipe**	
Foundation	FD	Crooked/Offset	SP1
Driveway	DD	Pipe	SP2
Basement	BD	Ferrule	SP3
Fire Hydrant		**Storm Drain**	
Upright Pipe	FH	Inlet	SDI
		Manhole	SMH
House		**Valve Vaults**	
Down Spouts	DS	Water Valve Vault	WVC
Window Well	WW	Surrounding Water Vault	WVA
Sump Pump	SP	Gas Vault Cover	GVC
		Surrounding Gas Vault	GVA
House Lateral		**Sewer MH**	
Main - C/O	HL1	Loose Cover	MHC
C/O - House	HL2	Shifted Frame	MHF
		Surrounding Area	MHA
Main Line			
Between Manholes	ML		

Site Sketch:

N

2. For smoke/dye test observations, the Contractor shall provide a site sketch showing:
   a. Location of the observation with a minimum of three dimensions relative to a permanent structure or marker (i.e. cross streets/building address)
   b. Approximate limits of area tributary to the observation and measurements of the tributary area
3. For smoke/dye test defects, the Contractor shall provide a photograph showing
   a. Location of observation showing a permanent structure in the background
   b. A minimum of one photograph showing the observation

33 01 30.74.04.06 Performing Dyed Water Test

1. The Contractor is responsible for notifying the property owner when access onto private property is required.

2. The Contractor is responsible for obtaining and transporting water to be used for the dyed water test. The cost to obtain and transport the water is considered incidental to the Work.

3. The Contractor shall wait a minimum of 15 minutes from the time the dyed water was introduced into the system before recording that the test was positive or negative.

4. Any sanitary sewer overflow or basement backup that is caused by the Contractor's Work shall be immediately reported to the County and cleaned up by the Contractor at no cost to the County, as required in these specifications.

5. In the event CCTV inspection work is required, CCTV inspections work shall be completed in accordance with Section 33 01 30.16, Pipeline Inspection and paid in accordance with Miscellaneous CCTV Inspection.

33 01 30.74.04.07 Dyed Water Test Summary Sheet and Observations

1. The Contractor shall complete a smoke/dye test summary sheet for each dye test.

2. For each dye test the Contractor shall record the following photographs:

    a. Landscape photograph of manhole location. The photograph must also show a placard with the test header information. Background features must be shown so that the test location can be found in the future.
    b. Zoom image of manhole showing a positive or negative test result. For positive test results, the photograph must show the location where the dyed water is entering the manhole/structure or pipe.

3. The CCTV video inspection shall clearly show the location where the dyed water is entering the manhole/structure or pipe.

33 01 30.74.04.08 Performing Dyed Water Flood

1. The Contractor is responsible for notifying the property owner when access onto private property is required to perform the test.

2. The Contractor is responsible for obtaining and transporting water to be used for the dyed water flood. The cost to obtain and transport the water is considered incidental to the Work.

3. The storm drain or observed defect shall be filled with a minimum of 6 inches of standing water for a minimum of 15 minutes. The flood test

shall be considered negative if no dyed water is observed after the storm drain or defect has been flooded for 15-minutes.

4. CCTV inspection work, including pre-inspection light cleaning, for dyed water floods is considered incidental to the Work and shall be completed in accordance with Section 33 01 30.16, Pipeline Inspection.

5. The Contractor is responsible for furnishing and installing temporary inflatable plugs, sandbags or other flow restrictors or baffles to isolate the storm drain pipe or observed defect that is being tested. The Contractor is responsible for completely removing all plugs, sandbags or flow restrictors. The Contractor shall immediately notify the Bureau of Utilities Emergency Sewer Services (410-887-7415) if a plugging device is flushed into the storm drain system.

6. Any sanitary sewer overflow or basement backup that is caused by the Contractor's Work shall be immediately reported to the County and cleaned up by the Contractor at no cost to the County, as required in these specifications

33 01 30.74.04.09 Quality Assurance Review

1. All submitted testing data will be subject to the County's Quality Assurance review.

2. The Contractor shall revise and resubmit to the County all test work that has not passed the County's QA review at no additional cost to the County. The County shall not pay for any mobilization or re-mobilization fee associated with revising test work including recording new CCT video inspections

3. Smoke and/or dyed water tests/floods may be rejected for any of the following reasons:

    a. Missing smoke/dye test summary table and/or sketch
    b. Missing landscape and zoom image for each observation/defect recorded on the smoke/dye test summary table
    c. Missing CCTV inspection database, if applicable
    d. Poor photograph quality
    e. Poor video quality

Following are examples of acceptable smoke test photographs:

Example Smoke Test Picture (Landscape)

Example Smoke Test Picture 2 (Zoom)

Example Dyed Water Test/Flood Video

Example Dyed Water Test/Flood .Video (Zoom)

33 01 30.73.05 MEASUREMENT AND PAYMENT

Measurement for Smoke Testing shall be on the basis of per linear feet of pipe tested as measured from the center of the beginning and ending manholes along the centerline of the test pipe. Payment for smoke testing shall be per linear foot tested and QA-approved and shall include all mobilization, travel

time, coordination with County personnel, printing and distributing notification flyers, traffic control on County roads (excluding road closures), confined space entry, locating and accessing manholes/structures, coordination with property owners, recording photographs, data, data submissions/resubmissions, data corrections and all other Work not included under other items, necessary to complete the Work.

It is anticipated that smoke testing Work Orders will be assigned in a single County sewershed; therefore, Work for multiple pipe smoke testing will be located within a limited geographic area. The County will not pay for any mobilization costs associated with smoke testing Work Orders that are located in a single County sewershed. The County will pay a single lump sum mobilization payment per smoke testing Work Order when pipe smoke testing Work is located in multiple County sewersheds. Payment for mobilization shall be made at the lump sum cost included in the schedule of prices.

Measurement for Dyed Water Test shall be on the basis of each dyed water test completed. Payment for dyed water test shall be per each dyed water test completed and QA-approved and shall include all mobilization, travel time, coordination with County personnel, traffic control on County roads (excluding road closures), confined space entry, locating and accessing manholes/structures, coordination with property owners, pictures, data, data submissions/resubmissions, data corrections and all other Work not included under other items, necessary to complete the Work.

It is anticipated that dyed water test Work Orders will be assigned in a single County sewershed; therefore, Work for multiple dyed water tests will be located within a limited geographic area. The County will not pay for any mobilization costs associated with dyed water test Work Orders that are located in a single County sewershed. The County will pay a single lump sum mobilization payment per dyed water test Work Order when dyed water test Work is located in multiple County sewersheds. Payment for mobilization shall be made at the lump sum cost included in the schedule of prices.

Measurement for Dyed Water Flood shall be on the basis of each dyed water flood completed. Payment for dyed water flood shall be per each dyed water flood completed and QA-approved and shall include all mobilization, travel time, coordination with County personnel, traffic control on County roads (excluding road closures), confined space entry, pre-inspection light cleaning, CCTV inspection, locating and accessing manholes/structures, flow control up to 1 MGD, coordination with property owners, recording photographs, videos, data, data submissions/resubmissions, data corrections and all other Work not included under other items, necessary to complete the Work.

It is anticipated that dyed water flood Work Orders will be assigned in a single County sewershed; therefore, Work for multiple dyed water floods will be located within a limited geographic area. The County will not pay for any mobilization costs associated with dyed water flood Work Orders that are located in a single County sewershed. The County will pay a single lump sum mobilization payment per dyed water flood Work Order when dyed water flood Work is located in multiple County sewersheds. Payment for mobilization shall be made at the lump sum cost included in the schedule of prices.

END OF SECTION

33 01 30.80 FLOW CONTROL

33 01 30.80.01 DESCRIPTION

The Work covered by this section consists of furnishing all labor, materials, equipment and supplies to control of wastewater or stormwater flow. The Contractor shall provide all pumps, piping and other equipment necessary to accomplish bypass pumping; perform all construction; obtain all permits; pay all costs; and perform complete restoration of all existing facilities and areas disturbed to conditions equal to or better than pre-construction conditions and to the satisfaction of the County. Flow control and routing methods shall be subject to review by the County prior to commencing Work.

33 01 30.80.01.01 Reference

All applicable requirements of other portions of the Contract Documents apply to the Work of this Section.

Any Contractor representative who makes a decision regarding the control of flow or makes the adjustments that control flow shall be a licensed wastewater operator as defined and certified by the Maryland Board of Waterworks and Waste Systems.

33 01 30.80.01.02 General

1. Violations from sewage spills resulting from the Contractor's Work shall be the sole responsibility of the Contractor and shall be reported to the Baltimore County Bureau of Utilities dispatch. In addition to contacting the Bureau of Utilities dispatch, the Contractor shall complete and submit to the County the following reports, as appropriate:

    a. Basement - Sewage Backup Report
    b. Sewage Overflow Report

2. The bypass system shall meet the requirements of all codes and regulatory agencies having jurisdiction.

3. The Contractor shall be responsible to notify customers where that service will be disturbed by a temporary bypass system. The Contractor shall advise the customers by written notice that service will be interrupted. Service shall promptly be restored and will not be shut off for extended periods of time.

33 01 30.80.01.03 Submittals.

Prior to mobilizing to the Work Area the Contractor shall submit to the County a detailed plan and description outlining all provisions and precautions that the Contractor shall take regarding the handling of the anticipated flows. The Work includes, but is not limited to, plugging, bypass pumping or trucking as deemed appropriate for the Work performed. The plan must be specific and complete, and shall include, but not be limited to, the following details:

1. Schedule for installation and maintenance of bypass pumping system.

2. Staging areas for pumps and Work Area access point(s) to bypass pumping locations. Contractor shall indicate locations on a Work Order Map.
3. Bypass pump sizes, including calculations to validate size selected, capacity, number of each size to be on Work Area, and power requirements.
4. Road crossing details, where applicable.
5. Sewer plugging methods, type of plugs, and bypass time duration for each pipe. Plugging or blocking of the flow shall only be allowed when the Contractor can demonstrate that the upstream collection system can accommodate the surcharging without any adverse impact.
6. Size, number, length, material, location and method of installation for suction and discharge piping.
7. Sections showing suction and discharge pipe depth.
8. Method of noise control for each pump and/or generator.
9. Standby power generator size and location.
10. Downstream discharging plan.
11. Methods of protecting discharge manholes or structures from erosion and damage.
12. Restraining lengths for piping. Thrust blocks will not be allowed as a method of restraint for bypass pumping systems.
13. Temporary pipe supports and anchoring required.
14. Location of fuel tank(s) and other potential contaminants.
15. Reliability methods including float switches, visual and audible alarms, and pump controls.
16. Procedures to monitor upstream mains for backup impacts.
17. Emergency plan detailing procedures to be followed in event of pump failures, sewer overflows, service backups, and pipe spillage. The Contractor shall maintain a copy of this emergency plan on Work Area for the duration of the project.

33 01 30.80.02 MATERIALS/EQUIPMENT

33 01 30.80.02.01 General

1. The Contractor shall provide the necessary operating controls for each pump.

2. Pumps shall be fully automatic, self-priming units that do not require the use of foot valves or vacuum pumps in the priming system. The pumps shall also be electric or diesel powered and constructed to allow dry running for long periods of time to accommodate the cyclical nature of effluent flows.

3. The Contractor shall provide either bypass redundancy for the largest pump or a minimum of 50% pump capacity of the total required flow within the system, whichever is greater with respect to flow volume. The intent of the redundant pump capacity is to ensure adequate back-up pumps are immediately available to the system. Back-up pumps shall be on-line, isolated from the primary system by a valve. The Contractor shall keep and maintain spare parts for pumps and piping within the Work Area and maintain adequate hoisting equipment and accessories on site for each pump.

4. All discharge systems shall be temporarily constructed of rigid pipe with positive, restrained joints. Only materials that withstand pressures greater than the peak bypass system pressures may be used. All materials shall be suitable for contact with domestic sanitary sewage. Under no circumstances will aluminum “irrigation” type piping or glued PVC pipe be allowed. Discharge hose will only be allowed in short sections and by specific permission from the County. The bypass pumping system shall be 100% watertight.

5. All bypassed flows must be discharged to the originated collection system.

33 01 30.80.03 CONSTRUCTION REQUIREMENTS

33 01 30.80.03.01 Preparation

1. The Contractor is responsible for locating any existing utilities in the area where the Contractor selects to locate the bypass pipelines. The Contractor shall locate the bypass pipelines to minimize any disturbance to existing utilities and shall obtain approval of the pipeline locations from the County. All cost associated with relocating utilities and obtaining all approvals shall be paid by the Contractor.

2. When working inside a manhole the Contractor shall exercise caution and comply with OSHA requirements when working in the presence of sewer gases, combustible or oxygen-deficient atmospheres, and confined spaces.

3. The Contractor is responsible for obtaining any approvals for placements of the temporary pipeline within public ways from the Maryland Department of Transportation and Baltimore County.

4. The Contractor is responsible for transport, delivery, handling, and storing pipe, fittings, pumps, ancillary equipment and materials to prevent damage and following the manufacturer’s recommendations.

5. The Contractor shall inspect all material and equipment for proper operation before initiating Work.

6. Material found to be defective or damaged due to the manufacturer or shipment shall be repaired or replaced, as recommended by the manufacturer, at no cost to the County.

7. The Contractor shall remove manhole sections or make connections to existing sewer and construct temporary bypass pumping structures as required to provide adequate suction conduit.

33 01 30.80.03.02 Plugging and Blocking

1. A pipe plug shall be inserted into the line upstream of the pipe being inspected. The plug shall be so designed that all or any portion or the upstream flow can be released. During the inspection work, the flow through the pipe shall be reduced to within the maximum limits stated

above. After the Work has been completed, the flow shall be restored to normal.

2. The Contractor shall be responsible for furnishing the necessary labor and supervision to install the plug, set up and operate the pumping and bypassing system and remove the plug upon completion of the by-pass operation.

33 01 30.80.03.03 Pumping and Bypassing

1. Pumps and equipment shall be continuously monitored by the Contractor during the periods that pumping and bypassing are required. If pumping is required on a 24-hour basis, engines shall be equipped in a manner to keep noise to a minimum.

2. The Contractor shall select pumping/bypassing equipment that will not have excessive noise levels from pumping/bypassing equipment and shall be restricted to a maximum of sixty-nine (69 dB) at a distance of 30-feet.

33 01 30.80.03.04 Flow Control Precautions

1. When flow in a pipe is plugged, blocked or bypassed by the Contractor, he shall take sufficient precautions to protect public health and to protect the pipe from damage that might result from surcharging. Further, the Contractor shall take precautions to insure that flow control operations do not cause flooding or damage to public or private property being served by the pipe involved. The Contractor shall be responsible for all mitigation, cleanup and damages resulting from his flow control operations.

2. When flow in a pipe is plugged or blocked by the Contractor, he shall monitor the conditions upstream of the plug and shall be prepared to immediately start bypass pumping, if needed. No liquid or solid matter shall be allowed to be discharged, stored or deposited on the ground, swale, road, stormwater drainage system or open environment. The Contractor shall protect all pumps, conduit and other equipment used for bypass from traffic, vandalism, or other possible sources of damage.

33 01 30.80.04 MEASUREMENT AND PAYMENT

Payment for flow Control under 1 MGD shall not be measured. Flow control equal to or less than 1 MGD will be considered incidental to the Work.

Measurement for Ancillary Flow Control, in excess of 1 MGD shall be on the basis of per day of flow bypassed, per pump size. Payment for ancillary flow control, in excess of 1 MGD shall be per day of flow bypassed and shall include all labor, materials, equipment, tools and incidentals for mobilization, traffic control on County roads (excluding road closures) pump setup, furnishing, inserting and removing pipe plugs, pumping flows, monitoring water levels, furnishing, installing, maintaining and removing bypass/diversion piping, trenching, plating for diversion piping, backfill, compaction, placing temporary pavement, confined space entry, locating and accessing manhole/structures, coordination with property owners, development of the flow control and bypassing plan, setup, pumps, piping, gasoline/diesel fuel, maintenance, transportation and storage, Work area cleanup,

submittals/resubmittals and all other Work not included under other items, necessary to complete the Work.

END OF SECTION

SECTION 1-A

CONTRACTOR QUALIFICATION INSTRUCTIONS

1. List five (5) projects of reasonably similar nature to this Contract that have been completed within the past 5 years. Provide owner name, address and contact information for each project. Cumulatively, the projects must meet the following criteria:

    - Minimum gravity pipe cleaning and CCTV experience 8 to 24-inch diameters – 800,000 LF. A minimum of 600,000 LF of the inspection work must be inspection of gravity sewers.
    - Minimum gravity pipe cleaning and CCTV experience 24 to 72 inch diameters – 200,000 LF. A minimum of 150,000 LF of the inspection work must be inspection of gravity sewers.
    - Minimum heavy cleaning 24 to 72 inch diameter gravity lines – 50,000 LF.
    - Minimum CCTV/sonar inspection – 50,000LF. CCTV/sonar inspection is defined as any combination of CCTV and sonar inspections that is performed simultaneously.

2. Key personnel must be experienced and trained. Submit a list of the expected staff, with qualifications, and location of the office from which the Work will be performed. They must have the following credentials:

    - Project Manager with a minimum of 10 years of wastewater and/or stormwater inspection experience.
    - Staff with GIS, PACP-compliant database management, wastewater and/or stormwater inspection quality assurance review expertise.
    - Field personnel with PACP, MACP, LACP and OSHA Confined-Space Entry certification.

CONTRACTOR QUALIFICATIONS

CONTRACTOR POINT OF CONTACT

NAME OF FIRM:

NAME AND TITLE:

TLEPHONE NUMBER:

FAX NUMBER:

E-MAIL ADDRESS:

PROPOSED TEAM

(Complete this section for the prime Contractor and all key subContractors.)

Firm Name, Address, and Role in This Contract. Provide the contractual relationship, name, full mailing address, and a brief description of the role of each firm that will be involved in performance of this Contract. List the prime Contractor or joint venture partners first. The named subContractors must be used; the contracting officer must approve any change. Attach an additional sheet in the same format as Section C if needed.

9a. PRIME NAME:

9a. JOINT-VENTURE PARTNER NAME:

9a. SUBCONTRACTOR 1 NAME:

10a. SUBCONTRACTOR 1 ADDRESS

11a. SUBCONTRACTOR 1 ROLE IN THIS CONTRACT

9b. SUBCONTRACTOR 2 NAME:

10b. SUBCONTRACTOR 2 ADDRESS

11b. SUBCONTRACTOR 2 ROLE IN THIS CONTRACT

9c. SUBCONTRACTOR 3 NAME:

10c. SUBCONTRACTOR 3 ADDRESS

11c. SUBCONTRACTOR 3 ROLE IN THIS CONTRACT

C. ORGANIZATIONAL CHART OF PROPOSED TEAM *(Attached; check here)*

D. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present 5 projects. Complete one page for each project. Projects must meet minimum criteria listed in instructions)

EXAMPLE PROJECT KEY NUMBER 1:

TITLE AND LOCATION (*City and State):*

PROJECT OWNER'S INFORMATION - PROJECT OWNER:

PROJECT OWNER'S INFORMATION - POINT OF CONTACT NAME

PROJECT OWNER'S INFORMATION - POINT OF CONTACT TELEPHONE NUMBER & EMAIL:

YEAR STARTED & COMPLETED:

INITIAL & FINAL CONTRACT COST:

NUMBER OF CLAIMS FILED & VALUE:

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, cost, pipe inspection technology used, CCTV software, cleaning methods used, flow control methods used and off-road equipment used):*

EXAMPLE PROJECT KEY NUMBER 2:

TITLE AND LOCATION (*City and State):*

PROJECT OWNER'S INFORMATION - PROJECT OWNER:

PROJECT OWNER'S INFORMATION - POINT OF CONTACT NAME

PROJECT OWNER'S INFORMATION - POINT OF CONTACT TELEPHONE NUMBER & EMAIL:

YEAR STARTED & COMPLETED:

INITIAL & FINAL CONTRACT COST:

NUMBER OF CLAIMS FILED & VALUE:

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, cost, pipe inspection technology used, CCTV software, cleaning methods used, flow control methods used and off-road equipment used):*

EXAMPLE PROJECT KEY NUMBER 3:

TITLE AND LOCATION (*City and State):*

PROJECT OWNER'S INFORMATION - PROJECT OWNER:

PROJECT OWNER'S INFORMATION - POINT OF CONTACT NAME

PROJECT OWNER'S INFORMATION - POINT OF CONTACT TELEPHONE NUMBER & EMAIL:

YEAR STARTED & COMPLETED:

INITIAL & FINAL CONTRACT COST:

NUMBER OF CLAIMS FILED & VALUE:

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, cost, pipe inspection technology used, CCTV software, cleaning methods used, flow control methods used and off-road equipment used):*

EXAMPLE PROJECT KEY NUMBER 4:

TITLE AND LOCATION (*City and State):*

PROJECT OWNER'S INFORMATION - PROJECT OWNER:

PROJECT OWNER'S INFORMATION - POINT OF CONTACT NAME

PROJECT OWNER'S INFORMATION - POINT OF CONTACT TELEPHONE NUMBER & EMAIL:

YEAR STARTED & COMPLETED:

INITIAL & FINAL CONTRACT COST:

NUMBER OF CLAIMS FILED & VALUE:

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, cost, pipe inspection technology used, CCTV software, cleaning methods used, flow control methods used and off-road equipment used):*

EXAMPLE PROJECT KEY NUMBER 5:

TITLE AND LOCATION (*City and State):*

PROJECT OWNER'S INFORMATION - PROJECT OWNER:

PROJECT OWNER'S INFORMATION - POINT OF CONTACT NAME

PROJECT OWNER'S INFORMATION - POINT OF CONTACT TELEPHONE NUMBER & EMAIL:

YEAR STARTED & COMPLETED:

INITIAL & FINAL CONTRACT COST:

NUMBER OF CLAIMS FILED & VALUE:

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, cost, pipe inspection technology used, CCTV software, cleaning methods used, flow control methods used and off-road equipment used):*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

NAME:

ROLE IN THIS CONTRACT:

YEARS EXPERIENCE – TOTAL:

YEARS EXPERIENCE - WITH CURRENT FIRM:

YEARS EXPERIENCE IN THIS ROLE:

62a. RELEVANT PROJECT - TITLE AND LOCATION *(City and State):*

62b. RELEVANT PROJECT - YEAR COMPLETED:

62c. RELEVANT PROJECT - BRIEF DESCRIPTION - Check here if project performed with current firm:

62d. RELEVANT PROJECT - BRIEF DESCRIPTION *(Brief scope, size, cost etc. or if one of your Example Projects, write Example Project Key Number here ____)* AND SPECIFIC ROLE:

63a. RELEVANT PROJECT - TITLE AND LOCATION *(City and State):*

63b. RELEVANT PROJECT - YEAR COMPLETED:

63c. RELEVANT PROJECT - BRIEF DESCRIPTION - Check here if project performed with current firm:

63d. RELEVANT PROJECT - BRIEF DESCRIPTION *(Brief scope, size, cost etc. or if one of your Example Projects, write Example Project Key Number here ____)* AND SPECIFIC ROLE:

64a. RELEVANT PROJECT - TITLE AND LOCATION *(City and State):*

64b. RELEVANT PROJECT - YEAR COMPLETED:

64c. RELEVANT PROJECT - BRIEF DESCRIPTION - Check here if project performed with current firm:

64d. RELEVANT PROJECT - BRIEF DESCRIPTION *(Brief scope, size, cost etc. or if one of your Example Projects, write Example Project Key Number here ____)* AND SPECIFIC ROLE:

65a. RELEVANT PROJECT - TITLE AND LOCATION *(City and State):*

65b. RELEVANT PROJECT - YEAR COMPLETED:

65c. RELEVANT PROJECT - BRIEF DESCRIPTION - Check here if project performed with current firm:

65d. RELEVANT PROJECT - BRIEF DESCRIPTION *(Brief scope, size, cost etc. or if one of your Example Projects, write Example Project Key Number here ____)* AND SPECIFIC ROLE:

G. SUPPLMENTAL INFORMATION

(Underline or circle correct answer. If yes, explain in detail using supplemental sheets if necessary)

Has Contractor or any team member ever failed to complete a project within the past ten (10) years? YES or NO

Does Contractor have a written Quality Control/Quality Assurance Program? YES or NO If yes, provide an outline.

Will all team members and subContractors be contractually required to adhere the prime Contractor's Quality Control/Quality Assurance Program? YES or NO

Does the Contractor have a written Safety Plan? YES or NO If yes, provide an outline.

Will all team members and subContractors be contractually required to adhere the prime Contractor's Safety Plan? YES or NO

	Experience Modification Rate (EMR)		
Firm Names (Prime & subContractors)	2015	2014	2013

Has the Contractor received an environmental notice of non-compliance during the past 5 years? YES or NO If yes, explain in detail.

BALTIMORE COUNTY, MARYLAND
REQUEST FOR BID NO. B-1051
ON-CALL UTILITY INSPECTION AND MAINTENANCE CONTRACT
Due Date: 9/8/16 Time: 3:00 P.M.

BID/PROPOSAL SIGNATURE COVER PAGE

SUBMISSION OF A BID/PROPOSAL IN RESPONSE TO THIS SOLICITATION EVIDENCES THE BIDDER'S ACCEPTANCE OF THE TERMS AND CONDITIONS THEREIN. THIS PAGE MUST BE PROPERLY SIGNED BY AN AUTHORIZED OFFICIAL IN THE FIRM WHO REPRESENTS AND WARRANTS ACCEPTANCE OF ALL TERMS AND CONDITIONS OF THE REQUEST FOR BID / REQUEST FOR PROPOSAL. THE PERSON SIGNING THE BID/PROPOSAL MUST INITIAL ANY ALTERATIONS IN FIGURES ON THIS FORM IN INK.

COMPANY NAME: _____

ADDRESS: _____

_____
(City) (State) (Zip Code)

TELEPHONE:_____ FAX:_____

SIGNED:_____ DATE: _____

PRINT NAME: _____ TITLE: _____

TAX ID NUMBER (FIN/SS#)_____ EMAIL: _____

Is your firm in compliance with all applicable laws and regulations relating to the employment of illegal aliens?
If YES, check here _____

NOTICE: **A notice required to be delivered shall be deemed to have been received when such notice has been sent to the following address and individual:**

_____
_____
_____
_____

THE PERSON SIGNING THE BID/PROPOSAL MUST INITIAL ANY ALTERATIONS IN FIGURES ON THIS FORM IN INK.

BID DEPOSIT REQUIRED: Accompanying this bid is a Certified Bid Deposit Check or Bid Bond in the amount of $_____ payable to Baltimore County, Maryland.

_____ We wish to submit a "NO BID" at this time.

_____ We do not offer this commodity/service.

Is your company a <u>certified</u> Minority Business Enterprise? *Bidders <u>must</u> complete the applicable Minority Participation Affidavit attached.*

Payment Terms: _____ Cash discounts for less than 30 days will not be considered in determining awards. However, should that bidder obtain award by consideration of the gross price, the County should make every effort to obtain the discount. The County will not accept payment terms with a period of less than (30) days.

Delivery shall be made within _____ calendar days after receipt of order.

F.O.B. Destination (unless otherwise stated herein).

If your firm is not already receiving email notification of new solicitations and amendments, you may register for email notification on the County's web site at http://www.baltimorecountymd.gov/purchasing.

BALTIMORE COUNTY, MARYLAND
REQUEST FOR BID NO. B-1051
ON-CALL UTILITY INSPECTION AND MAINTENANCE
Due Date: 9/8/16, Time: 3:00 P.M.

PRICE SHEET PAGE 1 OF 10		REQUEST FOR BID			
LINE NO.	COMMODITY /SERVICE DESCRIPTION	QUANTITY FROM/TO	UNIT	UNIT PRICE	EXTENDED AMOUNT
1	COMMODITY CODE: 913-81 Mobilization for Dispersed Work Areas, as per specifications	3	Each	$_____	$_____
2	COMMODITY CODE: 913-81 CMMS Data Entry, as per Specifications	264	Day	$_____	$_____
3	COMMODITY CODE: 913-81 Arrow Panel, as per specifications	5	Day	$_____	$_____
4	COMMODITY CODE: 913-81 Temporary Traffic Signs, as per specifications	480	SqFt	$_____	$_____
5	COMMODITY CODE: 913-81 Flagger, State Certified, as per specifications	40	Hour	$_____	$_____
6	COMMODITY CODE: 913-81 Traffic Cones, price per set-up, as per specifications	10	Each	$_____	$_____
7	COMMODITY CODE: 913-81 Plastic Drums, per set-up, as per specifications	10	Each	$_____	$_____
8	COMMODITY CODE: 913-81 Precast Temporary Concrete Traffic Barrier for MOT, as per specifications	10	Each	$_____	$_____
9	COMMODITY CODE: 913-81 Crew Chief, Contingent, on approval of the Engineer only for T&M tasks, as per specifications	40	Hour	$_____	$_____
10	COMMODITY CODE: 913-81 Skilled Laborer, Contingent, on approval of the Engineer only, for T&M tasks, as per specifications	40	Hour	$_____	$_____

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PRICE SHEET PAGE 2 OF 10		REQUEST FOR BID			
LINE NO.	COMMODITY /SERVICE DESCRIPTION	QUANTITY FROM/TO	UNIT	UNIT PRICE	EXTENDED AMOUNT
11	COMMODITY CODE: 913-81 Unskilled Laborer, Contingent, on approval of the Engineer only, for T&M tasks, as per specifications	40	Hour	$_____	$_____
12	COMMODITY CODE: 913-81 Pay Differential, as per specifications	1	Mult.	$1._____	$_____
13	COMMODITY CODE: 913-81 Manhole/Structure Inspection, as per specifications	1340	Each	$_____	$_____
14	COMMODITY CODE: 913-81 Manhole/Structure GPS Survey, as per specifications	1340	Each	$_____	$_____
15	COMMODITY CODE: 913-81 CCTV Inspection, On-Road, 8-10 Inch Diameter Pipe, as per specifications	340000	LnFt	$_____	$_____
16	COMMODITY CODE: 913-81 CCTV Inspection, On-Road, 11-18 Inch Diameter Pipe, as per specifications	26200	LnFt	$_____	$_____
17	COMMODITY CODE: 913-81 CCTV Inspection, On-Road, 19-24 Inch Diameter Pipe, as per specifications	3600	LnFt	$_____	$_____
18	COMMODITY CODE: 913-81 CCTV Inspection, On-Road, 25-36 Inch Diameter Pipe, as per specifications	200	LnFt	$_____	$_____
19	COMMODITY CODE: 913-81 CCTV Inspection, On-Road, 37-54 Inch Diameter Pipe, as per specifications	200	LnFt	$_____	$_____
20	COMMODITY CODE: 913-81 CCTV Inspection, On-Road, 55 Inch & Larger Diameter Pipe, as per specifications	200	LnFt	$_____	$_____

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PRICE SHEET PAGE 3 OF 10		REQUEST FOR BID			
LINE NO.	COMMODITY /SERVICE DESCRIPTION	QUANTITY FROM/TO	UNIT	UNIT PRICE	EXTENDED AMOUNT
21	COMMODITY CODE: 913-81 CCTV Inspection, Off-Road, 8-10 Inch Diameter Pipe, as per specifications	78000	LnFt	$_____	$_____
22	COMMODITY CODE: 913-81 CCTV Inspection, Off-Road, 11-18 Inch Diameter Pipe, as per specifications	33800	LnFt	$_____	$_____
23	COMMODITY CODE: 913-81 CCTV Inspection, Off-Road, 19-24 Inch Diameter Pipe, as per specifications	3400	LnFt	$_____	$_____
24	COMMODITY CODE: 913-81 CCTV Inspection, Off-Road, 25-36 Inch Diameter Pipe, as per specifications	600	LnFt	$_____	$_____
25	COMMODITY CODE: 913-81 CCTV Inspection, Off-Road, 37-54 Inch Diameter Pipe, as per specifications	180	LnFt	$_____	$_____
26	COMMODITY CODE: 913-81 CCTV Inspection, On-Road, 55 Inch & Larger Diameter Pipe, as per specifications	60	LnFt	$_____	$_____
27	COMMODITY CODE: 913-81 Miscellaneous CCTV Inspection, On-Road, 8-10 Inch Diameter Pipe, as per specifications	80	Hour	$_____	$_____
28	COMMODITY CODE: 913-81 Miscellaneous CCTV Inspection, On-Road, 11-18 Inch Diameter Pipe, as per specifications	80	Hour	$_____	$_____
29	COMMODITY CODE: 913-81 Miscellaneous CCTV Inspection, On-Road, 19-24 Inch Diameter Pipe, as per specifications	80	Hour	$_____	$_____

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PRICE SHEET PAGE 4 OF 10		REQUEST FOR BID			
LINE NO.	COMMODITY /SERVICE DESCRIPTION	QUANTITY FROM/TO	UNIT	UNIT PRICE	EXTENDED AMOUNT
30	COMMODITY CODE: 913-81 Miscellaneous CCTV Inspection, On-Road, 25-36 Inch Diameter Pipe, as per specifications	80	Hour	$_____	$_____
31	COMMODITY CODE: 913-81 Miscellaneous CCTV Inspection, On-Road, 37-54 Inch Diameter Pipe, as per specifications	80	Hour	$_____	$_____
32	COMMODITY CODE: 913-81 Miscellaneous CCTV Inspection, On-Road, 55 Inch & Larger Diameter Pipe, as per specifications	80	Hour	$_____	$_____
33	COMMODITY CODE: 913-81 Miscellaneous CCTV Inspection, Off-Road, 8-10 Inch Diameter Pipe, as per specifications	80	Hour	$_____	$_____
34	COMMODITY CODE: 913-81 Miscellaneous CCTV Inspection, Off-Road, 11-18 Inch Diameter Pipe, as per specifications	80	Hour	$_____	$_____
35	COMMODITY CODE: 913-81 Miscellaneous CCTV Inspection, Off-Road, 19-24 Inch Diameter Pipe, as per specifications	80	Hour	$_____	$_____
36	COMMODITY CODE: 913-81 Miscellaneous CCTV Inspection, Off-Road, 25-36 Inch Diameter Pipe, as per specifications	80	Hour	$_____	$_____
37	COMMODITY CODE: 913-81 Miscellaneous CCTV Inspection, Off-Road, 37-54 Inch Diameter Pipe, as per specifications	80	Hour	$_____	$_____
38	COMMODITY CODE: 913-81 Miscellaneous CCTV Inspection, Off-Road, 55 Inch &Larger, as per specifications	80	Hour	$_____	$_____

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LINE NO.	COMMODITY /SERVICE DESCRIPTION	QUANTITY FROM/TO	UNIT	UNIT PRICE	EXTENDED AMOUNT
39	COMMODITY CODE: 913-81 Miscellaneous Lateral Inspection, as per specifications	100	Each	$_____	$_____
40	COMMODITY CODE: 913-81 Sonar Inspection, On-Road, 18-24 Inch Diameter Pipe, as per specifications	3600	LnFt	$_____	$_____
41	COMMODITY CODE: 913-81 Sonar Inspection, On-Road, 25-36 Inch Diameter Pipe, as per specifications	100	LnFt	$_____	$_____
42	COMMODITY CODE: 913-81 Sonar Inspection, On-Road, 37-54 Inch Diameter Pipe, as per specifications	40	LnFt	$_____	$_____
43	COMMODITY CODE: 913-81 Sonar Inspection, On-Road, 55 Inch and Larger Diameter Pipe, as per specifications	200	LnFt	$_____	$_____
44	COMMODITY CODE: 913-81 Sonar Inspection, Off-Road, 18-24 Inch Diameter Pipe, as per specifications	3400	LnFt	$_____	$_____
45	COMMODITY CODE: 913-81 Sonar Inspection, Off-Road, 25-36 Inch Diameter Pipe, as per specifications	600	LnFt	$_____	$_____
46	COMMODITY CODE: 913-81 Sonar Inspection, Off-Road, 37-54 Inch Diameter Pipe, as per specifications	180	LnFt	$_____	$_____
47	COMMODITY CODE: 913-81 Sonar Inspection, Off-Road, 55 Inch and Larger Diameter Pipe, as per specifications	60	LnFt	$_____	$_____

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PRICE SHEET PAGE 6 OF 10		REQUEST FOR BID			
LINE NO.	COMMODITY /SERVICE DESCRIPTION	QUANTITY FROM/TO	UNIT	UNIT PRICE	EXTENDED AMOUNT
48	COMMODITY CODE: 913-81 CCTV/Sonar Inspection, On-Road, 18-24 Inch Diameter Pipe, as per specifications	3600	LnFt	$_____	$_____
49	COMMODITY CODE: 913-81 CCTV/Sonar Inspection, On-Road, 25-36 Inch Diameter Pipe, as per specifications	100	LnFt	$_____	$_____
50	COMMODITY CODE: 913-81 CCTV/Sonar Inspection, On-Road, 37-54 Inch Diameter Pipe, as per specifications	40	LnFt	$_____	$_____
51	COMMODITY CODE: 913-81 CCTV/Sonar Inspection, On-Road, 55 Inch and Larger Diameter Pipe, as per specifications	200	LnFt	$_____	$_____
52	COMMODITY CODE: 913-81 CCTV/Sonar Inspection, Off-Road, 18-24 Inch Diameter Pipe, as per specifications	3400	LnFt	$_____	$_____
53	COMMODITY CODE: 913-81 CCTV/Sonar Inspection, Off-Road, 25-36 Inch Diameter Pipe, as per specifications	600	LnFt	$_____	$_____
54	COMMODITY CODE: 913-81 CCTV/Sonar Inspection, Off-Road, 37-54 Inch Diameter Pipe, as per specifications	180	LnFt	$_____	$_____
55	COMMODITY CODE: 913-81 CCTV/Sonar Inspection, Off-Road, 55 Inch and Larger Diameter Pipe, as per specifications	60	LnFt	$_____	$_____
56	COMMODITY CODE: 913-81 Pipe Heavy Cleaning, On-Road, 8-10 Inch Diameter Pipe, as per specifications	48400	LnFt	$_____	$_____

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PRICE SHEET PAGE 7 OF 10		REQUEST FOR BID			
LINE NO.	COMMODITY /SERVICE DESCRIPTION	QUANTITY FROM/TO	UNIT	UNIT PRICE	EXTENDED AMOUNT
57	COMMODITY CODE: 913-81 Pipe Heavy Cleaning, On-Road, 11-18 Inch Diameter Pipe, as per specifications	4000	LnFt	$_____	$_____
58	COMMODITY CODE: 913-81 Pipe Heavy Cleaning, On-Road, 19-24 Inch Diameter Pipe, as per specifications	600	LnFt	$_____	$_____
59	COMMODITY CODE: 913-81 Pipe Heavy Cleaning, On-Road, 25-36 Inch Diameter Pipe, as per specifications	20	LnFt	$_____	$_____
60	COMMODITY CODE: 913-81 Pipe Heavy Cleaning, On-Road, 37-54 Inch Diameter Pipe, as per specifications	20	LnFt	$_____	$_____
61	COMMODITY CODE: 913-81 Pipe Heavy Cleaning, On-Road, 55 Inch and Larger Diameter Pipe, as per specifications	200	LnFt	$_____	$_____
62	COMMODITY CODE: 913-81 Pipe Heavy Cleaning, Off-Road, 8-10 Inch Diameter Pipe, as per specifications	11800	LnFt	$_____	$_____
63	COMMODITY CODE: 913-81 Pipe Heavy Cleaning, Off-Road, 11-18 Inch Diameter Pipe, as per specifications	5200	LnFt	$_____	$_____
64	COMMODITY CODE: 913-81 Pipe Heavy Cleaning, Off-Road, 19-24 Inch Diameter Pipe, as per specifications	600	LnFt	$_____	$_____
65	COMMODITY CODE: 913-81 Pipe Heavy Cleaning, Off-Road, 25-36 Inch Diameter Pipe, as per specifications	200	LnFt	$_____	$_____

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LINE NO.	COMMODITY /SERVICE DESCRIPTION	QUANTITY FROM/TO	UNIT	UNIT PRICE	EXTENDED AMOUNT
66	COMMODITY CODE: 913-81 Pipe Heavy Cleaning, Off-Road, 37-54 Inch Diameter Pipe, as per specifications	200	LnFt	$_____	$_____
67	COMMODITY CODE: 913-81 Pipe Heavy Cleaning, Off-Road, 55 Inch and Larger Diameter, as per specifications	200	LnFt	$_____	$_____
68	COMMODITY CODE: 913-81 Manhole/Structure Cleaning, On-Road, as per specifications	80	Each	$_____	$_____
69	COMMODITY CODE: 913-81 Manhole/Structure Cleaning, Off-Road, as per specifications	80	Each	$_____	$_____
70	COMMODITY CODE: 913-81 Pipe Specialty Cleaning, On-Road, 8-10 Inch Diameter Pipe, as per specifications	200	Hour	$_____	$_____
71	COMMODITY CODE: 913-81 Pipe Specialty Cleaning, On-Road, 11-18 Inch Diameter Pipe, as per specifications	20	Hour	$_____	$_____
72	COMMODITY CODE: 913-81 Pipe Specialty Cleaning, On-Road, 19-24 Inch Diameter Pipe, as per specifications	20	Hour	$_____	$_____
73	COMMODITY CODE: 913-81 Pipe Specialty Cleaning, On-Road, 25-36 Inch Diameter Pipe, as per specifications	20	Hour	$_____	$_____
74	COMMODITY CODE: 913-81 Pipe Specialty Cleaning, On-Road, 37-54 Inch Diameter Pipe, as per specifications	20	Hour	$_____	$_____

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LINE NO.	COMMODITY /SERVICE DESCRIPTION	QUANTITY FROM/TO	UNIT	UNIT PRICE	EXTENDED AMOUNT
75	COMMODITY CODE: 913-81 Pipe Specialty Cleaning, On-Road, 55 Inch and Larger Diameter Pipe, as per specifications	20	Hour	$_____	$_____
76	COMMODITY CODE: 913-81 Pipe Specialty Cleaning, Off-Road, 8-10 Inch Diameter Pipe, as per specifications	60	Hour	$_____	$_____
77	COMMODITY CODE: 913-81 Pipe Specialty Cleaning, Off-Road, 11-18 Inch Diameter Pipe, as per specifications	40	Hour	$_____	$_____
78	COMMODITY CODE: 913-81 Pipe Specialty Cleaning, Off-Road, 19-24 Inch Diameter Pipe, as per specifications	20	Hour	$_____	$_____
79	COMMODITY CODE: 913-81 Pipe Specialty Cleaning, Off-Road, 25-36 Inch Diameter Pipe, as per specifications	20	Hour	$_____	$_____
80	COMMODITY CODE: 913-81 Pipe Specialty Cleaning, Off-Road, 37-54 Inch Diameter Pipe, as per specifications	20	Hour	$_____	$_____
81	COMMODITY CODE: 913-81 Pipe Specialty Cleaning, Off-Road, 55 Inch and Larger Diameter Pipe, as per specifications	20	Hour	$_____	$_____
82	COMMODITY CODE: 913-81 Smoke Testing, as per specifications	10000	LnFt	$_____	$_____
83	COMMODITY CODE: 913-81 Dyed Water Test, as per specifications	10	Each	$_____	$_____

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LINE NO.	COMMODITY /SERVICE DESCRIPTION	QUANTITY FROM/TO	UNIT	UNIT PRICE	EXTENDED AMOUNT
84	COMMODITY CODE: 913-81 Dyed Water Flood, as per specifications	3	Each	$_____	$_____
85	COMMODITY CODE: 913-81 Contingent Ancillary Flow Control, In Excess of 1 MGD, 4-inch Pump, as per specifications	4	Day	$_____	$_____
86	COMMODITY CODE: 913-81 Contingent Ancillary Flow Control, In Excess of 1 MGD, 6-inch Pump, as per specifications	4	Day	$_____	$_____
87	COMMODITY CODE: 913-81 Contingent Ancillary Flow Control, In Excess of 1 MGD, 8-inch Pump, as per specifications	4	Day	$_____	$_____
88	COMMODITY CODE: 913-81 Contingent Ancillary Flow Control, In Excess of 1 MGD, 10-inch Pump, as per specifications	4	Day	$_____	$_____
89	COMMODITY CODE: 913-81 Contingent Ancillary Flow Control, In Excess of 1 MGD, 12-inch Pump, as per specifications	4	Day	$_____	$_____
90	COMMODITY CODE: 913-81 ST-RAT Inspection, On and Off-Road, as per specifications	1000	Each	$_____	$_____
91	COMMODITY CODE: 913-81 Drop Connection Cleaning, On and Off-Road, as per specifications	20	Each	$_____	$_____
92	COMMODITY CODE: 913-81 Grease Inhibitor Cleaning, On and Off-Road, as per specifications	100000	Each	$_____	$_____

GRAND TOTAL $_____

COMPANY NAME: _____

FED ID OR SOCIAL SECURITY NO. _____