

**MONROE COUNTY NEW YORK  
AND THE  
MONROE COUNTY SEWER DISTRICTS**

**SPECIFICATIONS AND RELATED DOCUMENTS**

**FOR**

**GENERAL CATCH BASIN AND LATERAL  
REPAIR AND CONSTRUCTION**

**TERM CONSTRUCTION CONTRACT**

**(TCC#1)**

**NOVEMBER 2012**

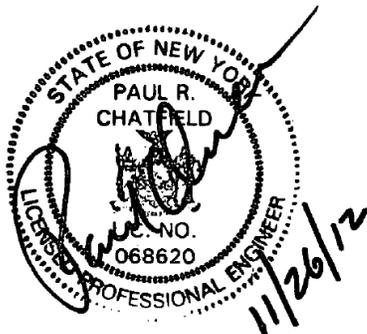


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**MONROE COUNTY NEW YORK  
AND THE  
MONROE COUNTY SEWER DISTRICTS**

**GENERAL CATCH BASIN AND LATERAL REPAIR AND CONSTRUCTION  
TERM CONSTRUCTION CONTRACT (TCC #1)**

**TABLE OF CONTENTS**

<b><u>SECTION NO.</u></b>	<b><u>DESCRIPTION</u></b>	<b><u>NO. OF PAGES</u></b>
<b><u>BIDDING REQUIREMENTS</u></b>		
00020	NOTICE TO BIDDERS	2
00200	CONTRACT TERMS AND CONDITIONS	13
00410	PROPOSAL	16
00430	BID BOND	2
00440	STANDARD CONTRACTORS QUESTIONNAIRE	5
00520	FORM OF AGREEMENT	8
00610	PERFORMANCE BOND	2
00615	PAYMENT BOND	2
00850	PREVAILING STATE WAGE RATES SCHEDULES	2
00855	MBE/WBE UTILIZATION PLAN FORMS	7
<b><u>TECHNICAL SPECIFICATIONS</u></b>		
<b><u>DIVISION 1: GENERAL REQUIREMENTS</u></b>		
01015	GENERAL PROVISIONS	5
01050	MEASUREMENT AND PAYMENT	24
01100	COORDINATION AND MEETINGS	5
01101	REFERENCE STANDARDS	2
01102	CARE AND PROTECTION OF PROPERTY	2
01103	INTERRUPTION OF CUSTOMER SERVICE	2
01104	TEMPORARY CONTROLS	2
01105	TRAFFIC REGULATION	2
<b><u>DIVISION 2: SITE WORK</u></b>		
02200	EARTHWORK	8
02225	TRENCHING	5
02227	BACKFILLING	3
02229	ROCK REMOVAL	2
02230	SELECT FILL	2
02732	SEWER LATERALS	5
02919	TEMPORARY PAVEMENT	2
02920	RESTORATION OF PAVEMENTS	7
02936	SEEDING	5
<b><u>DIVISION 3: CONCRETE</u></b>		
03300	CAST-IN-PLACE CONCRETE	7
<b><u>APPENDIX A</u></b>		
	STANDARD DETAIL DRAWINGS	21

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**SECTION 00020  
NOTICE TO BIDDERS**

Monroe County will receive sealed Proposals for the **General Catch Basin and Lateral Repair and Construction Term Construction Contract (TCC#1)** in the County and the sanitary sewer districts in Monroe County, New York. Proposals will be received and bids publicly opened and read at the following place and time:

**PLACE:** Office of the Purchasing Manager  
Monroe County  
200 County Office Building  
39 West Main Street  
Rochester, New York 14614

**DATE:** December 20, 2012

**TIME:** 11:00 A.M.

The work to be performed consists principally of the furnishing of all labor and construction materials and equipment necessary for the installation and/or replacement of catch basins and lateral sewer pipe, appurtenances and associated surface restoration. Monroe County's Division of Pure Waters will provide pre-cast bases, pre-cast extension rings, frames and grates, pipe, fittings and elastomeric couplings. However, if deemed necessary, the contractor can provide these materials and be reimbursed at their cost.

The foregoing is a general outline of work only and shall not be construed as a complete description of the work to be performed under the Contracts.

Bid Documents, Specifications, and Proposal forms are available online at [www.monroecounty.gov](http://www.monroecounty.gov). On the homepage of the aforementioned website, select the "How Do I?" heading then "View Public Bids Online", which will lead to a list of projects being publicly bid by the County. Contact the Purchasing Office if any questions regarding acquisition of bid documents and specifications.

Office of the Purchasing Manager  
Monroe County  
200 County Office Building  
39 West Main Street  
Rochester, New York 14614  
Telephone: (585) 753-1100

Bid Documents, Specifications and Proposal forms may be examined at the following location:

Builders Exchange  
180 Linden Oaks, Suite 100  
Rochester, New York 14625

Proposals must be made in writing on the forms furnished and shall be accompanied by a bid guaranty in the amount of Ten Thousand Dollars (\$10,000), and Qualifications of Bidders information in accordance with the Contract Terms and Conditions. Standard Contractor's Questionnaire shall be submitted within 24 hours of the bid opening by the apparent two (2) lowest bidders for each Contract.

The County is exempt under Sections 1116 of the Tax Law, and therefore, no sales tax shall be included in the bid.

The successful Bidders will be required to furnish and pay for satisfactory performance and labor and material bonds in accordance with the Contract Terms and Conditions.

The County reserves the right to consider bids for forty-five (45) days after the receipt before awarding any Contract. The County further reserves the right to reject any and all bids, and to accept any Proposal or individual item or items, which they may deem to be the most favorable to its best interest.

MONROE COUNTY

BY: \_\_\_\_\_  
Dawn C. Staub  
Purchasing Manager

**SECTION 00200**  
**CONTRACT TERMS AND CONDITIONS**

**1. GENERAL DESCRIPTION**

**General Catch Basin and Lateral Repair and Construction Term Construction Contract (TCC #1)** consists of providing and installing catch basins, sewer lateral pipe (various material types) and appurtenances, at locations directed by the OWNER.

**2. CONTRACT TERM**

The Contract shall extend from the Date of Award through December 31, 2013, with the option to extend for four (4) additional one (1) year periods at the mutual consent of both parties.

**3. DEFINITIONS**

- a. *BIDDER*: Any party or parties submitting in proper form a Proposal to perform the work hereinafter specified to be performed. The successful Bidder selected by the OWNER to perform the work hereinafter specified will thereafter be known as the "CONTRACTOR".
- b. *CONTRACT DOCUMENTS*: Contract Documents consist of the Notice to Bidders, Contract Terms and Conditions, Proposal, Bid Guarantee, Agreement, Performance and Payment Bonds, Technical Specification, and Drawings.
- c. *CONTRACTOR*: Party or parties contracting to perform the work or his or their heirs, executors, administrators, successors, or assigns.
- d. *COUNTY*: Monroe County or the County of Monroe.
- e. *DISTRICT*: Any County sanitary sewer district and extension or extension thereto now existing or subsequently created by the County Legislature of the County of Monroe.
- f. *EXTRA WORK*: Work not included as a part of a Scheduled Payment Item, as determined and approved by the OWNER.
- g. *OWNER*: The County and/or the District.
- h. *SCHEDULE OF PAYMENT ITEMS*: The list of work items and prices contained in the Proposal Form, which are the basis for bidding, defining work orders and payment.
- i. *WORK*: Designates the work, equipment, materials and things required to be done, or any one of them, furnished and/or performed by the CONTRACTOR under the Specifications attached hereto.
- j. *WORK ORDER*: the written authorization by the OWNER to the CONTRACTOR to perform a defined quantity of work.

**4. BRAND REFERENCE**

- a. Reference to a manufacturer's product by brand name or number is done solely to establish the minimum quality and performance characteristics required.

Bidders may submit bids on alternates, but must attach catalog sheets listing the specifications for any alternate bid. Further, the Bidder must demonstrate that the alternate proposed has a sufficient operating track record to show the equipment will perform per the specified brand. The acceptance of a Bidder's alternate rests solely with the OWNER.

**5. SPECIFICATION ALTERATION**

- a. Specifications will be construed to be complete, and except where specifically noted, be considered the entire description of the goods or services upon which the OWNER is now seeking bids.
- b. Only formal written addenda can materially alter this set of specifications. No verbal statement made by the OWNER, their agent, or anyone else is binding nor shall such statement be considered an official part of this public bid proposal.

**6. BID PROPOSAL**

- a. Proposals shall be submitted in duplicate on the enclosed Proposal forms. Proposals shall be enclosed in a sealed envelope plainly marked with the title of the work and name and address of the Bidder on the outside. No proposal will be considered unless filed on or before the time and at the place designated.
- b. Bidders shall submit a single Bid with unit prices filled in for each item.
- c. The unit price of each of the Scheduled Payment Items shall establish the price to be paid for each item which shall include all labor, materials, equipment, overhead, bonds, insurance, profit, and other contingencies in connection therewith. No allowances for such items will be made separately.
- d. Monroe County and Districts are exempt under Sections 1116 of the Tax Law, and therefore, no sales tax shall be included.
- e. Deletion or changes to items listed or work shown or unit prices of the Schedule of Payment Items will be cause for rejection of the Bid.
- f. Negligence on the part of the Bidder in preparing his Proposal confers no right for the withdrawal of the Proposal after it has been opened.
- g. The quantities included in the Bid Proposal are approximate only and cannot be determined prior to issuance of a Work Order. The quantities are utilized solely for the purpose of establishing unit prices for the term of the Contract and for determining the Low Bidder. The quantities are not guaranteed nor promises given as to the work ordered during the term of the Contract.

**7. BID GUARANTY**

- a. A Bid Guaranty of Ten Thousand Dollars (\$10,000) is required to be submitted with this Bid. This may be in the form of a Bid Bond, certified check, or standard form irrevocable letter of credit payable to Monroe County, Director of Finance. If a Bidder submits a certified check or an irrevocable letter of credit, such guaranty may be rolled over as the Performance or Payment Bonds required herein. If a Bid Bond is submitted then the Bidder will be required to

submit separate Performance and Labor and Materials Bonds, and upon receipt will be returned the Bid Bond.

- b. Bid guaranties will be returned within ten (10) days after the bids are opened to Bidders whose Proposals, in the judgment of the OWNER and ENGINEER, will not be considered in making the award. All other checks will be returned upon execution of the Contract and required bonds by the successful Bidder.

## **8. BID AWARD**

- a. The OWNER reserves the right to award a Contract, based on the Total Amount Base Bid, to the Lowest Responsible Bidder who meets all terms of the Specifications. The OWNER reserves the right to reject any or all Bids, if the Monroe County Purchasing Manager deems said action to be in the best interests of the OWNER.
- b. The OWNER reserves the right to consider bids for forty-five (45) days after the receipt before awarding any Contract.
- c. The acceptance of Proposal will be a Notice of Award in writing from the OWNER. The Notice of Award shall bind the successful Bidder to execute the Contract as provided hereinafter.

## **9. EXECUTION OF THE CONTRACT**

- a. The Bidder who's Proposal has been accepted shall execute the Contract within ten (10) calendar days of the date of Notice of Award.
- b. As a part of the execution of the Contract the successful Bidder shall procure, execute and deliver to the OWNER, and maintain, at his own cost and expense, for the period of the Contract the following bonds, in the form attached herein, of a surety company approved by the OWNER and authorized to do business in the State of New York as a surety:
  - (1) **Performance Bond:** in the amount of One Hundred Thousand Dollars (\$100,000).
  - (2) **Payment Bond:** in the amount of One Hundred Thousand Dollars (\$100,000).
- c. As a part of the execution of the Contract the successful Bidder shall secure and maintain for the entire length of the Contract, including the guarantee period, such insurance policies, naming the CONTRACTOR, County of Monroe and the District and shall protect those named and including his Subcontractor, including their officers, officials, employees and agents, from claims for bodily injuries, death or property damage which may arise from operations under this Contract whether such operations be by himself or by any Subcontractor or anyone employed by them directly or indirectly, the following insurance policies with insurance companies authorized to do business in New York State are required:
  - (1) Statutory Worker's Compensation.
  - (2) General Liability Insurance; aggregate limits of liability \$3,000,000. This coverage may be in the form of a single policy or a basic policy plus umbrella coverage.

- (3) CONTRACTOR's Protective Liability covering operations of Subcontractors, with same limits.
- (4) Contractual Liability covering Hold Harmless Clause.
- (5) Automobile Public Liability and Property Damage covering both owned and hired vehicles. (Bodily Injury \$1,000,000 each accident; Property Damage \$1,000,000 each accident.)
- (6) Prior to the storage or use of explosives, the CONTRACTOR shall provide evidence of blasting coverage in the Public Liability, Property Damage and CONTRACTOR's Protective Liability Insurance.
- (7) All Risk Builders Risk or All Risk Installation Floater, as appropriate, including Fire and Extended Coverage in an amount of \$50,000.
- (8) If any of the rating classifications embody property damage exclusions x, c, or u, coverage for eliminating such exclusions must be provided with same limits.

Said certificates of insurance shall contain a thirty (30) day notice of cancellation in favor of the OWNER.

The above outlined insurance requirements are the minimum during the Contract period.

During the guarantee period the CONTRACTOR shall furnish completed operation liability insurance in a minimum amount of \$3,000,000. Prior to the release of the final payment, the CONTRACTOR shall provide a certificate of insurance for this coverage which may not be canceled prior to the end of the guarantee period.

- d. Failure or refusal of the Bidder, whose Proposal is accepted, to execute the Contract shall entitle the OWNER to proceed against the sum represented by the bid guaranty to recover damages, or take such other action as the OWNER may deem in the public's best interest.

## **10. MATERIALS**

- a. Unless otherwise identified in the Work Order, the OWNER will furnish at no cost to the CONTRACTOR pre-cast bases, pre-cast extension rings, catch basin frames and grates, pipe, fittings and elastomeric couplings for installation under the Contract. The furnishing of all other materials shall be the responsibility of, and paid for by the CONTRACTOR. All OWNER supplied materials identified above will be located at the Rochester Operations Center, 444 East Henrietta Road, Rochester, New York; or the Monroe County Fleet Center, 145 Paul Road, Rochester, New York and will be the Contractor's responsibility to pick them up at the location as designated by the OWNER prior to the commencement of work.
- b. If the CONTRACTOR and OWNER agree that the CONTRACTOR independently procure any of the items normally provided by the OWNER as listed above, the

CONTRACTOR will be reimbursed by the OWNER at COST without markup. The CONTRACTOR shall provide written quotes for any of these items that are to be incorporated into the Project for the OWNERS review and approval prior to purchasing materials.

- c. The OWNER may provide other miscellaneous pipe/fittings/structures from time to time as deemed necessary by the OWNER.
- d. All materials, equipment and accessories shall be new and unused and shall be essentially the standard product of a manufacturer regularly engaged in the production of such material or equipment. The OWNER reserves the right to reject any material or equipment manufacturer who, although he meets the above requirements, does not provide satisfactory evidence indicating availability and prompt delivery of materials or equipment. Items of any one type of material or equipment shall be the product of a single manufacturer. All materials or equipment delivered to the site shall be accompanied by certificates, signed by an authorized officer of the manufacturing company, guaranteeing that the materials or equipment conform to Specification requirements. Such certificates shall be immediately turned over to the OWNER. Materials or equipment delivered to the site without such certificates will be subject to rejection.
- e. Prior to award of the Contract and within forty-eight (48) hours of request by the OWNER, the CONTRACTOR shall furnish for approval the identification of the materials to be used and all samples and testing data as required by the technical specification. The submittal shall include the identification of the availability of all materials. Work shall be in accordance with the approved materials.
- f. Catch basin frames and grates for existing structures shall be the property of the OWNER, and shall be delivered to the OWNER's facilities at 145 Paul Road, Rochester, NY, by the CONTRACTOR at no additional expense to the OWNER.
- g. The CONTRACTOR shall have the full continuing responsibility to install all materials supplied and purchased, to protect the same, to maintain them in proper condition and to forthwith repair, replace and make good any damage thereto without cost to the OWNER until such time as the work covered by the Contract is fully accepted by the OWNER.

## **11. WORK ORDERS**

- a. No work shall be performed until a written Work Order has been issued by the OWNER to the CONTRACTOR. Any work performed by the CONTRACTOR prior to receipt of the Work Order shall be at the CONTRACTOR's own risk.
- b. Work will be authorized through one or more Work Orders, totaling not less than Ten Thousand Dollars (\$10,000). Each individual Work Order shall total not more than One Hundred Thousand Dollars (\$100,000).
- c. Each Work Order will describe the location, size, and estimated quantity of catch basins and lateral sewer pipe to be replaced, with a total estimated price for performing the work.
- d. The work to be completed under each work order shall commence within ten (10) days after the written authorization of the Work Order.

- e. The entire Work Order shall be completed within the time stipulated in the Work Order. If the time stipulated in the Work Order extends beyond the time of the Contract, the Contract shall be extended to the completion date of the Work Order.

**12. ADDITIONAL PERFORMANCE BONDS**

- a. Prior to commencement of Work, the County requires the Performance and Payment Bonds in the amount of one hundred percent (100%) of the Work should be in place. Therefore, where more than one Work Order is authorized at one time, the sum total of each type of surety bond shall be the difference between the full amount of the sum of the estimated price of all of the Work Orders and One Hundred Thousand Dollars (\$100,000).
- b. The additional Bonds will be returned upon acceptance of the Work ordered by the OWNER.

**13. PAYMENTS**

- a. Payments for performance of the Work performed under each Work Order of this Contract will be made by the OWNER to the CONTRACTOR based on the terms and conditions stated in the Agreement.
- b. At least five (5) days before the submission of application for payment, the CONTRACTOR shall furnish to the OWNER a complete breakdown of all work performed. This breakdown, when approved, will be used as a basis for preparing an approvable invoice for payment. The CONTRACTOR shall furnish a Monroe County Claim Voucher with each application for payment.
- c. Payments shall be calculated based on multiplying the quantity of the work performed, times the unit price of the applicable Scheduled Payment Item, or cost plus fifteen percent (15%) for general overhead and profit, or a negotiated price, or any combination thereof.
- d. Neither the final payment nor any partial payment shall constitute acceptance of any defective workmanship or material, or noncompliance with the Contract Documents.

**14. ACCEPTANCE AND GUARANTEE OF WORK**

- a. Upon completion of the Work Order the OWNER shall approve all of the work done and shall, within fifteen (15) days of the approval, prepare a final certificate of the work done and the value thereof. The OWNER shall, upon approval of the final certificate, promptly pay the CONTRACTOR the entire sum so found due thereunder after deduction of all previous payments and amounts to be kept and retained under provisions of this Contract. All prior payments shall be subject to correction in the final estimate and payment.
- b. Before issuance of final certificate, the CONTRACTOR shall submit evidence satisfactory to the OWNER that all payrolls, material bills, and other indebtedness connected with the work have been paid.

- c. The CONTRACTOR shall guarantee the work accomplished under this Contract for a period of one year from the date of issuance of final certificate for the Work Order. The guarantee period shall be considered as work remaining to be completed under this Agreement and shall have a value of one percent (1%) of the final Work Order amount during the Guarantee Period. During the Guarantee Period, twice the value of the guarantee (i.e., two percent (2%) of the contract Work Order amount) shall be retained.
- d. Upon expiration of the guarantee period, the CONTRACTOR shall submit an Invoice for approval to the OWNER for final payment, which shall include any and all monies due the CONTRACTOR, including the amount withheld during the guarantee period. All prior partial payments shall be subject to correction in the final invoice and payment.

**15. ASSIGNMENT**

The CONTRACTOR may not assign, transfer, convey, sublet or otherwise dispose of the Contract to any person or corporation without the prior consent of the OWNER in writing.

**16. WAGE RATES AND PAYROLL RECORDS**

- a. Pursuant to the provisions of Section 220-A of the New York State Labor Law, as amended, CONTRACTOR and its subcontractors will be obligated to pay to all laborers, workmen and mechanics the applicable prevailing wage rates and supplements. Included in this Specification are the current applicable wage rates and supplements. CONTRACTOR shall at its sole expense, be responsible to pay any increased wage rates or additional supplements which may become applicable during the term of the Contract.
- b. The CONTRACTOR shall submit weekly a copy of all payrolls to the OWNER. The prime CONTRACTOR shall be responsible for the submission of copies of payrolls of all subcontractors. The copy shall be accompanied by a statement signed by the CONTRACTOR indicating that the payrolls are correct and complete, that the wage rates contained therein are not less than those determined by the Secretary of Labor, and that the classifications set forth for each laborer or mechanic including apprentices and trainees, conform with the work he performed.
- c. The CONTRACTOR shall make the records required under this clause available for inspection by authorized representatives of the OWNER and the Department of Labor, and shall permit such representatives to interview employees during working hours on the job.

**17. FEDERAL SINGLE AUDIT ACT**

In the event the Contractor is a recipient through the Agreement, directly or indirectly, of any funds of or from the United States Government, Contractor agrees to comply fully with the terms and requirements of Federal Single Audit Act [Title 31 United States Code, Chapter 75], as amended from time to time. The Contractor shall comply with all requirements stated in Federal Office of Management and Budget Circulars A-102, A-110, and A-133, and such other circulars, interpretations, opinions, rules, or regulations that may be issued in connection with the Federal Single Audit Act.

Of the amount specified in Article I of the Agreement, \_\_\_\_\_ dollars (\$\_\_\_\_\_) of such amount, or \_\_\_\_\_ percent (\_\_\_\_%) of such amount, is being passed-through the County from the United States Government under the following:

Award Name: \_\_\_\_\_

Award Number: \_\_\_\_\_

Award Year: \_\_\_\_\_

Name of Federal Agency: \_\_\_\_\_

Catalog of Federal Domestic Assistance (CFDA) Number: \_\_\_\_\_

The Award [ ] is, [ ] is not, related to Research and Development.

If on a cumulative basis the Contractor expends Five Hundred Thousand and 00/100 Dollars (\$500,000.00) or more in federal funds in any fiscal year, it shall cause to have a single audit conducted, the Data Collection Form (defined in Federal Office of Management and Budget Circular A-133) shall be submitted to the County; however, if there are findings or questioned costs related to the program that is federally funded by the County, the Contractor shall submit the complete reporting package (defined in Federal Office of Management and Budget Circular A-133) to the County.

If on a cumulative basis the Contractor expends less than Five Hundred Thousand and 00/100 Dollars (\$500,000.00) in federal funds in any fiscal year, it shall retain all documents relating to the federal programs for three (3) years after the close of the Contractor's fiscal year in which any payment was received from such federal programs.

All required documents must be submitted within nine (9) months of the close of the Contractor's fiscal year end to:

Monroe County Internal Audit Unit  
304 County Office Building  
39 West Main Street  
Rochester, NY 14614

The Contractor shall, upon request of the County, provide the County such documentation, records, information and data and response to such inquiries as the County may deem necessary or appropriate and shall fully cooperate with internal and/or independent auditors designated by the County and permit such auditors to have access to, examine and copy all records, documents, reports, and financial statements as the County deems necessary to assure or monitor payments to the Contractor under the Agreement.

The County's right of inspection and audit pursuant to the Agreement shall survive the payment of monies due to Contractor and shall remain in full force and effect for a period of three (3) years after the close of the Contractor's fiscal year in which any funds or payment was received from the County under the Agreement.

**18. NON-DISCRIMINATION**

The Contractor agrees that in carrying out its activities under the terms of the Agreement that it shall not discriminate against any person due to such person's age, marital status, disability, genetic predisposition or carrier status, race, color, creed, sexual orientation, sex or national origin, and that at all times it will abide by the applicable provisions of the Human Rights Law of the State of New York as presently set forth in Sections 290-301 of the Executive Law of the State of New York.

**19. UTILIZATION OF MINORITY (MBE) AND WOMEN'S (WBE) BUSINESS ENTERPRISES**

- a. It is the policy of the County that Minority Business Enterprises (MBE's) and Women's Business Enterprises (WBE's) be afforded opportunities to participate as Subcontractors on County projects. In furtherance of that policy, the County requires CONTRACTOR's to utilize their best efforts to achieve goals for MBE and WBE participation on all County projects. On this project, that goal is a combined participation of MBE firms on ten percent (10%) of the project and by WBE firms on two percent (2%) of the project. The successful Bidder on this project will be required to take various affirmative steps to achieve the participation goals set forth herein. Those affirmative steps, along with the Bid submission and Contract requirements, are described hereafter.
- b. As part of the Bid submission, Bidders shall complete the Certification for Utilization of Minority and Women Business Enterprises, and upon written request of the County the Lowest Responsive Bidder shall provide to the OWNER, within five (5) days of the Bid date, a completed Subcontracting Plan. A copy of the certification for utilization form is included in this Document.
- c. The CONTRACTOR shall agree to take the affirmative steps identified to afford opportunities for MBE and WBE firms on the project and will make his/her best efforts to meet the MBE/WBE participation goals established for this project.
  - 1) The CONTRACTOR will be required to designate, in writing, an executive of its company who will have overall responsibility for implementing the CONTRACTOR's MBE/WBE Utilization Plan.
  - 2) The CONTRACTOR shall maintain records showing Subcontractor awards to MBE and WBE firms and all specific efforts to award subcontracts to such firms even if not successful. Upon written request of the County, the CONTRACTOR shall provide to the OWNER a completed MBE/WBE Monthly Report. A copy of the monthly report form is included in this Document.
  - 3) The CONTRACTOR shall submit payment records that demonstrate payment to all Subcontractors, including the MBE and WBE firms utilized on the project. Such submissions shall include affidavits certifying payments to Subcontractors for work previously paid for by the OWNER. A copy of the affidavit form to be utilized is included in this Document.
- d. Upon written request of the County, the CONTRACTOR shall provide to the OWNER a MBE/WBE Utilization Plan. The Plan must identify, to the maximum extent possible, the MBE and WBE firms to be utilized by the CONTRACTOR.

The OWNER's MBE/WBE Officer shall be responsible for reviewing the CONTRACTOR's Plan and for reviewing each Subcontractor's qualifications as an MBE or WBE. A copy of the utilization plan form is included in this Document.

- 1) The Utilization Plan should be accompanied by executed sub-contracts or signed letters of intent from the MBE/WBE firms identified in the Plan. The CONTRACTOR will be obligated, throughout the term of the Contract, to furnish to the OWNER copies of all subcontracts with MBE and WBE firms for Project work. Failure to provide a copy of such subcontracts prior to commencement of the subcontracted work shall constitute a breach of the CONTRACTOR's obligation and the OWNER shall have the right, at its discretion, to order the work suspended until the CONTRACTOR has complied with this provision. Any costs associated with or resulting from the suspension of work due to the CONTRACTOR's failure to comply with this provision shall be the CONTRACTOR's sole responsibility.
  - 2) Any amendments to the Utilization Plan submitted by the CONTRACTOR must be approved by the OWNER, including, without limitation, changes in the work to be subcontracted to MBE/WBE firms, changes in use of MBE/WBE firms or substitutions of MBE/WBE firms.
- e. The CONTRACTOR shall be required to take the following affirmative steps to insure MBE/WBE participation on the project:
- 1) notify Minority or Women's Contractor Association of the subcontracting opportunities on the project prior to soliciting bids/quotations for such work;
  - 2) advertise in Minority and Women's trade association newsletters with respect to subcontracting opportunities;
  - 3) segment the project work to be subcontracted to the extent consistent with the size and capability of available MBE and WBE contractor's; or
  - 4) negotiate in good faith with MBE/WBE firms interested in performing work on the project (the CONTRACTOR shall be responsible for documenting all such negotiations in order to demonstrate the unacceptability of any MBE/WBE firms which are not chosen to perform work on the project);
  - 5) take positive action to substitute another MBE/WBE firm in the event an MBE/WBE Subcontractor is unable to perform subcontracted work as originally planned.

The CONTRACTOR's failure to take the affirmative steps listed herein shall constitute a default by the CONTRACTOR of the obligations under the Agreement. In the event of such a default by the CONTRACTOR, the OWNER shall be entitled to deduct from its final payment to the CONTRACTOR the percentage amount of the Contract that equals the CONTRACTOR's shortfall from the MBE/WBE participation goals for this project.

- f. The State of New York maintains a list of firms which have previously been certified as MBE's or WBE's as those terms are defined below. A compilation of

State certified MBE/WBE firms is available at the County Purchasing Office, Room 200, County Office Building, 39 West Main Street, Rochester, New York 14614 or from Irv Murph, Monroe County Division of Engineering and Facilities Management, City Place, 50 West Main Street, Suite 7100, Rochester, New York 14614-1228, Telephone: (585) 753-7544. Mr. Murph is available to assist prospective bidders in meeting the requirements of the County's MBE/WBE program.

- g. The following terms are defined as follows:
- 1) *Minority Business Enterprise (MBE)* - an independent business completely or substantially owned, controlled and operated by one or more members of specified minority groups or socially and economically disadvantaged individuals.
  - 2) *Women's Business Enterprise (WBE)* - an independent business completely or substantially owned, controlled and operated by one or more women.
  - 3) *Independent* - demonstrably free from any control, domination or undue influence by individuals or businesses that are not intended to be primary beneficiaries of the MBE/WBE program.
  - 4) *Business* - an entity capable of performing a commercially useful function, including management and supervision of the work.
  - 5) *Owned, Controlled and Operated* - minority or women owners must: (a) have at least 51% of the beneficial ownership interest of the business; (b) share in the risks and profits commensurate with their percentage of ownership; (c) possess the power to direct or cause the direction of the management and policies of the business; (d) be actively involved in the day-to-day management and operation of the firm.
  - 6) *Specified Minority Groups* - Black Americans, Hispanic Americans, Native Americans and Asian Pacific Americans.
  - 7) *Socially and Economically Disadvantaged* - members of a group or an individual found to be so by the U.S. Small Business Administration under Section 8 (a) of the Small Business Act, as amended (15 USC Section 637a).

## **20. NOTICE OF JOB VACANCIES**

- a. The CONTRACTOR recognizes the continuing commitment on the part of Monroe County to assist those receiving temporary assistance to become employed in jobs for which they are qualified, and the County's need to know when jobs become available in the community.
- b. The CONTRACTOR agrees to notify the County when the CONTRACTOR has or is about to have a job opening within Monroe County. Such notice shall be given as soon as practicable after the CONTRACTOR has knowledge that a job opening will occur. The notice shall contain information that will facilitate the identification and referral of appropriate candidates in a form and as required by the Employment Coordinator. This would include at least a description of

conditions for employment, including the job title and information concerning wages, hours per work week, location and qualification (education and experience).

- c. Notice shall be given in writing to:

Employment Coordinator  
Monroe County Department of Human & Health Services  
Room 535, 691 St. Paul Street  
Rochester, New York 14605  
Telephone: (585) 753-6322  
Fax: (585) 753-6308

- d. The CONTRACTOR recognizes that this is an opportunity to make a good faith effort to work with Monroe County for the benefit of the community. Nothing contained in this provision, however, shall be interpreted as an obligation on the part of the CONTRACTOR to employ any individual who may be referred by or through the County for job openings as a result of the above notice. Any decisions made by the CONTRACTOR to hire an individual referred by or through the County shall be voluntary and based solely upon the CONTRACTOR's job requirements and the individual's qualifications for the job, as determined by the CONTRACTOR.

## **21. STATEMENT OF BIDDER'S QUALIFICATIONS**

Each Bidder shall be in the business of regularly performing general sewer repair with a minimum of three (3) years experience. Each bidder shall submit a Standard Contractor's Questionnaire with the bid. When specifically requested by the OWNER, a detailed financial and ownership statement shall be submitted by the apparent low bidder. The OWNER shall have the right to take such steps as he deems necessary to determine the ability of the Bidder to perform his obligations under the Contract, and the Bidder shall furnish the OWNER all such information and data for this purpose as he may request. The right is reserved to reject any Proposal where an investigation of the available evidence or information does not satisfy the OWNER that the Bidder is qualified to carry out properly the terms of the Contract. The issuing of Bid Documents and acceptance of a Bidder's payment for the Bid Documents by the OWNER shall not be construed as pre-qualification of that Bidder.

## **22. OWNER'S RIGHT TO TERMINATE AND/OR COMPLETE CONTRACT**

Should the CONTRACTOR become insolvent, or should he refuse or neglect to perform the work in a proper manner and as directed by the OWNER, or otherwise fail in the performance of any of his obligations under this Contract, and Surety after proper request fails to complete the Contract, then the OWNER, upon the certificate of the CONSULTANT that sufficient cause exists to justify such action, and after giving the CONTRACTOR and his Surety seven (7) calendar days written notice, may, without prejudice to any other right or remedy, terminate the employment of the CONTRACTOR and take possession of the premises and of all materials, tools, and appliances thereon and finish the work by whatever method he may deem expedient. In such cases, no further payment shall be made to the CONTRACTOR until the work is completed, at which time, if the unpaid balance of the Contract price shall exceed the expense of finishing the work, such excess shall be paid to the CONTRACTOR. Should such expense exceed the unpaid balance, the CONTRACTOR and his Surety shall pay the difference to the OWNER. The OWNER shall audit and certify the

expense incurred by him in finishing the work and the damage incurred through the CONTRACTOR'S fault.

**23. OTHER AGENCIES**

The CONTRACTOR(S) must honor the prices, terms and conditions of this contract with political subdivisions, school districts, fire districts or other district or public authority located entirely or partly within Monroe County. Usage of this contract by any of these other political subdivisions or agencies or corporations will have to be coordinated between that subdivision or agency or corporations and the CONTRACTOR. Orders placed against this contract between any subdivision or agency or corporation will be contracts solely between the CONTRACTOR(S) and those entities. Monroe County will not be responsible for, nor will it have any liability or other obligation for, such contract between the CONTRACTOR(S) and any third party.

END OF SECTION

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**SECTION 00410**  
**PROPOSAL**

Submitted By: \_\_\_\_\_  
(CONTRACTOR)

TO: Monroe County, New York

Ladies and Gentlemen:

The undersigned bidder has carefully examined the form and contents of the Contract, has an understanding of the scope and nature of the work, and hereby proposes to furnish all necessary plant, labor, materials, equipment, and tools required to perform and complete the work in strict accordance with the Contract.

The undersigned Bidder agrees to submit to all conditions reported, intended, or implied, both particularly and generally by the Contract at the prices herein stated for:

**GENERAL CATCH BASIN AND LATERAL REPAIR AND CONSTRUCTION  
TERM CONSTRUCTION CONTRACT (TCC #1)**

1. The undersigned Bidder also agrees as follows:

FIRST:

If this Proposal is accepted, to execute the Contract within ten (10) calendar days of date of Notice of Award of Contract, and furnish to the OWNER satisfactory surety bonds each in the sum of One Hundred Thousand Dollars (\$100,000) as security for the faithful performance of the work, and for the payment of all persons performing labor and furnishing materials in connection with the work.

SECOND:

Unless otherwise directed, to begin work within ten (10) days of the issuance of a Work Order and to prosecute said work in such a manner as to complete all work within the time period specified in the Work Order.

THIRD:

To certify as follows: Pursuant to Section 103-d. of the General Municipal Law:

- (a) By submission of this bid, each Bidder and each person signing on behalf of any Bidder certifies, and in the case of a joint bid, each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief:
  - (1) The bid has been arrived at independently without collusion, consultation, communication, or agreement, for the purposes of restricting competition, as to any matter relating to such prices with any other Bidder or with any competitor;
  - (2) Unless otherwise required by law, the unit prices which have been quoted in this bid has not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to opening, directly, or indirectly, to any other Bidder or to any competitor; and

- (3) No attempt has been made or will be made by the Bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

FOURTH:

The CONTRACTOR hereby agrees to the provisions of Section 139-a and 139-b of the New York State Finance Law which requires that upon the refusal of a person, when called before a grand jury, head of a state department, temporary state commission or other state agency, which empowered to compel the attendance of witnesses and examine them under oath, to testify in an investigation, concerning any transaction or Contract had with the State, any political subdivision thereof, a public authority or with any public department, agency or official of the State or of any political subdivision thereof or of a public authority, to sign a waiver of immunity against subsequent criminal prosecution or to answer any relevant question concerning such transaction or Contract,

- (a) Such person, and any firm, partnership or corporation of which he is a member, partner, director or officer shall be disqualified from thereafter selling to or submitting bids to or receiving awards from or entering into any Contract with New York State or any public department, agency or official thereof, for goods, work or services, for a period of five years after such refusal, and
- (b) Any and all Contracts made with the State of New York or any public department, agency, or official thereof, since the effective date of this law, by such a person, and by any firm, partnership, or corporation of which he is a member, partner, director or officer may be canceled or terminated by New York State without any penalty or damages on account of such cancellation or termination, but any monies owing by the State of New York for goods delivered or work done prior to the cancellation or termination shall be paid.

FIFTH:

During the performance of this Contract, the CONTRACTOR hereby agrees as follows:

- (a) The Contractor agrees that in carrying out its activities under the terms of the Agreement that it shall not discriminate against any person due to such person's age, marital status, disability, genetic predisposition or carrier status, race, color, creed, sexual orientation, sex or national origin, and that at all times it will abide by the applicable provisions of the Human Rights Law of the State of New York as presently set forth in Sections 290-301 of the Executive Law of the State of New York. Such action shall be taken with reference, but not be limited to: recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff or termination, rates of pay or other forms of compensation, and selection for training or retraining, including apprenticeship and on-the-job training.
- (b) The CONTRACTOR will send to each labor union or representative of workers with which he has or is bound by a collective bargaining or other agreement or understanding, a notice, to be provided by the State Commission for Human Rights, advising such labor union or representative of the CONTRACTOR's agreement under clauses (a) through (g) hereinafter called "nondiscrimination clauses".

If the CONTRACTOR was directed to do so by the contracting agency as part of the bid or negotiation of this Contract, the CONTRACTOR shall request such labor union or representative will not discriminate because of race, creed, color, sex, or national origin and that such labor union or representative either will affirmatively cooperate, within

the limits of its legal and contractual authority, in the implementation of the policy and provisions of these nondiscrimination clauses or that it consents and agrees that recruitment, employment and the terms and conditions of employment under this Contract shall be in accordance with the purposes and provisions of these nondiscrimination clauses. If such labor union or representative fails or refuses to comply with such a request that it furnish a statement, the CONTRACTOR shall promptly notify the State Commission for Human Rights of such failure or refusal.

- (c) The CONTRACTOR will post and keep posted in conspicuous places, available to employees and applicants for employment, notices to be provided by the State Commission for Human Rights setting forth the substance of the provisions of clauses (a) and (b) and such provisions of the State's laws against discrimination as the State Commission for Human Rights shall determine.
- (d) The CONTRACTOR will state, in all solicitations or advertisements for employees placed by or on behalf of the CONTRACTOR, that all qualified applicants will be afforded equal opportunities without discrimination because of age, marital status, disability, genetic predisposition or carrier status, race, color, creed, sexual orientation, sex or national origin.
- (e) The CONTRACTOR will comply with the provisions of Sections 291-299 of the Executive Law, will furnish all information and reports deemed necessary by the State Commission for Human Rights under these nondiscrimination clauses and such sections of the Executive Law, and will permit access to his books, records and accounts by the State Commission for Human Rights, the Attorney General and the Industrial Commissioner for purposes of investigation to ascertain compliance with these nondiscrimination clauses and such sections of the Executive Law and Civil Rights Law.
- (f) This Contract may be forthwith canceled, terminated or suspended, in whole or in part, by the contracting agency upon the basis of a finding made by the State Commission for Human Rights that the CONTRACTOR has not complied with these nondiscrimination clauses, and the CONTRACTOR may be declared ineligible for future contracts made by or on behalf of the State or a public authority or agency of the State, until he has established and is carrying out a program in conformity with the provisions of these nondiscrimination clauses. Such findings shall be made by the State Commission for Human Rights after conciliation efforts by the Commission have failed to achieve compliance with these nondiscrimination clauses and after a verified complaint has been filed with the Commission, notice thereof has been given to the CONTRACTOR and an opportunity has been afforded him to be heard publicly before three members of the Commission. Such sanctions may be imposed and remedies invoked independently of or in addition to sanctions and remedies otherwise provided by law.
- (g) The CONTRACTOR will include the provisions of clauses (a) through (f) in every subcontract or purchase order in such a manner that such provisions will be binding upon each subcontractor or vendor as to operations to be performed within the State of New York. The CONTRACTOR will take such action in enforcing such provisions of such subcontract or purchase order as the OWNER may direct, including sanctions or remedies for noncompliance. If the CONTRACTOR becomes involved in or is threatened with litigation with a subcontractor or vendor as a result of such direction by the OWNER, the CONTRACTOR shall promptly so notify the Attorney General, requesting him to intervene and protect the interests of the State of New York.

SIXTH

- (a) It is the intent of the OWNER to obtain a proposal for all work performed under this Contract.

The unit price bid shall not include any Sales Tax levied by the following governmental agencies:

- (1) New York State
- (2) Monroe County, New York
- (3) Any other town or governing agency

The quantity times the scheduled unit price shall be the sum of all material and installation cost for each bid item as defined herein.

The CONTRACTOR must agree to transfer the ownership of the material for each scheduled unit price item by separate billing before it is incorporated in and become a part of real property.

(b) The undersigned submits herewith bid guaranty in the amount of Ten Thousand Dollars (\$10,000). In case this Proposal is accepted by the OWNER, and the undersigned shall refuse or neglect, within ten (10) calendar days after date of receipt of Notice to Award, to execute and deliver an Agreement in the form provided herein, or to execute and deliver a Performance Bond and Payment Bond in the amounts required and in the form prescribed, the amount of bid security shall be forfeited and will be retained by the OWNER as liquidated damages, otherwise the total amount of the bid security will be returned to the depositor in accordance with provisions set forth in Contract Terms and Conditions.

- (c) The undersigned acknowledges the receipt of the following Addenda, but he agrees that he is bound by all Addenda whether or not listed herein:

**ADDENDUM NUMBERS AND DATES**

Number 1 - dated \_\_\_\_\_

Number 2 - dated \_\_\_\_\_

Number 3 - dated \_\_\_\_\_

Number 4 - dated \_\_\_\_\_

*(Remainder of Page Intentionally Blank)*

**PROPOSAL**  
**SCHEDULED PAYMENT ITEMS**

The following Scheduled Payment Items are the only payment items under this Contract. Payment to the CONTRACTOR will be based on multiplying the appropriate payment item unit price, times the quantity of the item. The payment items shall include all labor and materials, equipment, overhead, bonds, insurances, profit, and other contingencies; no separate or additional compensation will be made under this Contract unless otherwise hereinafter specified.

Materials such as pipe, fittings, saddles, couplings / Ferncos, pre-cast structures and frames and covers will be reimbursed separately or provided by owner (refer to the Contract Terms and Conditions).

The quantities included in the Bid Proposal are approximate only and cannot be determined prior to issuance of a Work Order. The quantities are utilized solely for the purpose of establishing unit prices for the term of the Contract and for determining the Low Bidder. The quantities are not guaranteed nor promises given as to the work ordered during the term of the Contract.

Some Pay Items are provided with a minimum Unit Bid Price. Higher prices may be submitted on the Bid by entering the revised numbers and initializing the changes.

Note: Where the OWNER determines that work is required which is not included in or covered by the Payment Item Schedule, the payment for this work shall be either the actual cost for labor, direct overhead, materials, supplies, equipment and other services necessary to complete the work plus an added amount of fifteen (15) percent of the actual cost to cover the cost of general overhead and profit, or a negotiated price.

<b>PAY ITEM</b>	<b>ESTIMATED QUANTITY</b>	<b>ITEM DESCRIPTION W/ UNIT PRICE (IN WORDS)</b>	<b>UNIT PRICE IN FIGURES (IN NUMBERS)</b>	<b>AMOUNT BID</b>
101C	50 LF	4"- 6" DIAMETER LATERAL PIPE INSTALL; <8.01' IN DEPTH (Pipe & fittings provided by OWNER, or reimbursed at cost)		
		_____ DOLLARS		
		and _____ CENTS	_____	_____
		LF		
101D	50 LF	4"- 6" DIAMETER LATERAL PIPE INSTALL; 8.01' - 12' IN DEPTH (Pipe & fittings provided by OWNER, or reimbursed at cost)		
		_____ DOLLARS		
		and _____ CENTS	_____	_____
		LF		
101E	50 LF	4"- 6" DIAMETER LATERAL PIPE INSTALL; 12.01' - 16' IN DEPTH (Pipe & fittings provided by OWNER, or reimbursed at cost)		
		_____ DOLLARS		
		and _____ CENTS	_____	_____
		LF		

<b>PAY ITEM</b>	<b>ESTIMATED QUANTITY</b>	<b>ITEM DESCRIPTION W/ UNIT PRICE (IN WORDS)</b>	<b>UNIT PRICE IN FIGURES (IN NUMBERS)</b>	<b>AMOUNT BID</b>
101F	50 LF	8"-12" DIAMETER LATERAL PIPE INSTALL, <8.01' IN DEPTH (Pipe & fittings provided by OWNER, or reimbursed at cost)		
		_____ DOLLARS		
		and _____ CENTS	_____	_____
		LF		
101G	50 LF	8"-12" DIAMETER LATERAL PIPE INSTALL, 8.01' - 12' IN DEPTH (Pipe & fittings provided by OWNER, or reimbursed at cost)		
		_____ DOLLARS		
		and _____ CENTS	_____	_____
		LF		
101H	50 LF	8"-12" DIAMETER LATERAL PIPE INSTALL, 12.01' - 16' IN DEPTH (Pipe & fittings provided by OWNER, or reimbursed at cost)		
		_____ DOLLARS		
		and _____ CENTS	_____	_____
		LF		
120B	10 EA	CONNECTING LATERAL TO SEWER - CORING & SADDLE/INSERTA TEE (Fittings / couplings provided by OWNER, or reimbursed at cost), FOR		
		_____ DOLLARS		
		and _____ CENTS	_____	_____
		EACH		
120D	20 EA	CONNECTING LATERAL TO LATERAL ELASTOMERIC SLEEVES (Fittings / couplings provided by OWNER, or reimbursed at cost), FOR		
		_____ DOLLARS		
		and _____ CENTS	_____	_____
		EACH		

<b>PAY ITEM</b>	<b>ESTIMATED QUANTITY</b>	<b>ITEM DESCRIPTION W/ UNIT PRICE (IN WORDS)</b>	<b>UNIT PRICE IN FIGURES (IN NUMBERS)</b>	<b>AMOUNT BID</b>
120E	5 EA	CONNECTING SEWER TO EXISTING MANHOLE, FOR  _____ DOLLARS and _____ CENTS EACH	_____	_____
120F	10 EA	CONNECTING LATERAL TO EXISTING CATCH BASIN, FOR  _____ DOLLARS and _____ CENTS EACH	_____	_____
120G	5 EA	REPLACEMENT OF 4" TO < 8" DIAMETER SEWER PIPE CROSSING TRENCH EXCAVATION, FOR  _____ DOLLARS and _____ CENTS EACH	_____	_____
120H	5 EA	REPLACEMENT OF 8" OR > DIAMETER SEWER PIPE CROSSING TRENCH EXCAVATION, FOR  _____ DOLLARS and _____ CENTS EACH	_____	_____
220B	50 CY	SELECT GRANULAR FILL (EXTRA WORK), FOR  _____ DOLLARS and _____ CENTS PER CY	_____	_____
230B	50 CY	CRUSHED STONE BEDDING (EXTRA WORK), FOR  _____ DOLLARS and _____ CENTS PER CY	_____	_____

<b>PAY ITEM</b>	<b>ESTIMATED QUANTITY</b>	<b>ITEM DESCRIPTION W/ UNIT PRICE (IN WORDS)</b>	<b>UNIT PRICE IN FIGURES (IN NUMBERS)</b>	<b>AMOUNT BID</b>
240A	5 CY	CONCRETE CRADLE AND ENCASEMENT, FOR  _____ DOLLARS and _____ CENTS PER CY	_____	_____
250B	10 CY	TRENCH / STRUCTURE EXCAVATION - SOLID ROCK MECHANICAL METHOD, FOR  _____ DOLLARS and _____ CENTS PER CY	_____	_____
250C	50 CY	TEST/INSERTION PIT EXCAVATION, FOR  _____ DOLLARS and _____ CENTS PER CY	_____	_____
260A	40 EA	PLUGGING - ABANDON EXISTING LATERAL AND/OR EXISTING UTILITIES, FOR  _____ DOLLARS and _____ CENTS EACH	_____	_____
260B	10 CY	CONTROLLED DENSITY FILL - FILLING OF VOIDS/ ABANDONMENT OF EXISTING LATERAL AND/OR EXISTING UTILITIES, FOR  _____ DOLLARS and _____ CENTS PER CY	_____	_____
280A	5 EA	SUPPORT OF UTILITIES CROSSING EXCAVATION TRENCH - 4" TO < 8" DIAMETER UTILITY, FOR  _____ DOLLARS and _____ CENTS EACH	_____	_____

<b>PAY ITEM</b>	<b>ESTIMATED QUANTITY</b>	<b>ITEM DESCRIPTION W/ UNIT PRICE (IN WORDS)</b>	<b>UNIT PRICE IN FIGURES (IN NUMBERS)</b>	<b>AMOUNT BID</b>
280B	5 EA	SUPPORT OF UTILITIES CROSSING EXCAVATION TRENCH - 8" OR > DIAMETER UTILITY, FOR  _____ DOLLARS and _____ CENTS EACH	_____	_____
280C	100 SF	TEMPORARY TIGHT SHEETING FOR UTILITY SUPPORT, FOR  _____ DOLLARS and _____ CENTS PER SF	_____	_____
320A	100 EA	PRECAST CONCRETE CATCH BASIN UP TO 6.0' DEEP (OWNER PROVIDES PRE-CAST BASIN, FRAME & GRATE, OR REIMBURSED AT COST), FOR  _____ DOLLARS and _____ CENTS EACH	_____	_____
320B	20 VF	ADDITIONAL DEPTH OF CATCH BASIN, FOR (OWNER PROVIDES PRE-CAST EXTENSION RINGS, OR REIMBURSED AT COST), FOR  _____ DOLLARS and _____ CENTS PER Vertical Foot	_____	_____
401A	500 SF	HEAVY DUTY PAVEMENT RESTORATION, FOR  _____ DOLLARS and _____ CENTS PER SF	_____	_____
401E	500 SF	MEDIUM DUTY PAVEMENT RESTORATION, FOR  _____ DOLLARS and _____ CENTS PER SF	_____	_____

<b>PAY ITEM</b>	<b>ESTIMATED QUANTITY</b>	<b>ITEM DESCRIPTION W/ UNIT PRICE (IN WORDS)</b>	<b>UNIT PRICE IN FIGURES (IN NUMBERS)</b>	<b>AMOUNT BID</b>
401I	200 SF	LIGHT DUTY PAVEMENT RESTORATION, FOR  _____ DOLLARS and _____ CENTS PER SF	_____	_____
401M	100 SF	CONCRETE BASE PAVEMENT RESTORATION, FOR  _____ DOLLARS and _____ CENTS PER SF	_____	_____
401Q	500 SF	1½" TOP COURSE ASPHALT CONCRETE PAVEMENT RESTORATION IN AREAS OF COLD MILLING ONLY, FOR  _____ DOLLARS and _____ CENTS PER SF	_____	_____
401R	500 SF	TEMPORARY PAVEMENT PATCH (ASPHALT) AS REQUIRED BY CORSCCD, FOR  _____ DOLLARS and _____ CENTS PER SF	_____	_____
401S	200 SF	TEMPORARY PAVEMENT PATCH (CONCRETE) AS REQUIRED BY CORSCCD, FOR  _____ DOLLARS and _____ CENTS PER SF	_____	_____
401T	100 SF	MISCELLANEOUS COLD MILLING OF ASPHALT CONCRETE , FOR  _____ DOLLARS and _____ CENTS PER SF	_____	_____

<b>PAY ITEM</b>	<b>ESTIMATED QUANTITY</b>	<b>ITEM DESCRIPTION W/ UNIT PRICE (IN WORDS)</b>	<b>UNIT PRICE IN FIGURES (IN NUMBERS)</b>	<b>AMOUNT BID</b>
402A	500 SF	CONCRETE SIDEWALK RESTORATION, FOR  _____ DOLLARS and _____ CENTS PER SF	_____	_____
402B	100 SF	CONCRETE DRIVEWAY RESTORATION, FOR  _____ DOLLARS and _____ CENTS PER SF	_____	_____
402C	100 SF	ASPHALT DRIVEWAY RESTORATION - LIGHT DUTY, FOR  _____ DOLLARS and _____ CENTS PER SF	_____	_____
402D	100 SF	ASPHALT DRIVEWAY RESTORATION - MEDIUM DUTY, FOR  _____ DOLLARS and _____ CENTS PER SF	_____	_____
402E	50 SF	RESET EXISTING BRICK PAVERS/STONE SIDEWALK, FOR  _____ DOLLARS and _____ CENTS PER SF	_____	_____
402F	100 LF	CONCRETE CURBING RESTORATION, FOR  _____ DOLLARS and _____ CENTS PER LF	_____	_____

<b>PAY ITEM</b>	<b>ESTIMATED QUANTITY</b>	<b>ITEM DESCRIPTION W/ UNIT PRICE (IN WORDS)</b>	<b>UNIT PRICE IN FIGURES (IN NUMBERS)</b>	<b>AMOUNT BID</b>
402G	25 LF	NEW STONE CURBING RESTORATION, FOR  _____ DOLLARS and _____ CENTS PER LF	_____	_____
402H	50 LF	RESET EXISTING STONE CURBING, FOR  _____ DOLLARS and _____ CENTS PER LF	_____	_____
402I	5,000 SF	TURF RESTORATION, FOR  _____ DOLLARS and _____ CENTS PER SF	_____	_____
402J	50 LF	CONCRETE GUTTER RESTORATION, FOR  _____ DOLLARS and _____ CENTS PER LF	_____	_____
501A	5 HR	DOWNTIME (DIRECTED BY THE OWNER), FOR  _____ DOLLARS and _____ CENTS PER HR	_____	_____

TOTAL AMOUNT BASE BID \$ \_\_\_\_\_

AMOUNT BASE BID IN WRITING \_\_\_\_\_

SUBMITTED

Dated: \_\_\_\_\_

***(If an Individual, Partnership, or Non-Incorporated Organization)***

Name of Bidder: \_\_\_\_\_

By: \_\_\_\_\_  
(Signature)

Address of Bidder: \_\_\_\_\_

Names and Addresses of Members of the Firm

***(If a Corporation)***

Name of Bidder: \_\_\_\_\_

By: \_\_\_\_\_  
(Signature)

Incorporated Under the Laws of the State of \_\_\_\_\_

Name of President \_\_\_\_\_  
(Name) (Address)

Officer (Secretary) \_\_\_\_\_  
(Name) (Address)

(Treasurer) \_\_\_\_\_  
(Name) (Address)

CORPORATE SEAL

**CERTIFICATION FOR UTILIZATION OF  
MINORITY AND WOMEN'S BUSINESS ENTERPRISES**

The Bidder hereby assures that he/she will take affirmative steps as specified by Monroe County to use Minority and Women's Business Enterprises on this project. He/she further assures that he/she will attempt to utilize not less than ten percent (10%) of Minority Business Enterprise participation, and two percent (2%) of Women's Business Enterprise participation.

BIDDER'S NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

IRS NUMBER: \_\_\_\_\_

\_\_\_\_\_  
Signature and Title

\_\_\_\_\_  
Date

**PERFORMANCE & PAYMENT BOND INFORMATION FORM**

Project Title: General Catch Basin and Lateral Repair and Construction  
Term Construction Contract (TCC#1)

Construction Contract: \_\_\_\_\_

Name of Contractor: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Bonding Company or Person Issuing Security Bonds:  
\_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Bonding Company Agent: \_\_\_\_\_ Telephone No.: (    )

Address: \_\_\_\_\_  
\_\_\_\_\_

Amount of Bonds: \$ \_\_\_\_\_

Duration of Bonds: \_\_\_\_\_ From Date of Contract \_\_\_\_\_ To Final Payment

The Bidder shall complete the information above regarding the performance and payment bond proposed to be provided for the Contract. This information will be used by the OWNER and/or CONSULTANT to verify the bonding prior to award of the Contract.

**CONTRACTOR'S CERTIFICATION REGARDING  
DEBARMENT, SUSPENSION, AND RESPONSIBILITY**

The undersigned certifies, to the best of his/her knowledge and belief, that the CONTRACTOR and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency;
2. Have not within a three-year period preceding this transaction/application/proposal/contract/agreement been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 2 of this certification; and
4. Have not within a three-year period preceding this transaction/application/proposal/contract/agreement had one or more public transactions (Federal, State or local) terminated for cause or default.

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

\_\_\_\_\_  
(Print Name of Contractor)

By: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
(Print Title/Office)

# BID BOND

Any singular reference to Bidder, Surety, Owner, or other party shall be considered plural where applicable.

BIDDER (Name and Address):

SURETY (Name and Address of Principal Place of Business):

OWNER (Name and Address):

BID  
 Bid Due Date:  
 Project (Brief Description Including Location):

BOND  
 Bond Number:  
 Date (Not later than Bid due date):  
 Penal sum \_\_\_\_\_ (Words) \_\_\_\_\_ (Figures)

Surety and Bidder, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Bid Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

<p>BIDDER</p> <p style="text-align: right;">(Seal</p> <p>_____ )</p> <p>Bidder's Name and Corporate Seal</p> <p>By: _____</p> <p>Signature and Title</p> <p>Attest: _____</p> <p>Signature and Title</p>	<p>SURETY</p> <p style="text-align: right;">(Seal)</p> <p>_____</p> <p>Surety's Name and Corporate Seal</p> <p>By: _____</p> <p>Signature and Title (Attach Power of Attorney)</p> <p>Attest: _____</p> <p>Signature and Title</p>
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Note: Above addresses are to be used for giving required notice.

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Surety's liability.
2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation shall be null and void if:
  - 3.1. Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
  - 3.2. All Bids are rejected by Owner, or
  - 3.3. Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default by Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.
6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after Bid due date.
7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

MONROE COUNTY, NEW YORK

**STANDARD CONTRACTOR'S QUESTIONNAIRE**

The information requested in this questionnaire is to assist the CONSULTANT and/or County Project Manager in evaluating the qualifications of contractors, and shall be submitted within 48 hours of the bid opening by the apparent two (2) lowest bidders. An Affidavit of No Change to a previously submitted Questionnaire will not be accepted.

Please indicate whether you believe that any of the information supplied herein is confidential and should be exempt from disclosure under the Freedom of Information Law \_\_\_\_\_ Yes \_\_\_\_\_ No.

If you checked "yes" you must identify the information you feel is confidential by placing an asterisk in front of the appropriate question number(s) and you are requested to attach an additional sheet(s) upon which the basis for such claim(s) is explained.

Project: General Catch Basin and Lateral Repair and Construction – Term Construction Contract (TCC#3)

1. Contract: \_\_\_\_\_

2. Contractor: \_\_\_\_\_

DBA Name, if any: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: (\_\_\_\_) \_\_\_\_\_

Fax: (\_\_\_\_) \_\_\_\_\_

3. Type of company: \_\_\_\_\_ corporation incorporated in: \_\_\_\_\_

\_\_\_ partnership

\_\_\_ individual proprietor

\_\_\_ joint venture consisting of \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4. List names and titles of officers, partners or proprietors.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5. How long has the company been in business? \_\_\_\_\_

List any former names of the company.

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Identify any affiliates of your company. For purposes by this question, your company and another are affiliates when, either directly or indirectly, one controls or has the power to control the other, or a third party or parties controls or has the power to control both.

<u>Federal ID No.</u>	<u>Company Name</u>	<u>Address</u>
-----------------------	---------------------	----------------

_____	_____	_____
_____	_____	_____

6. Has the company, any affiliate, or any predecessor or any member of the company ever been included on any Federal, state or municipal ineligible or debarred list? \_\_\_\_\_ Yes  
\_\_\_\_\_ No?

If yes, please explain the circumstances and the present status on a separate page and attach it.

7. Has the company, any affiliate or any predecessor, been defaulted, or failed to complete a contract in the last five years? \_\_\_\_\_ Yes \_\_\_\_\_ No?

If yes, please explain the circumstances on a separate page and attach it.

8. What type(s) of construction does the company normally perform? \_\_\_\_\_

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9. Please attach a list of significant projects completed in the last five years. Provide project name, owner, consultant, contract amount and completion date.

10. What is the total value of work presently under contract? \$\_\_\_\_\_.

Please attach a list of current contracts including project name, contract amount, owner, consultant, owner/consultant contact person and phone number.

11. What work on this project will you perform with your own forces? (excavation, grading, paving, concrete, masonry, structural steel, plumbing, HVAC, electrical, etc.)

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12. What percentage of the contract does this represent? \_\_\_\_\_ %
13. Please attach a list of key people you expect to assign to this contract, including their positions and experience.
14. a. What work on this project do you plan to subcontract? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- b. What percentage of the contract does this represent? \_\_\_\_\_ %
15. Identify the MBE/WBE firms that your company either has already contacted or plans to contact for subcontracting opportunities. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
16. Please attach a certified financial statement for the last fiscal year and any other evidence of financial capability.
17. Is any officer or owner of the company an elected or appointed official of Monroe County?  
 \_\_\_\_\_ Yes \_\_\_\_\_ No If Yes, please indicate \_\_\_\_\_  
 \_\_\_\_\_
18. Within the past five (5) years has the company, any affiliate, any predecessor company or entity, or any person identified in question number 4 above been the subject of any of the following: (respond to each question and describe in detail the circumstances of each company's "Yes" answer; attach additional pages if necessary).
- a. A judgment of conviction for any business-related conduct constituting a crime under state or federal law? \_\_\_\_\_ No \_\_\_\_\_ Yes
- b. A criminal investigation or indictment for any business-related conduct constituting a crime under state or federal law? \_\_\_\_\_ No \_\_\_\_\_ Yes
- c. A grant of immunity for any business-related conduct constituting a crime under state or federal law? \_\_\_\_\_ No \_\_\_\_\_ Yes
- d. A rejection of any bid for lack of qualifications or responsibility or because of the submission of an informal, non-responsive or incomplete bid? \_\_\_\_\_ No \_\_\_\_\_ Yes
- e. A rejection of any proposed subcontract for lack of qualifications or responsibility or because of the submission of an informal, non-responsive or incomplete bid?  
 \_\_\_\_\_ No \_\_\_\_\_ Yes
- f. A voluntary exclusion from a bidding/contracting agreement? \_\_\_\_\_ No  
 \_\_\_\_\_ Yes
- g. Any administrative proceeding or civil action seeking specific performance or restitution in connection with any public works contract except any disputed work proceeding?  
 \_\_\_\_\_ No \_\_\_\_\_ Yes

- h. An OSHA Citation and Notification Penalty containing a violation classified as serious?  
 No  Yes
- i. An OSHA Citation and Notification of Penalty containing a violation classified as willful?  No  Yes
- j. A prevailing wage or supplement payment violation?  No  Yes
- k. A State Labor Law violation deemed willful?  No  Yes
- l. Any other federal or state citations, Notices, violation orders, pending administration hearings or proceedings, or determination of a violation of any labor law or regulation?  
 No  Yes
- m. Any criminal investigation, felony indictment or conviction concerning formation of or any business association with, an allegedly false or fraudulent women's, minority or disadvantaged business enterprise?  No  Yes
- n. Any denial, decertification, revocation or forfeiture of Women's Business Enterprise, Minority Business Enterprise or Disadvantaged Business Enterprise status?  No  Yes
- o. Rejection of a low bid on a State contract for failure to meet statutory affirmative action or M/WBE requirements?  No  Yes
- p. A consent order with the NYS Department of Environmental Conservation, or a federal, state or local government enforcement determination involving a violation of federal or state environmental laws?  No  Yes
- q. Any bankruptcy proceeding?  No  Yes
- r. Any suspension or revocation of any business or professional license?  No  Yes
- s. Any citations, Notices, violation orders, pending administrative hearings or proceedings or determination for violation of:
- federal, state or local health laws, rules or regulations
  - unemployment insurance or workers compensation coverage or claim requirements
  - ERISA (Employee Retirement Income Security Act)
  - federal, state or local human rights laws
  - federal or state security laws?
- No  Yes

I hereby certify the above and attached information to be true, complete and not misleading. False or misleading statements may result in revocation of the contract.

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Signature

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Name and Title

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Date

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_, before me personally came \_\_\_\_\_, to me known and known to me to be the person described in and who executed the foregoing instrument and duly acknowledged that he/she executed the same.

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Notary Public

Submit completed questionnaire to:

Kevin Quinn, Project Manager  
Monroe County Department of Environmental Services  
50 West Main Street  
City Place, Suite 7100  
Rochester, NY 14614

Ph# (585) 753-7652  
Fax# (585) 324-4257

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**SECTION 00520  
FORM OF AGREEMENT**

THIS AGREEMENT, made on the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_, by and between Monroe County, acting on its own behalf and acting on behalf of all its sanitary sewer districts, and all extensions thereto now existing or subsequently created by the County Legislature of the County of Monroe, hereinafter called the OWNER, and \_\_\_\_\_ hereinafter called the CONTRACTOR.

WITNESSETH, that the CONTRACTOR and the OWNER, for the consideration hereinafter named, agree as follows:

**ARTICLE I - SCOPE OF WORK**

The CONTRACTOR hereby agrees to furnish all of the materials with the exception of those provided by the OWNER and listed in the "Contract Terms and Conditions," and all the equipment and labor necessary, and to perform all of the work shown on the Plans and described in the Specification and as outlined in the Work Orders for the Project entitled:

**GENERAL CATCH BASIN AND LATERAL REPAIR AND CONSTRUCTION  
TERM CONSTRUCTION CONTRACT (TCC #1)**

all in accordance with the requirements and provisions of the following Documents prepared by the firm of Chatfield Engineers, P.C., and which Documents are hereby made a part of the Agreement:

- (a) Notice to Bidders
- (b) Contract Terms and Conditions
- (c) Forms
  - Proposal Form
  - Bid Bond Form
  - Contractor's Questionnaire
  - Agreement Form
  - Performance Bond Form
  - Payment Bond Form
- (d) Wage Rates
- (e) MBE/WBE Forms
- (f) Technical Specifications
- (g) The following Addenda:
  - Addendum No. 1 dated \_\_\_\_\_
  - Addendum No. 2 dated \_\_\_\_\_
  - Addendum No. 3 dated \_\_\_\_\_
  - Addendum No. 4 dated \_\_\_\_\_

This agreement is a term contract of indefinite quantity through December 31, 2013 with the option to extend for four (4) additional one (1) year periods at the mutual consent of both parties. The duration of the Contract shall be twelve (12) months, with the exception of the first term, from the date of the Agreement. Work will be authorized through one or more Work Orders, totaling not less than Ten Thousand Dollars (\$10,000). Each individual Work Order

shall total not less than Two Thousand Dollars (\$2,000) and not more than One Hundred Thousand Dollars (\$100,000).

ARTICLE II - WORK ORDERS

- (a) No work shall be performed until a written Work Order has been issued by the OWNER to the CONTRACTOR. Any work performed by the CONTRACTOR prior to receipt of the Work Order shall be at the CONTRACTOR's own risk.
- (b) Each Work Order will describe the location, size, and estimated quantity of catch basins and lateral sewer pipes to be replaced, with a total estimated price for performing the work.
- (c) The Work to be completed under each Work Order shall commence within ten (10) days after the written authorization of the Work Order.
- (d) The entire Work Order shall be completed within the time stipulated in the Work Order.

ARTICLE III - CONTRACT SUM

- (a) The OWNER shall pay to the CONTRACTOR for the performance of the work, a sum calculated by multiplying the quantity of work authorized under each Work Order, times the applicable Scheduled Payment Item unit price. This sum shall include all labor, materials, equipment, overhead, bonds, insurance, profit, and other contingencies in connection therewith.
- (b) **The Contract Price, based upon the estimated quantities included in the Itemized Proposal shall be:**

_____	_____
(Written in Words)	(Amount)

all in accordance with the CONTRACTOR's Proposal attached hereto and made a part thereof. The quantities included in the Bid Proposal are approximate only and cannot be determined prior to issuance of a Work Order. The quantities are utilized solely for the purpose of establishing unit prices for the term of the Contract and for determining the Low Bidder. The quantities are not guaranteed nor promises given as to the work ordered during the term of the Contract.

- (c) The applicable payment item will be determined by the OWNER or OWNER's representative at the time that the work is performed.
- (d) The OWNER is exempt under Section 1116 of the Tax Law and, therefore, no sales tax shall be included in the bids.

Materials:

It shall be understood that title to all materials is to pass to the OWNER prior to their incorporation into the realty, be they purchased by the CONTRACTOR, or by any subcontractor, or by any supplier. Such CONTRACTOR or subcontractors or supplier, since they purchase the materials for resale as tangible personal property rather than as realty, will not be required to pay the tax to the material supplier or subcontractor on their purchase, and each shall include with each order a Resale Certificate (Form ST-120.1).

## Labor:

The OWNER shall furnish to the successful prime CONTRACTOR or CONTRACTOR's a Certificate of Capital Improvements (New York State Department of Taxation and Finance FORM ST-124) which will exempt such CONTRACTOR or CONTRACTOR's from the tax on all labor. Each CONTRACTOR shall copy and pass such copies to all his subcontractors for the same purpose.

The exemption does not, however, apply to tools, machinery, equipment or other property leased by or to the CONTRACTOR or to his subcontractors and he and they shall be responsible for and pay any and all applicable taxes, including sales and compensating use taxes on such leased tools, machinery, equipment or other property, and for such materials not incorporated into the project.

The following specific provisions are hereby included in this Agreement and parallel provisions shall be included in the Contract and in all Subcontracts entered into hereunder:

Title to all materials to be sold by the CONTRACTOR to the OWNER pursuant to the provisions of this Agreement, shall immediately vest in the OWNER upon delivery of such material to the job site before their installation or incorporation into the project. Such materials shall then become the sole property of the OWNER, subject to the right of the OWNER and ENGINEER to reject the same within a reasonable period for failure to conform to the standards and Specifications of the Contract Documents and the Purchase Orders.

The purchase by subcontractors of materials to be sold hereunder will also be a purchase for resale to the CONTRACTOR (either directly or through other subcontractors). The Subcontract Agreements providing for the resale of such material prior to and separate and apart from the incorporation of such materials into the project and such Subcontract Agreements shall be a form similar to this Agreement.

The sum paid under this Agreement shall be deemed to be in full consideration for the performance by the CONTRACTOR of all his duties and obligations under this Agreement in connection with said sale, including furnishing the use of construction equipment not owned by the CONTRACTOR or its subcontractors but rented from others.

Nothing in this article is intended or shall be construed as relieving the CONTRACTOR from his obligations under this Agreement and the CONTRACTOR shall have the full continuing responsibility to install the material and supplies purchased in accordance with the provisions of this Agreement, to protect the same, to maintain them in proper condition and to forthwith repair, replace and make good any damage thereto without cost to the OWNER until such time as the work covered by the Agreement is fully accepted by the OWNER.

## ARTICLE IV - ADDITIONS-DEDUCTIONS-DEVIATIONS

If the OWNER orders, in writing, changes to the performance or scope of any work covered by the Work Order for any reason, the value of such work, additions, deductions or deviations ("revised work"), shall be determined either by the unit prices specifically contained in the Contract documents, or where unit prices do not apply by acceptance of agreed unit prices, based on cost plus fifteen percent (15%) for general overhead and profit, or negotiated price.

## ARTICLE V - PROGRESS PAYMENTS

The OWNER shall make payments under this Agreement as follows:

- (a) On not later than the fifth day of every month, the CONTRACTOR shall submit an

approvable invoice covering the work performed from the previous invoice. Attached to said invoice shall be supporting documentation which may reasonably be required by the OWNER.

- (b) Not later than the fifth day of the month following the submittal of an approvable invoice, the OWNER will make partial payment to the CONTRACTOR in accordance with the following terms:
  - (1) The OWNER shall retain five percent (5%) of the amount due on each invoice. The OWNER reserves the right to retain a greater percentage in the event the CONTRACTOR fails to make satisfactory progress or in the event there is other specific cause for greater withholding.
  - (2) At such time that the OWNER deems the Work Order substantially complete, the amount retained may be reduced below five percent (5%) to two percent (2%) of the total Work Order amount, plus two times the value of any remaining items of work to be completed, as determined by the OWNER.
  - (3) Notwithstanding any of the amounts to be withheld in accordance with the paragraphs set forth above, the OWNER has the further right to withhold any amount necessary to satisfy any claims, liens or judgments against the CONTRACTOR and any costs incurred by the OWNER arising out of handling and processing the same.
  - (4) Upon final completion of the Work Order, the CONTRACTOR shall submit an invoice to the OWNER for final payment which shall include any and all monies due the CONTRACTOR, including the amount withheld during the guarantee period.
- (c) All work covered by partial payments shall thereupon become the sole property of the OWNER, but this provision shall not be construed as relieving the CONTRACTOR from his sole responsibility for the care and protection of work upon which payments have been made of the restoration of any damaged work, or as waiver of the right of the OWNER to require the fulfillment of all the terms of the Contract.
- (d) Before any payments will be made under this Contract, the OWNER reserves the right to require the CONTRACTOR and all subcontractors to submit written verified statements, in satisfactory form, certifying in detail to the amounts then due and unpaid by such CONTRACTOR and its subcontractors to all laborers for daily or weekly wages on account of labor performed upon the work under this Contract, or to other persons for materials, equipment and supplies delivered at the site of the work. The term "laborers," as used herein, shall include workmen and mechanics.
- (e) The OWNER hereby reserves the right to deduct from any monies due or to become due the CONTRACTOR any costs incurred by the OWNER arising out of this project for the handling and/or processing of any liens, release of liens, restraining notices, garnishments, levies, summons, subpoenas or other documents, legal papers, suits or actions served upon or filed with the OWNER.

#### ARTICLE VI - ACCEPTANCE AND FINAL PAYMENT

- (a) Upon completion of the work the OWNER shall approve all of the work done and shall, within fifteen (15) days of the approval, prepare a final certificate of the work done and the value thereof. The OWNER shall, upon approval of the final certificate, promptly

pay the CONTRACTOR the entire sum so found due thereunder after deduction of all previous payments and amounts to be kept and retained under provisions of this Contract.

- (b) Before issuance of final certificate, the CONTRACTOR shall submit evidence satisfactory to the OWNER that all payrolls, material bills, and other indebtedness connected with the work have been paid.
- (c) The CONTRACTOR shall guarantee the work accomplished under this Contract for a period of one (1) year from the date of issuance of final certificate for the Work Order. The guarantee shall have a value of two percent (2%) of the final Work Order amount during the guarantee period. The OWNER shall retain two percent (2%) of the total Work Order amount during the guarantee period as security for the performance for any guarantee work.
- (d) Upon expiration of the guarantee period, the CONTRACTOR shall submit an approvable invoice to the OWNER for final payment, which shall include any and all monies due the CONTRACTOR, including the amount withheld during the guarantee period. All prior partial payments shall be subject to correction in the final invoice and payment.

#### ARTICLE VII - INSURANCE

- (a) The CONTRACTOR shall secure and maintain for the entire length of the Contract, including the guarantee period, such insurance policies naming the CONTRACTOR, the COUNTY OF MONROE and the District and shall protect those named and his Subcontractors, including their officers, officials, employees and agents, from claims for bodily injuries, death or property damage which may arise from operations under this Contract whether such operations be by himself or by any Subcontractor or anyone employed by them directly or indirectly. The following insurance policies with insurance companies authorized to do business in New York State are required:
  - 1. Statutory Worker's Compensation.
  - 2. General Liability Insurance; aggregate limits of liability \$3,000,000. This coverage may be in the form of a single policy of a basic policy plus umbrella coverage.
  - 3. CONTRACTOR'S Protective Liability covering operations of Subcontractors, with same limits.
  - 4. Contractual Liability covering Hold Harmless Clause.
  - 5. Automobile Public Liability and Property Damage covering both owned and hired vehicles. (Bodily Injury \$1,000,000 each accident; Property Damage \$1,000,000 each accident).
  - 6. Prior to the storage or use of explosives, the CONTRACTOR shall provide evidence of blasting coverage in the Public Liability, Property Damage and CONTRACTOR'S Protective Liability Insurance.
  - 7. All Risk Builders Risk or All Risk Installation Floater, as appropriate, including Fire and Extended Coverage in an amount of \$50,000.
  - 8. If any of the rating classifications embody property damage exclusions x, c, or

u, coverage for eliminating such exclusions must be provided with same limits.

- (b) Certification of such insurance shall be filed with the OWNER prior to Contract signing and shall be subject to approval for adequacy of protection. Said certificates of insurance shall contain a thirty (30) days notice of cancellation in favor of the OWNER.
- (c) The above outlined insurance requirements are the minimum during construction.
- (d) During the guarantee period, CONTRACTOR shall furnish completed operations liability insurance in a minimum amount of \$3,000,000. Prior to the release of the semi-final payment, the CONTRACTOR shall provide a certificate of insurance for this coverage which may not be canceled prior to the end of the guarantee period.

ARTICLE VIII - RESPONSIBILITY FOR DAMAGE CLAIMS/HOLD HARMLESS

The CONTRACTOR shall defend, indemnify, and save harmless the OWNER, their offices and employees, from all suits, actions, or claims of any character brought because of any injuries or damage received or sustained by a person, persons, or property on account of the operations of said CONTRACTOR; or on account of or in consequence of any neglect in safeguarding the work; or through use of unacceptable materials in constructing the work; or because of any act or omission, neglect, or from any infringements of patent, trademark, or copyright; or from any claims on amounts arising or recovered under the Worker's Compensation Act, or any other law, ordinance, order or decree; and so much of the money due the said CONTRACTOR under and by virtue of his contract as shall be considered necessary by the OWNER for the purpose, may be retained for the use of the OWNER; or, in case no money is due, his surety may be held until such suit or suits, action or actions, claim or claims have been settled and suitable evidence to that effect furnished to the OWNER, except that money due the CONTRACTOR, will not be withheld when the contract or produces satisfactory evidence that he is adequately protected by public liability and property damage insurance. The CONTRACTOR specifically agrees to defend and indemnify the County of Monroe and the District from any and all claims brought under the labor law.

IN WITNESS WHEREOF, the parties hereto have executed this Contract the day and year first above written.

Monroe County, New York

BY: \_\_\_\_\_  
Dawn C. Staub  
Purchasing Manager

CONTRACTOR: \_\_\_\_\_

BY: \_\_\_\_\_

\_\_\_\_\_  
Title

\_\_\_\_\_  
CONTRACTORS Social Security Number, or  
Federal I.D. Number

STATE OF NEW YORK)  
COUNTY OF MONROE) SS.:  
CITY OF ROCHESTER)

On the \_\_\_\_ day of \_\_\_\_\_ in the year 20\_\_\_\_, before me, the undersigned, a Notary Public in and for said State, personally appeared DAWN C. STAUB, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her capacity, and that by her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

\_\_\_\_\_  
Notary Public

**(ACKNOWLEDGEMENT BY CONTRACTOR, IF A CORPORATION)**

STATE OF NEW YORK)  
COUNTY OF MONROE) SS:

On this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally came \_\_\_\_\_, to me known, who being duly sworn, did depose and say that he/she resides in \_\_\_\_\_; that he/she is the of the \_\_\_\_\_ Corporation described herein, and which executed the foregoing instrument; and that he/she knows the Seal of the Corporation; that the Seal affixed to the instrument is such Corporate Seal; that it was so affixed by the order of the Board of Directors of the Corporation; and that he/she signed her/his name thereto by like order.

\_\_\_\_\_  
NOTARY PUBLIC

**(ACKNOWLEDGEMENT BY CONTRACTOR IF A PARTNERSHIP)**

STATE OF NEW YORK)  
COUNTY OF MONROE) SS:

On this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally came to me known and known to me to be a member of the firm of \_\_\_\_\_, and known to me to be an individual described in, and who executed the foregoing instrument in the firm name of \_\_\_\_\_, and he/she duly acknowledged to me that he/she executed the same for and in the behalf of said firm for the uses and purposes mentioned therein.

\_\_\_\_\_  
NOTARY PUBLIC

**(ACKNOWLEDGEMENT BY CONTRACTOR, IF AN INDIVIDUAL)**

STATE OF NEW YORK)  
COUNTY OF MONROE)      SS:

On this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally came \_\_\_\_\_, to me known and known to me to be the person described in and who executed the foregoing instrument and duly acknowledged that he/she executed the same.

\_\_\_\_\_  
NOTARY PUBLIC

END OF SECTION

# PERFORMANCE BOND

Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

SURETY (Name and Address of Principal Place of Business):

OWNER (Name and Address):

## CONTRACT

Date:

Amount:

Description (Name and Location):

## BOND

Bond Number:

Date (Not earlier than Contract Date):

Amount:

Modifications to this Bond Form:

Surety and Contractor, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Performance Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

### CONTRACTOR AS PRINCIPAL

Company:

Signature: \_\_\_\_\_ (Seal)

Name and Title:

(Space is provided below for signatures of additional parties, if required.)

### CONTRACTOR AS PRINCIPAL

Company:

Signature: \_\_\_\_\_ (Seal)

Name and Title:

### SURETY

\_\_\_\_\_  
(Seal)

Surety's Name and Corporate Seal

By: \_\_\_\_\_

Signature and Title

(Attach Power of Attorney)

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

Signature and Title

### SURETY

\_\_\_\_\_  
(Seal)

Surety's Name and Corporate Seal

By: \_\_\_\_\_

Signature and Title

(Attach Power of Attorney)

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

Signature and Title:

EJCDC No. C-610 (2002 Edition)

Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, and the American Institute of Architects.

1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner for the performance of the Contract, which is incorporated herein by reference.
2. If Contractor performs the Contract, Surety and Contractor have no obligation under this Bond, except to participate in conferences as provided in Paragraph 3.1.
3. If there is no Owner Default, Surety's obligation under this Bond shall arise after:
  - 3.1. Owner has notified Contractor and Surety, at the addresses described in Paragraph 10 below, that Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with Contractor and Surety to be held not later than 15 days after receipt of such notice to discuss methods of performing the Contract. If Owner, Contractor and Surety agree, Contractor shall be allowed a reasonable time to perform the Contract, but such an agreement shall not waive Owner's right, if any, subsequently to declare a Contractor Default; and
  - 3.2. Owner has declared a Contractor Default and formally terminated Contractor's right to complete the Contract. Such Contractor Default shall not be declared earlier than 20 days after Contractor and Surety have received notice as provided in Paragraph 3.1; and
  - 3.3. Owner has agreed to pay the Balance of the Contract Price to:
    1. Surety in accordance with the terms of the Contract;
    2. Another contractor selected pursuant to Paragraph 4.3 to perform the Contract.
4. When Owner has satisfied the conditions of Paragraph 3, Surety shall promptly and at Surety's expense take one of the following actions:
  - 4.1. Arrange for Contractor, with consent of Owner, to perform and complete the Contract; or
  - 4.2. Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or
  - 4.3. Obtain bids or negotiated proposals from qualified contractors acceptable to Owner for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by Owner and Contractor selected with Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Contract, and pay to Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by Owner resulting from Contractor Default; or
  - 4.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:
    1. After investigation, determine the amount for which it may be liable to Owner and, as soon as practicable after the amount is determined, tender payment therefor to Owner; or
    2. Deny liability in whole or in part and notify Owner citing reasons therefor.
5. If Surety does not proceed as provided in Paragraph 4 with reasonable promptness, Surety shall be deemed to be in default on this Bond 15 days after receipt of an additional written notice from Owner to Surety demanding that Surety perform its obligations under this Bond, and Owner shall be entitled to enforce any remedy available to Owner. If Surety proceeds as provided in Paragraph 4.4, and Owner refuses the payment tendered or Surety has denied liability, in whole or in part, without further notice Owner shall be entitled to enforce any remedy available to Owner.
6. After Owner has terminated Contractor's right to complete the Contract, and if Surety elects to act under Paragraph 4.1, 4.2, or 4.3 above, then the responsibilities of Surety to Owner shall not be greater than those of Contractor under the Contract, and the responsibilities of Owner to Surety shall not be greater than those of Owner under the Contract. To a limit of the amount of this Bond, but subject to commitment by Owner of the Balance of the Contract Price to mitigation of costs and damages on the Contract, Surety is obligated without duplication for:
  - 6.1. The responsibilities of Contractor for correction of defective Work and completion of the Contract;
  - 6.2. Additional legal, design professional, and delay costs resulting from Contractor's Default, and resulting from the actions or failure to act of Surety under Paragraph 4; and
  - 6.3. Liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or non-performance of Contractor.
7. Surety shall not be liable to Owner or others for obligations of Contractor that are unrelated to the Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than Owner or its heirs, executors, administrators, or successors.
8. Surety hereby waives notice of any change, including changes of time, to Contract or to related subcontracts, purchase orders, and other obligations.
9. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the Work or part of the Work is located and shall be instituted within two years after Contractor Default or within two years after Contractor ceased working or within two years after Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
10. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the address shown on the signature page.
11. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
12. Definitions.
  - 12.1. Balance of the Contract Price: The total amount payable by Owner to Contractor under the Contract after all proper adjustments have been made, including allowance to Contractor of any amounts received or to be received by Owner in settlement of insurance or other Claims for damages to which Contractor is entitled, reduced by all valid and proper payments made to or on behalf of Contractor under the Contract.
  - 12.2. Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.
  - 12.3. Contractor Default: Failure of Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract.
  - 12.4. Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract or to perform and complete or comply with the other terms thereof.

FOR INFORMATION ONLY – Name, Address and Telephone  
 Surety Agency or Broker  
 Owner's Representative (engineer or other party)

# PAYMENT BOND

Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

SURETY (Name and Address of Principal Place of Business):

OWNER (Name and Address):

## CONTRACT

Date:

Amount:

Description (Name and Location):

## BOND

Bond Number:

Date (Not earlier than Contract Date):

Amount:

Modifications to this Bond Form:

Surety and Contractor, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Payment Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

### CONTRACTOR AS PRINCIPAL

Company:

Signature: \_\_\_\_\_ (Seal)

Name and Title:

(Space is provided below for signatures of additional parties, if required.)

### CONTRACTOR AS PRINCIPAL

Company:

Signature: \_\_\_\_\_ (Seal)

Name and Title:

### SURETY

\_\_\_\_\_  
(Seal)

Surety's Name and Corporate Seal

By:

Signature and Title

(Attach Power of Attorney)

Attest:

Signature and Title

### SURETY

\_\_\_\_\_  
(Seal)

Surety's Name and Corporate Seal

By:

Signature and Title

(Attach Power of Attorney)

Attest:

Signature and Title:

EJCDC No. C-615 (2002 Edition)

Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, the American Institute of Architects, the American Subcontractors Association, and the Associated Specialty Contractors.

1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner to pay for labor, materials, and equipment furnished by Claimants for use in the performance of the Contract, which is incorporated herein by reference.

2. With respect to Owner, this obligation shall be null and void if Contractor:

2.1. Promptly makes payment, directly or indirectly, for all sums due Claimants, and

2.2. Defends, indemnifies, and holds harmless Owner from all claims, demands, liens, or suits alleging non-payment by Contractor by any person or entity who furnished labor, materials, or equipment for use in the performance of the Contract, provided Owner has promptly notified Contractor and Surety (at the addresses described in Paragraph 12) of any claims, demands, liens, or suits and tendered defense of such claims, demands, liens, or suits to Contractor and Surety, and provided there is no Owner Default.

3. With respect to Claimants, this obligation shall be null and void if Contractor promptly makes payment, directly or indirectly, for all sums due.

4. Surety shall have no obligation to Claimants under this Bond until:

4.1. Claimants who are employed by or have a direct contract with Contractor have given notice to Surety (at the addresses described in Paragraph 12) and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.

4.2. Claimants who do not have a direct contract with Contractor:

1. Have furnished written notice to Contractor and sent a copy, or notice thereof, to Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials or equipment were furnished or supplied, or for whom the labor was done or performed; and

2. Have either received a rejection in whole or in part from Contractor, or not received within 30 days of furnishing the above notice any communication from Contractor by which Contractor had indicated the claim will be paid directly or indirectly; and

3. Not having been paid within the above 30 days, have sent a written notice to Surety and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to Contractor.

5. If a notice by a Claimant required by Paragraph 4 is provided by Owner to Contractor or to Surety, that is sufficient compliance.

6. When a Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at Surety's expense take the following actions:

6.1. Send an answer to that Claimant, with a copy to Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.

6.2. Pay or arrange for payment of any undisputed amounts.

7. Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by Surety.

8. Amounts owed by Owner to Contractor under the Contract shall be used for the performance of the Contract and to satisfy claims, if any, under any performance bond. By Contractor furnishing and Owner accepting this Bond, they agree that all funds earned by Contractor in the performance of the Contract are dedicated to satisfy obligations of Contractor and Surety under this Bond, subject to Owner's priority to use the funds for the completion of the Work.

9. Surety shall not be liable to Owner, Claimants, or others for obligations of Contractor that are unrelated to the Contract. Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.

10. Surety hereby waives notice of any change, including changes of time, to the Contract or to related Subcontracts, purchase orders and other obligations.

11. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the Work or part of the Work is located or after the expiration of one year from the date (1) on which the Claimant gave the notice required by Paragraph 4.1 or Paragraph 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the addresses shown on the signature page. Actual receipt of notice by Surety, Owner, or Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.

13. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory Bond and not as a common law bond.

14. Upon request of any person or entity appearing to be a potential beneficiary of this Bond, Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

15. DEFINITIONS

15.1. Claimant: An individual or entity having a direct contract with Contractor, or with a first-tier subcontractor of Contractor, to furnish labor, materials, or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Contract, architectural and engineering services required for performance of the Work of Contractor and Contractor's Subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

15.2. Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.

15.3. Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract or to perform and complete or comply with the other terms thereof.

**FOR INFORMATION ONLY – Name, Address and Telephone**

**Surety Agency or Broker:**

**Owner's Representative (engineer or other party):**

## **WAGE RATE NOTE**

PROJECT: **General Catch Basin and Lateral Repair and Construction  
Term Construction Contract (TCC #1)**

NYSDOL PRC#: 2012009711

The Contractor shall ensure that workers are paid the appropriate wages and supplemental (fringe) benefits. Throughout the contract, the Contractor shall obtain and pay workers in accordance with periodic wage rate schedule updates from the NYS Department of Labor (NYSDOL). Wage rate amendments and supplements are available on the NYSDOL web site at [www.labor.state.ny.us](http://www.labor.state.ny.us). All changes or clarification of labor classification(s) and applicability of prevailing wage rates shall be obtained in writing from the Office of the Director, NYSDOL Bureau of Public Work.

The NYSDOL prevailing wage rate schedule for this contract has been determined and is available on the internet. The prevailing wage rate schedule is accessed by visiting the NYSDOL web site, navigating to the appropriate web page, and entering the **Prevailing Rate Case No. 2012009711**.

A copy of the project specific prevailing wage rate schedule will be provided to the successful bidder upon award of the contract. Upon written request, the schedule will be provided by the Owner to prospective Bidders without internet access.

New York State Department of Labor  
**Prevailing Wage**

[Unemployment Benefits](#)

[Career Services](#)

[Business Services](#)

[Worker Protection](#)

[Forms and Publications](#)

[Home](#)

[Wage Schedule](#) · [Submit Notice Of Award](#) · [Submit Notice Of Project Completion](#)

PRC#: 2012009711

Acceptance Status: Accepted Article 8

Type of Contracting Agency: County

**Contracting Agency**

**Send Reply To**

Monroe County DES  
 Kevin Quinn  
 Engineer  
 50 W. Main Street  
 City Place, Suite 7100  
 Rochester NY 14614  
  
 (585) 753-7652  
 (585) 324- 4257 Fax  
 kquinn@monroecounty.gov

**Project Information**

**Project Title** Term Construction Contract #1  
**Description of Work** General Catch Basin and Lateral Repair and Construction  
**Contract Id No.** 1117-12  
**Project Locations(s)** Varied - Monroe County  
**Route No / Street Address** varies  
**Village / City** varies  
**Town** varies  
**State / Zip** NY  
**Nature of Project** Other Reconstruction, Maintenance, Repair or Alteration  
**Approximate Bid Date** 11/30/2012  
**Checked Occupation(s)** Construction (Building, Heavy & Highway, Sewer, Water, Tunnel)

**Applicable Counties**

Monroe

**SECTION 00855  
CONSULTANTS/CONTRACTORS DETAILED MBE/WBE UTILIZATION PLAN FORMS**

CONSULTANT/CONTRACTOR			CONTRACT	
NAME:			PROJECT NAME:	
ADDRESS:			CONTRACT DESCRIPTION:	
CONTACT PERSON:				
PHONE:				

**PROJECTED MBE/WBE CONTRACT SUMMARY**

**MINORITY BUSINESS ENTERPRISE**

TOTAL DOLLAR VALUE OF THE PRIME CONTRACT: \$ \_\_\_\_\_

CONTRACT MBE PERCENTAGE GOAL: \_\_\_\_\_ %

MBE PERCENTAGE/AMOUNT APPLIED TO THE CONTRACT: \$ \_\_\_\_\_

TOTAL MBE DOLLAR AMOUNT PROJECTED: \$ \_\_\_\_\_

MBE DOLLAR AMOUNT UNABLE TO MEET: \$ \_\_\_\_\_

**WOMEN BUSINESS ENTERPRISE**

TOTAL DOLLAR VALUE OF THE PRIME CONTRACT: \$ \_\_\_\_\_

CONTRACT WBE PERCENTAGE GOAL: \_\_\_\_\_ %

WBE PERCENTAGE/AMOUNT APPLIED TO THE CONTRACT: \$ \_\_\_\_\_

TOTAL WBE DOLLAR AMOUNT PROJECTED: \$ \_\_\_\_\_

WBE DOLLAR AMOUNT UNABLE TO MEET: \$ \_\_\_\_\_

FOR THE MONROE COUNTY DEPARTMENT OF ENGINEERING USE ONLY

GOOD FAITH EFFORT DEMONSTRATED: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

DATE RECEIVED \_\_\_\_\_

DATE APPROVED: \_\_\_\_\_

INITIALS: \_\_\_\_\_

## CONSULTANTS/CONTRACTORS DETAILED MBE/WBE UTILIZATION PLAN

### SECTION I-MBE PARTICIPATION

MBE FIRM	DESCRIPTION OF WORK	CONTRACT INFORMATION	
NAME:		CONTRACT AMOUNT:	
ADDRESS:		DATE OF CONTRACT:	
		SCHEDULE START DATE:	
		PAYMENT SCHEDULE:	
CONTACT PERSON		COMPLETION DATE:	
PHONE:			
NAME:		CONTRACT AMOUNT:	
ADDRESS:		DATE OF CONTRACT:	
		SCHEDULE START DATE:	
		PAYMENT SCHEDULE:	
CONTACT PERSON		COMPLETION DATE:	
PHONE:			
NAME:		CONTRACT AMOUNT:	
ADDRESS:		DATE OF CONTRACT:	
		SCHEDULE START DATE:	
		PAYMENT SCHEDULE:	
CONTACT PERSON		COMPLETION DATE:	
PHONE:			

**CONSULTANTS/CONTRACTORS DETAILED MBE/WBE UTILIZATION PLAN**

SECTION II-WBE PARTICIPATION

MBE FIRM		DESCRIPTION OF WORK	CONTRACT INFORMATION	
NAME:			CONTRACT AMOUNT:	
ADDRESS:			DATE OF CONTRACT:	
			SCHEDULE START DATE:	
			PAYMENT SCHEDULE:	
CONTACT PERSON			COMPLETION DATE:	
PHONE:				
NAME:			CONTRACT AMOUNT:	
ADDRESS:			DATE OF CONTRACT:	
			SCHEDULE START DATE:	
			PAYMENT SCHEDULE:	
CONTACT PERSON			COMPLETION DATE:	
PHONE:				
NAME:			CONTRACT AMOUNT:	
ADDRESS:			DATE OF CONTRACT:	
			SCHEDULE START DATE:	
			PAYMENT SCHEDULE:	
CONTACT PERSON			COMPLETION DATE:	
PHONE:				



**MBE/WBE AFFIDAVIT OF PAYMENT**

STATE OF NEW YORK)  
COUNTY OF MONROE) SS:

\_\_\_\_\_, BEING DULY SWORN, disposes and says:

1. I am the \_\_\_\_\_ of \_\_\_\_\_ (Corporation), a corporation duly authorized to conduct business in the State of New York and that I have full authority to execute this document on behalf of said Corporation.

2. That Corporation entered into a contract dated \_\_\_\_\_ with ("Sub") for the performance of the following scope of services: \_\_\_\_\_

3. That Sub is believed by the Corporation to be a bona fide Minority or Women's Business Enterprise (MBE or WBE respectively) as defined by the Agreement between the Corporation and the County.

4. That the Sub did actually perform the services described above.

5. That as compensation for work previously performed and vouchered for, the Corporation has paid to the Sub \_\_\_\_\_ (\$\_\_\_\_\_) and that said sum represents all sums due and owing to date for the Sub's performance except (\$\_\_\_\_\_) which remains unpaid because \_\_\_\_\_

6. That I make the foregoing statements with full knowledge that the information contained herein will be used and relied upon by one (1) or more public servants in the performance of official duties.

7. I am aware that Section 210 of the New York State Penal Law provides that deliberately making a sworn false statement with intent to mislead a public servant in the performance of his official duties is a crime and that my making a false statement in this document constitutes a violation of that section and subjects me to possible criminal prosecution.

IN WITNESS WHEREOF, the Corporation has caused this certificate to be duly executed by the undersigned officer who is duly authorized to do so.

\_\_\_\_\_  
Corporation

By: \_\_\_\_\_  
(Title)

(ACKNOWLEDGEMENT BY CONTRACTOR IF A CORPORATION)

STATE OF NEW YORK)  
COUNTY OF MONROE) SS:

On this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me the subscriber, personally came \_\_\_\_\_, to me known, who being by me duly sworn, did depose and say the he/she resides in the \_\_\_\_\_, of \_\_\_\_\_, that he/she is the \_\_\_\_\_, of \_\_\_\_\_, the corporation described in and which executed the above instrument; that he/she knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that is was so affixed by order of the Board of Directors of said corporation and that he/she signed his/her name thereto by like order.

\_\_\_\_\_  
Notary Public

(ACKNOWLEDGEMENT BY CONTRACTOR IF A PARTNERSHIP)

STATE OF NEW YORK)  
COUNTY OF MONROE) SS:

On this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally came \_\_\_\_\_, to me known and known to me to be a member of the firm of \_\_\_\_\_, and known to me to be an individual described in, and who executed the foregoing instrument in the firm name of \_\_\_\_\_, and he/she duly acknowledged to me that he/she executed the same for and in the behalf of said firm for the uses of purposes mentioned herein.

\_\_\_\_\_  
Notary Public

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**DIVISION 1: GENERAL REQUIREMENTS**

01015 GENERAL PROVISIONS	5
01050 MEASUREMENT AND PAYMENT	24
01100 COORDINATION AND MEETINGS	5
01101 REFERENCE STANDARDS	2
01102 CARE AND PROTECTION OF PROPERTY	2
01103 INTERRUPTION OF CUSTOMER SERVICE	2
01104 TEMPORARY CONTROLS	2
01105 TRAFFIC REGULATION	2

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**SECTION 01015  
GENERAL PROVISIONS**

**1. GENERAL**

The provisions of Section 200 through 700 and any subsections in Section 100 which are included as part of the requirements in Sections 200 through 700 of the New York State Department of Transportation Specifications of May 4, 2006 or latest revision and all addenda in affect on the date of advertising for bids shall apply except as amended by the City of Rochester, Department of Environmental Services, Standard Construction Contract Documents, November 1991 or latest revision, and where modified by these Specifications.

**2. SCOPE OF WORK**

General Catch Basin and Lateral Repair and Construction Term Construction Contract (TCC #1) consists of installing catch basins, sewer lateral pipe (various material types) and appurtenances, at locations directed by the OWNER. This description is general only and shall not be construed as a complete listing of every item of work required.

The work to be completed under this Contract and in accordance with these specifications consist of furnishing of plant, equipment, superintendence, labor, skill and materials and all other items necessary for repair and/or replacement of catch basins and lateral pipes in the County or in the District. The CONTRACTOR shall perform all work required for such construction in accordance with the drawings and specifications provided and as outlined in each individual Work Order, and subject to the terms and conditions of the contract, complete and ready for use.

In addition, this Contract may be utilized by other agencies within Monroe County as identified in the Contract Terms and Conditions, Paragraph 23. Other Agencies.

**3. DEFINITION**

- a. Within this section (Section 01015, "General Provisions"), where reference is made to the ENGINEER, the OWNER and or the OWNER's designated representative shall be substituted.
- b. Where reference is made to "as shown on the plans", or "as shown on the Standard Detail Drawings" the term "as shown on the Work Order" may be substituted.
- c. Where reference is made in the New York State Department of Transportation Specifications to New York State Department of Transportation, Commissioner, etc., the appropriate Monroe County department, or official shall be substituted.

**4. CONTRACT DRAWINGS AND SPECIFICATIONS**

- a. Included by reference as part of the Contract Documents are:
  1. New York State Department of Transportation, "Standard Specifications for Construction and Materials", May 4, 2006 and Addenda (NYSDOT).

2. City of Rochester, Department of Environmental Services, "Standard Construction Contract Documents", November 1, 1991 or latest revision (CORSCCD).
- b. In the event of a conflict between the specification requirements, the order of precedence shall be:
    1. These Specifications.
    2. CORSCCD Specifications.
    3. NYSDOT Specifications.

**5. PROTECTION OF PROPERTY**

The CONTRACTOR shall be responsible for the preservation and protection of property adjacent to the work site against damage and or injury as a result of his operations under this Contract. Any damage or injury occurring on account of any act, omission or neglect on the part of the CONTRACTOR shall be restored in a proper and satisfactory manner or replaced by and at the expense of the CONTRACTOR.

**6. EXISTING UTILITIES AND STRUCTURES**

- a. The term "existing utilities" shall be deemed to refer to both publicly and privately owned utilities such as storm drains, sanitary sewers, water lines, gas, electrical telephone cable television services and appurtenances.
- b. It shall be the responsibility of the CONTRACTOR to ascertain the actual extent and exact location of existing utilities and structures.
- c. The work shall be carried out in a manner to prevent disruption of existing services and to avoid damage to the existing utilities. Any damage resulting from the work of this contract shall be promptly repaired by the CONTRACTOR at his own expense in a manner approved by the ENGINEER and further subject to the requirements of the authority having jurisdiction.
- d. Where excavations by the CONTRACTOR require any utility lines or appurtenant structures to be temporarily supported and otherwise protected during the construction work, such support and protection shall be provided by the CONTRACTOR. All such work shall be performed in a manner satisfactory to the ENGINEER and the respective authority having jurisdiction over such work. In the event the CONTRACTOR fails to provide proper support or protection to any existing utility, the ENGINEER may at his discretion, have the respective authority provide such support or protection as may be necessary to insure the safety of such utility, and the costs of such measures shall be paid by the CONTRACTOR.

**7. DRAINAGE AND DEWATERING OF EXCAVATIONS**

- a. Except as noted in paragraph (b) below, the CONTRACTOR shall be responsible at all times for preventing the accumulation of groundwater and the removal of all water in and in the vicinity of excavations.
- b. Where the OWNER determines that unstable soil conditions exist because of

groundwater, the OWNER will authorize the CONTRACTOR and separately reimburse to stabilize these conditions.

- c. The proposed methods of controlling and removing groundwater and water and stabilizing shall be submitted to the OWNER for approval prior to their use.

## **8. WORK ON PROPERTIES AND IN STREETS AND ROADWAYS**

- a. The CONTRACTOR shall be responsible for securing all permits and licenses required to perform the Work including the Permit for work within the applicable municipal rights-of-way. The CONTRACTOR shall provide the OWNER a copy of the applicable permits prior to the start of construction.
- b. The CONTRACTOR shall restrict his operations to the areas within permanent and temporary easements if such easements have been obtained by the OWNER, and to areas within existing municipal street rights-of-way.
- c. Temporary easements required by the CONTRACTOR for additional work areas shall be obtained and paid for by the CONTRACTOR. All temporary easements obtained by the CONTRACTOR shall contain a provision holding the District and County of Monroe harmless to any and all claims thereto related. The agreement shall bear the signature of the OWNER of the land. Copies of all temporary easements shall be supplied to the OWNER prior to utilization of the temporary easements.
- d. Prior to the start of work, the CONTRACTOR shall have his job surveyor locate the temporary and permanent easement lines and other key features associated with construction of the improvements.

A continuous snow type fence shall be installed and maintained in place along these lines during construction operations until this area has been restored to its original condition. The fence shall be in place five (5) days in advance of work in any area. No construction activity, access, storage, or other use shall take place exterior of the fencing.

Snow type fencing for individual tree protection during the construction shall be installed and maintained by the CONTRACTOR as required or ordered by the OWNER.

## **9. MAINTENANCE AND PROTECTION OF TRAFFIC**

- a. Any maintenance and protection of traffic required by the work performed under this contract shall be in accordance with the "Manual of Uniform Traffic Control Devices NYSDOT".
- b. For projects within the City of Rochester, the Permit Section in the City of Rochester Department of Environmental Services shall be advised of commencement of the operations at least seven (7) working days prior to construction. The Permit Section will determine if the Monroe County Division of Traffic Engineering must review and approve the temporary traffic disruption.
- c. Where a traffic plan is required, the CONTRACTOR shall be responsible for

developing, installing, and maintaining the approved plan at no additional cost to the OWNER.

- d. The CONTRACTOR shall submit the traffic plan to the Monroe County Division of Traffic Engineering, allowing a minimum of five (5) working days for approval.
- e. When traveled way is closed for any reasons, detour routes shall be as designated by the Monroe County Division of Traffic Engineering.

#### **10. TESTING AND CHECKING**

- a. Unless specifically identified as the responsibility of the OWNER, the CONTRACTOR shall be responsible for the performing and paying for all laboratory and field-testing and checking required by the Contract.
- b. **Work within the City of Rochester:** Tests required by the City of Rochester to determine if the work has been performed in accordance with the specifications shall be the responsibility of the OWNER. However, should the tests show the work to be unacceptable to the City of Rochester, the CONTRACTOR shall be responsible for paying the cost of the test and penalties, in addition to correcting the work.
- c. The OWNER shall be responsible for field compaction density tests. Where test results indicate insufficient compaction and additional compaction is required, the CONTRACTOR shall be responsible for all field compaction density retesting, until sufficient compaction is achieved.

#### **11. DUST CONTROL**

The CONTRACTOR shall take all necessary measures to control dust resulting from his operations and to prevent spillage and excavated material on public roads. When directed by the OWNER, the CONTRACTOR shall sprinkle water in such quantities and at such frequencies as may be required to control such dust and prevent it from becoming a nuisance to the surrounding area at no additional cost to the OWNER. All roads must be maintained dust free at all times. Daily cleaning will be required.

#### **12. DISPOSAL OF MATERIALS**

- a. It shall be the responsibility of the CONTRACTOR to remove from the site and dispose of, according to applicable regulations, all rubbish, construction debris and waste materials, "unsuitable excavation material", and unused materials.
- b. "Unsuitable excavation material" shall include, but not be limited to, excavated earth not suitable for pipe/structure support or backfill, rock, pavement/surface materials, and abandoned sewer facilities.
- c. Unless otherwise directed by the OWNER, all "unsuitable excavation material" shall be loaded directly from the excavation and removed from the construction site on the same day.
- e. Materials to be disposed of shall be disposed of at a permitted/authorized "construction and demolition" debris disposal facility, and/or facility

permitted/authorized for respective materials. Discharge of unused material, including, but not limited to concrete and controlled density fill, to sewer mains, laterals, catch basins, manholes and other sewer system appurtenances is strictly prohibited.

**13. CONSTRUCTION PHOTOGRAPHS**

The CONTRACTOR shall provide "before" and "after" construction photographs, as directed by and at no additional cost to the OWNER, at mutually agreed upon locations so as to avoid disputes concerning the restoration work. Digital photographs shall be provided on a compact disc to the OWNER. CONTRACTOR shall provide a minimum of twelve (12) "before" and twelve (12) "after" photographs, or quantity as directed by the OWNER. Final photographs shall be taken at the same location and in the same direction as preconstruction photograph.

END OF SECTION

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**SECTION 01050  
MEASUREMENT AND PAYMENT**

1.01 SECTION INCLUDES

- A. Measurement and payment criteria applicable to the Work performed under a unit price payment method.
- B. Defect assessment and non-payment for rejected work.
- C. Procedures for preparation and submittal of applications for payment.

1.02 GENERAL

- A. Measurement methods delineated in the individual specification sections are intended to complement the criteria of this section. In the event of conflict, the requirements of the individual specification section shall govern. Actual quantities provided will determine payment.
- B. Within this section (Section 01050, "Measurement and Payment"), where reference is made to the ENGINEER, the OWNER and or the OWNER's designated representative shall be substituted.
- C. Take all measurements and compute quantities. The ENGINEER will verify measurements and quantities.
- D. Assist ENGINEER by providing necessary equipment, workers, and survey personnel as required.

1.03 UNIT QUANTITIES SPECIFIED

- A. Quantities and measurements indicated in the Bid are for bidding and contract purposes only. Quantities and measurements for materials supplied or placed in the Work and verified by the ENGINEER shall determine payment.
- B. If the actual Work requires more or fewer quantities than those quantities indicated, provide the required quantities at the unit sum/prices stated in the Bid.
- C. The quantities included in the Bid Proposal are approximate only and cannot be determined prior to issuance of a Work Order. The quantities are utilized solely for the purpose of establishing unit prices for the term of the Contract and for determining the Low Bidder. The quantities are not guaranteed nor promises given as to the work ordered during the term of the Contract.

1.04 MEASUREMENT OF QUANTITIES

- A. Measurement by Volume: Measured by cubic dimension using mean length, width and height or thickness.
- B. Measurement by Area: Measured by square dimension using mean length and width or radius.

- C. Linear Measurement: Measured by linear dimension, at the item centerline or mean chord.
- D. Stipulated Sum/Price Measurement: Items measured by weight, volume, area, or linear means or combination, as appropriate, as a completed item or unit of the Work.
- E. Lump Sum: Items described in Bid.

#### 1.05 APPLICATION FORMAT

- A. For each item, provide a column for listing: Item Number; Item Description, Estimated Quantity, Units (LF, EA, CY, etc.), Quantity for this Estimate, Quantity from Previous Estimates, Quantity to Date, Unit Price, Dollar Amount this Estimate, Dollar Amount to Date, Percent Complete, Balance to Finish. Authorized modifications, listed as subcategories under their associated Change Orders and retainage must be listed separately.
- B. Base estimates of lump-sum items on a schedule dividing each item into its appropriate component parts together with a quantity and a unit price for each part such that the sum of the products of prices and quantities will equal the contract price for the item. Submit schedule for ENGINEER's approval before the first estimate becomes due.
- C. Submit invoices for force account work which include, in addition to the above, a complete description of the work performed. Also, include a summary of totals for labor, equipment, materials, labor overhead, construction overhead, and profit as set forth in the Terms and Conditions.

#### 1.06 PREPARATION OF APPLICATIONS

- A. Present required information in typewritten form.
- B. Execute certification by signature of authorized officer.
- C. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for the portion of work performed.
- D. List each authorized Change Order as an extension on continuation sheet, and include Change Order number and dollar amount as outlined for original items of work.
- E. Utilize the Contract Unit Prices for calculation of the Payment Items.

#### 1.07 SUBMITTAL PROCEDURES

- A. Submit four copies of all pay requests and change orders, all with original signatures, are to be submitted for review and approval.
- B. Submit an updated construction schedule and certified payrolls with each Application for Payment.

C. Submit under transmittal letter.

1.08 SUBSTANTIATING DATA

- A. When the ENGINEER requires substantiating information, submit data justifying dollar amounts in question.
- B. Provide one copy of data, with cover letter, for each copy of submittal. Show Application number, date and line item by number and description.

1.09 DEFECT ASSESSMENT

- A. Replace the Work, or portions of the Work, not conforming to specified requirements.
- B. When, in the ENGINEER's opinion, it is not practical to remove and replace defective Work, the ENGINEER will direct one of the following remedies:
  - 1. Defective work may remain, but the unit sum/price will be adjusted to a new sum/price at the discretion of the ENGINEER.
  - 2. Defective work will be partially repaired according to ENGINEER's instructions, and the unit sum/price will be adjusted to a new sum/price at the discretion of the ENGINEER.
- C. Individual specification sections may modify these options or may identify a specific formula or percentage sum/price reduction.
- D. The authority of the ENGINEER to assess defects and identify payment adjustment is final.

1.10 NON-PAYMENT FOR REJECTED PRODUCTS

- A. Payment will not be made for any of the following:
  - 1. Products wasted or disposed of in a manner that is not acceptable.
  - 2. Products determined as unacceptable before or after placement.
  - 3. Products not completely unloaded from the transporting vehicle.
  - 4. Products placed beyond required lines and levels of the Work.
  - 5. Products remaining on hand after completion of the Work.
  - 6. Loading, hauling and disposing of rejected products.

1.11 SHOP DRAWING SUBMITTALS

- A. All shop drawings, if necessary, must comply with the Contract Documents.
- B. Submit a minimum of four (4) copies of each shop drawing for ENGINEER's review in accordance with the GENERAL CONDITIONS.

1. Three (3) copies will be retained for the ENGINEER's use and the remainder will be returned.
- C. The ENGINEER will review and stamp shop drawings as follows:
1. "APPROVED": shop drawing complies with the Contract Documents and is acceptable as it is. No re-submittal or revision is required.
  2. "MAKE CORRECTIONS NOTED": shop drawing partially complies with the Contract Documents and is acceptable with some minor revisions. ENGINEER will note revisions on shop drawing. No re-submittal is required.
  3. "REVISE AND RESUBMIT": shop drawing partially complies with Contract Documents and is not acceptable as it is. Resubmit shop drawing with additional information.
  4. "REJECTED": shop drawing does not comply with Contract Documents and is not acceptable at all. Resubmit a shop drawing for a different product, method, layout, etc. which complies with Contract Documents.
  5. "SUBMIT SPECIFIED ITEM": shop drawing does not comply with Contract Documents and is not acceptable at all. Resubmit a shop drawing for a product, method, layout, etc. which complies with Contract Documents.
- D. Submit and receive back all shop drawings prior to using any associated methods or materials.
- E. ENGINEER's acceptance of shop drawings indicates that the submittal has been reviewed to the extent necessary to ensure conceptual compliance with the Contract Documents.
- F. Acceptance of shop drawings does not relieve the CONTRACTOR from verifying details such as, but not limited to, dimensions, field conditions, spacing, tolerances, materials, etc.

#### 1.12 PAYMENT ITEM DESCRIPTIONS

- A. The following pages include the description of Payment Items in the Contract, along with a description of the Measurement and Payment for each Payment Item.

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**PAYMENT ITEM #****DESCRIPTION**

ITEM 101C	4"- 6" DIAMETER LATERAL PIPE INSTALL; <8.01' IN DEPTH (Pipe & fittings provided by OWNER, or reimbursed at cost)
ITEM 101D	4"- 6" DIAMETER LATERAL PIPE INSTALL; 8.01' - 12' IN DEPTH (Pipe & fittings provided by OWNER, or reimbursed at cost)
ITEM 101E	4"- 6" DIAMETER LATERAL PIPE INSTALL; 12.01' - 16' IN DEPTH (Pipe & fittings provided by OWNER, or reimbursed at cost)
ITEM 101F	8"-12" DIAMETER LATERAL PIPE INSTALL, <8.01' IN DEPTH (Pipe & fittings provided by OWNER, or reimbursed at cost)
ITEM 101G	8"-12" DIAMETER LATERAL PIPE INSTALL, 8.01' - 12' IN DEPTH (Pipe & fittings provided by OWNER, or reimbursed at cost)
ITEM 101H	8"-12" DIAMETER LATERAL PIPE INSTALL, 12.01' - 16' IN DEPTH (Pipe & fittings provided by OWNER, or reimbursed at cost)

**GENERAL DESCRIPTION:**

The work shall consist of repairing and installing sections of lateral pipe, connecting laterals to new sewers, new laterals to existing laterals, and new laterals to existing catch basins including excavation of all materials, disposal of excavated material, bedding and backfill as shown on the plans and specified, or as directed by the ENGINEER.

The OWNER will provide fitting, saddle, inserta-tee and elastomeric sleeve materials associated with this payment item. If the OWNER and CONTRACTOR agree that any of the above materials should be procured independently by the CONTRACTOR, the CONTRACTOR shall be reimbursed by the OWNER at cost for those items.

ITEM 101C: 4"- 6" DIAMETER LATERAL PIPE INSTALL; <8.01' IN DEPTH

Includes all work necessary as associated with the installation of 4" to 6" lateral pipe at depths up to 8 feet.

ITEM 101D: 4"- 6" DIAMETER LATERAL PIPE INSTALL; 8.01' - 12' IN DEPTH

Includes all work necessary as associated with the installation of 4" to 6" lateral pipe at depths greater than 8 feet and up to 12 feet.

ITEM 101E: 4"- 6" DIAMETER LATERAL PIPE INSTALL; 12.01' - 16' IN DEPTH

Includes all work necessary as associated with the installation of 4" to 6" lateral pipe at depths greater than 12 feet and up to 16 feet.

ITEM 101F: 8"-12" DIAMETER LATERAL PIPE INSTALL, <8.01' IN DEPTH

Includes all work necessary as associated with the installation of 8" to 12" lateral pipe at depths up to 8 feet.

ITEM 101G: 8"-12" DIAMETER LATERAL PIPE INSTALL, 8.01' - 12' IN DEPTH

Includes all work necessary as associated with the installation of 8" to 12" lateral pipe at depths greater than 8 feet and up to 12 feet.

ITEM 101H: 8"-12" DIAMETER LATERAL PIPE INSTALL, 12.01' - 16' IN DEPTH

Includes all work necessary as associated with the installation of 8" to 12" lateral pipe at depths greater than 12 feet and up to 16 feet.

**METHOD OF MEASUREMENT:**

- ITEM 101C 4"- 6" DIAMETER LATERAL PIPE INSTALL; <8.01' IN DEPTH  
(Pipe & fittings provided by OWNER, or reimbursed at cost)
- ITEM 101D 4"- 6" DIAMETER LATERAL PIPE INSTALL; 8.01' - 12' IN DEPTH  
(Pipe & fittings provided by OWNER, or reimbursed at cost)
- ITEM 101E 4"- 6" DIAMETER LATERAL PIPE INSTALL; 12.01' - 16' IN DEPTH  
(Pipe & fittings provided by OWNER, or reimbursed at cost)
- ITEM 101F 8"-12" DIAMETER LATERAL PIPE INSTALL, <8.01' IN DEPTH  
(Pipe & fittings provided by OWNER, or reimbursed at cost)
- ITEM 101G 8"-12" DIAMETER LATERAL PIPE INSTALL, 8.01' - 12' IN DEPTH  
(Pipe & fittings provided by OWNER, or reimbursed at cost)
- ITEM 101H 8"-12" DIAMETER LATERAL PIPE INSTALL, 12.01' - 16' IN DEPTH  
(Pipe & fittings provided by OWNER, or reimbursed at cost)

The quantity shall be the total horizontal length in linear feet, measured to the nearest foot, of sewer lateral pipe installed as measured parallel with the centerline of the lateral. The length shall include the length of wye branches or tee branch sections, but not the four (4) foot length of sewer pipe connecting into new catch basins, as measured from the outside face of the catch basin, as that is already included in payment item 320A (installation of a Precast Concrete Catch Basin) work activity.

**BASIS OF PAYMENT:**

<u>ITEM NO.</u>	<u>ITEM</u>	<u>PAY UNIT</u>
101C	4"- 6" DIAMETER LATERAL PIPE INSTALL; <8.01' IN DEPTH	LF
101D	4"- 6" DIAMETER LATERAL PIPE INSTALL; 8.01' - 12' IN DEPTH	LF
101E	4"- 6" DIAMETER LATERAL PIPE INSTALL; 12.01' - 16' IN DEPTH	LF
101F	8"-12" DIAMETER LATERAL PIPE INSTALL, <8.01' IN DEPTH	LF
101G	8"-12" DIAMETER LATERAL PIPE INSTALL, 8.01' - 12' IN DEPTH	LF
101H	8"-12" DIAMETER LATERAL PIPE INSTALL, 12.01' - 16' IN DEPTH	LF

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**PAYMENT ITEM #****DESCRIPTION**

ITEM 120B	CONNECTING LATERAL TO SEWER – CORING & SADDLE/INSERTA-TEE
ITEM 120D	CONNECTING LATERAL TO LATERAL - ELASTOMERIC SLEEVES
ITEM 120E	CONNECTING SEWER TO EXISTING MANHOLE
ITEM 120F	CONNECTING LATERAL TO EXISTING CATCH BASIN
ITEM 120G	REPLACEMENT OF 4" TO < 8" DIAMETER SEWER PIPE CROSSING TRENCH EXCAVATION
ITEM 120H	REPLACEMENT OF 8" OR > DIAMETER SEWER PIPE CROSSING TRENCH EXCAVATION

**GENERAL DESCRIPTION:**

The work shall consist of repairing and installing sections of lateral pipe, connecting laterals to new sewers, new laterals to existing laterals, new laterals to existing manholes and new laterals to existing catch basins including excavation of all materials, disposal of excavated material, trenching, bedding and backfill as shown on the plans and specified, or as directed by the ENGINEER.

The OWNER will provide fitting, saddle, inserta-tee and elastomeric sleeve materials associated with this payment item. If the OWNER and CONTRACTOR agree that any of the above materials should be procured independently by the CONTRACTOR, the CONTRACTOR shall be reimbursed by the OWNER at cost for those items.

**ITEM 120B- CONNECTING LATERAL TO SEWER – CORING & SADDLE/INSERTA-TEE**

Includes the sewer coring, the saddle installation and connection of the lateral pipe to the new or existing main sewer.

**ITEM 120D - CONNECTING LATERAL TO LATERAL – ELASTOMERIC SLEEVES**

Includes elastomeric sleeve connection of lateral to an existing lateral.

*Note: This pay item is not applicable as an addition to Pay Item 320A (installation of a Precast Concrete Catch Basin), regardless of linear feet of lateral pipe installed as part of a new precast concrete catch basin installation, as the sleeve connection is already inclusive to that work activity.*

**ITEM 120E - CONNECTING SEWER TO EXISTING MANHOLE**

Includes manhole coring, lateral pipe connection, mortar grouting, and coatings.

**ITEM 120F - CONNECTING LATERAL TO EXISTING CATCH BASIN**

Includes catch basin coring, lateral pipe connection, mortar grouting, and coatings.

ITEM 120G - REPLACEMENT OF 4" TO < 8" DIAMETER SEWER PIPE CROSSING TRENCH EXCAVATION

Includes removal of the existing sewer pipe, temporary by-passing of flow, the length of sewer pipe crossing the trench excavation of the main sewer, and the connection of the pipe to the existing sewer pipe, with elastomeric sleeves if required.

ITEM 120H - REPLACEMENT OF 8" OR > DIAMETER SEWER CROSSING TRENCH EXCAVATION

Includes removal of the existing sewer pipe, temporary by-passing of flow, the length of sewer pipe crossing the trench excavation of the main sewer, and the connection of the pipe to the existing sewer pipe, with elastomeric sleeves if required.

**METHOD OF MEASUREMENT:**

ITEM 120B - CONNECTING LATERAL TO SEWER – CORING & SADDLE/INSERTA-TEE

ITEM 120D - CONNECTING LATERAL TO LATERAL - ELASTOMERIC SLEEVES  
(OUTSIDE OF TRENCH EXCAVATION FOR MAIN SEWER)

ITEM 120E - CONNECTING SEWER TO EXISTING MANHOLE

ITEM 120F - CONNECTING LATERAL TO EXISTING CATCH BASIN

The quantity above shall be the number of connections completed.

ITEM 120G - REPLACEMENT OF 4" TO < 8" DIAMETER SEWER CROSSING  
TRENCH EXCAVATION

ITEM 120H - REPLACEMENT OF 8" OR > DIAMETER SEWER CROSSING  
TRENCH EXCAVATION

The quantity above shall be the number of laterals replaced.

**BASIS OF PAYMENT:**

<u>ITEM NO.</u>	<u>ITEM</u>	<u>PAY UNIT</u>
120B	CONNECTING LATERAL TO SEWER – CORING & SADDLE/ INSERTA-TEE	Each
120D	CONNECTING LATERAL TO LATERAL - ELASTOMERIC SLEEVES	Each
120E	CONNECTING LATERAL TO EXISTING MANHOLE	Each
120F	CONNECTING LATERAL TO EXISTING CATCH BASIN	Each
120G	REPLACEMENT OF 4" TO < 8" DIAMETER SEWER CROSSING TRENCH EXCAVATION	Each
120H	REPLACEMENT OF 8" OR > DIAMETER SEWER CROSSING TRENCH EXCAVATION	Each

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**PAYMENT ITEM #****DESCRIPTION**

ITEM 220B: SELECT GRANULAR FILL (EXTRA WORK)

**GENERAL DESCRIPTION:**

This work shall consist of the furnishing, placing and compacting of select granular fill as shown on the plans and specified, or as directed by the ENGINEER.

**METHOD OF MEASUREMENT:**

**ITEM 220B - SELECT GRANULAR FILL (EXTRA WORK):** Where approved as extra work, the quantity of select granular fill shall be the number of cubic yards installed as measured to the nearest cubic yard.

**BASIS OF PAYMENT:****ITEM NO.****ITEM****PAY UNIT**

220B

SELECT GRANULAR FILL (EXTRA WORK)

Cubic Yard

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**PAYMENT ITEM #****DESCRIPTION**

ITEM 230B

CRUSHED STONE BEDDING (EXTRA WORK)

**GENERAL DESCRIPTION:**

This work shall consist of furnishing, placing and compacting crushed stone bedding as shown on the plans and specified, or as directed by the ENGINEER.

**METHOD OF MEASUREMENT:**

ITEM 230B - CRUSHED STONE BEDDING (EXTRA WORK)

Where approved as extra work, the quantity of crushed stone bedding shall be the number of cubic yards installed as measured to the nearest cubic yard.

**BASIS OF PAYMENT:****ITEM NO.****ITEM****PAY UNIT**

230B

CRUSHED STONE BEDDING (EXTRA WORK)

Cubic Yard

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<b><u>PAYMENT ITEM #</u></b>	<b><u>DESCRIPTION</u></b>
ITEM 240A:	CONCRETE CRADLE AND ENCASEMENT

**GENERAL DESCRIPTION:**

This work shall consist of furnishing and placing concrete for sewer cradle and encasement as indicated on the plans and specified, or as ordered by the ENGINEER.

**METHOD OF MEASUREMENT:**

The quantity shall be the number of cubic yards, measured to the nearest 1/2 cubic yard, of concrete cradle and encasement installed as computed on the basis of the actual cubic yards cradled or encased.

**BASIS OF PAYMENT:**

<b><u>ITEM NO.</u></b>	<b><u>ITEM</u></b>	<b><u>PAY UNIT</u></b>
240A	CONCRETE CRADLE AND ENCASEMENT	Cubic Yard

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**PAYMENT ITEM #****DESCRIPTION**

ITEM 250B: TRENCH/STRUCTURE EXCAVATION- SOLID ROCK MECHANICAL METHOD  
ITEM 250C: TEST/INSERTION PIT EXCAVATION

**GENERAL DESCRIPTION:**

This work shall consist of the excavation of all materials, disposal of excavated materials, protection from the hazards of falling or sliding material, backfill and compaction required for trenches and structures as shown on the plans and specified, or as ordered by the ENGINEER.

**METHOD OF MEASUREMENT:**

**250B - TRENCH/STRUCTURE EXCAVATION - SOLID ROCK MECHANICAL METHOD:** The quantity of excavation shall be the number of cubic yards, measured to the nearest tenth of a cubic yard, of material excavated as measured in its original position within the payment limits shown on the plans or indicated in this item. The bottom payment limit shall be the designed bottom of the excavation. The top payment limit shall be the original rock surface. The side payment limit shall be:

1. Pipes: Limits shall be as shown on plans and parallel to each side of pipe barrels.
2. Structures: Limits shall be eighteen (18) inches beyond and parallel to outside of footings.

**250CC - TEST/INSERTION PIT EXCAVATION:** The quantity of excavation shall be the number of cubic yards, measured to the nearest cubic yard, of material excavated as measured in its original position within the payment limits indicated in this item. The top payment limit shall be the existing ground surface. The bottom payment limit shall be the bottom of excavation as ordered by the ENGINEER. Side payment limits shall be vertical and spaced minimum four feet by eight feet, or larger as ordered by the ENGINEER.

**BASIS OF PAYMENT:**

<b><u>ITEM NO.</u></b>	<b><u>ITEM</u></b>	<b><u>PAY UNIT</u></b>
250B	TRENCH/STRUCTURE EXCAVATION - SOLID ROCK MECHANICAL METHOD	Cubic Yard
250C	TEST/INSERTION PIT EXCAVATION	Cubic Yard

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<b><u>PAYMENT ITEM #</u></b>	<b><u>DESCRIPTION</u></b>
ITEM 260A	PLUGGING - ABANDON EXISTING SEWER AND/OR EXISTING UTILITIES
ITEM 260B -	CONTROLLED DENSITY FILL - FILLING OF VOIDS/ABANDONMENT OF EXISTING SEWER

**GENERAL DESCRIPTION:**

This work shall consist of furnishing and placing plugs or controlled density fill in existing sewers and/or existing utilities to be abandoned, or in and around utilities where compaction is not possible including excavation, disposal of excavated materials, backfill, K-Krete, brick and mortar as shown on the plans and specified, or as ordered by the ENGINEER.

**METHOD OF MEASUREMENT:**

ITEM 260A - PLUGGING - ABANDON EXISTING SEWER AND/OR EXISTING UTILITIES

The quantity shall be the number of brick masonry plugs installed.

ITEM 260B - CONTROLLED DENSITY FILL - FILLING OF VOIDS/ABANDONMENT OF EXISTING SEWER

The quantity shall be the number of cubic yards, measured to the nearest tenth of a cubic yard, of controlled density fill used to fill abandoned sewers and manholes or voids.

**BASIS OF PAYMENT:**

<b><u>ITEM NO.</u></b>	<b><u>ITEM</u></b>	<b><u>PAY UNIT</u></b>
260A	PLUGGING - ABANDON EXISTING SEWER AND/OR EXISTING UTILITIES	Each
260B	CONTROLLED DENSITY FILL - FILLING OF VOIDS/ ABANDONMENT OF EXISTING SEWER	Cubic Yard

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**PAYMENT ITEM #****DESCRIPTION**

- ITEM 280A SUPPORT OF UTILITIES CROSSING EXCAVATION TRENCH - 4"  
TO < 8" DIAMETER UTILITY
- ITEM 280B SUPPORT OF UTILITIES CROSSING EXCAVATION TRENCH - 8"  
OR > DIAMETER UTILITY
- ITEM 280C TEMPORARY TIGHT SHEETING FOR UTILITY SUPPORT

**GENERAL DESCRIPTION:**

This work shall consist of the furnishing, placing and removal of temporary support of utilities affected by excavation as required by the utility agency and approved by the ENGINEER. Temporary tight sheeting included in this description shall be for the purpose of utility support only.

- ITEM 280A - SUPPORT OF UTILITIES CROSSING EXCAVATION TRENCH - 4"  
TO < 8" DIAMETER UTILITY
- ITEM 280B - SUPPORT OF UTILITIES CROSSING EXCAVATION TRENCH - 8"  
OR > DIAMETER UTILITY

The support of a utility is the act of supporting one or a group of utilities together crossing the excavation and shall include all the individual horizontal and vertical support components (system) necessary to provide the support.

- ITEM 280C - TEMPORARY TIGHT SHEETING FOR UTILITY SUPPORT

Temporary tight sheeting for utility support is sheeting used to protect utilities, which is in addition to that sheeting and/or shielding necessary for the safety of workmen and public from the hazard of falling or sliding materials.

**METHOD OF MEASUREMENT:**

- ITEM 280A SUPPORT OF UTILITIES CROSSING EXCAVATION TRENCH -  
4" TO < 8" DIAMETER UTILITY
- ITEM 280B SUPPORT OF UTILITIES CROSSING EXCAVATION TRENCH -  
8" OR > DIAMETER UTILITY

The quantity shall be each support system crossing the excavation which is supported as required by the utility agency and approved by the ENGINEER. No payment will be made for support of utilities less than 4" in diameter.

- ITEM 280C - TEMPORARY TIGHT SHEETING FOR UTILITY SUPPORT

The quantity shall be the number of square feet, measured to the nearest square foot, of temporary tight sheeting installed as required by the utility agency and approved by the ENGINEER as measured from the existing surface to the bottom of the excavation or the original rock surface, whichever is higher, and the horizontal length required by the utility agency.

**BASIS OF PAYMENT:**

<u>ITEM NO.</u>	<u>ITEM</u>	<u>PAY UNIT</u>
280A	SUPPORT OF UTILITIES CROSSING EXCAVATION TRENCH - 4" TO < 8" DIAMETER UTILITY	Each
280B	SUPPORT OF UTILITIES CROSSING EXCAVATION TRENCH - 8" OR > DIAMETER UTILITY	Each
280C	TEMPORARY TIGHT SHEETING FOR UTILITY SUPPORT	Square Foot

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**PAYMENT ITEM #****DESCRIPTION**

ITEM 320A	PRECAST CONCRETE CATCH BASIN UP TO 6.0' DEEP
ITEM 320B	ADDITIONAL DEPTH OF CATCH BASIN

**GENERAL DESCRIPTION:**

This work shall include the placement of precast concrete catch basins including excavation of all materials, disposal of excavated material, bedding, backfill, brick, mortar, form and pour concrete, inclusive of rebar, asphalt restoration (inclusive of sawcut and tack coat) solely associated with the basin installation as specified by the ENGINEER or governing agency, coatings, up to a four (4) foot section of lateral pipe extending from the exterior face of the catch basin and connection to laterals and underdrains as shown on the plans and specified, or as directed by the ENGINEER.

The pre-cast basins, pre-cast extension rings, frames, grates, pipe, fittings and elastomeric couplings shall be provided by the OWNER. The items will be located at the Monroe County Fleet Center, 145 Paul Road, Rochester, New York and will be the CONTRACTOR's responsibility to pick them up at that location.

If the OWNER and CONTRACTOR agree that the CONTRACTOR independently procure any of the items normally provided by the OWNER as listed above, the CONTRACTOR shall be reimbursed at cost for those items.

**METHOD OF MEASUREMENT:**

ITEM 320A - PRECAST CONCRETE CATCH BASIN UP TO 6.0' DEEP

The quantity shall be the number of catch basins installed, inclusive of the first four (4) foot length of lateral pipe extending from the catch basin, and the connection to the new or existing lateral. Depth of catch basins will be measured from the invert elevation of the lowest lateral pipe to the grate cover top elevation.

ITEM 320B - ADDITIONAL DEPTH OF CATCH BASIN

The quantity shall be the number of vertical linear feet, measured to the nearest half of a foot, of depth greater than 6.0' as specified above.

**BASIS OF PAYMENT:**

<b><u>ITEM NO.</u></b>	<b><u>ITEM</u></b>	<b><u>PAY UNIT</u></b>
320A	PRECAST CONCRETE CATCH BASIN UP TO 6.0' DEEP	Each
320B	ADDITIONAL DEPTH OF CATCH BASIN	Vertical Foot

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**PAYMENT ITEM #****DESCRIPTION**

ITEM 401A:	HEAVY DUTY PAVEMENT RESTORATION
ITEM 401E:	MEDIUM DUTY PAVEMENT RESTORATION
ITEM 401I:	LIGHT DUTY PAVEMENT RESTORATION
ITEM 401M:	CONCRETE BASE PAVEMENT RESTORATION
ITEM 401Q:	TOP COURSE ASPHALT CONCRETE PAVEMENT RESTORATION
ITEM 401R:	TEMPORARY PAVEMENT PATCH (ASPHALT)
ITEM 401S:	TEMPORARY PAVEMENT PATCH (CONCRETE)

**GENERAL DESCRIPTION:**

This work shall consist of the furnishing and placing pavement restoration including saw cutting, gravel sub-base, stone base, concrete base, asphalt concrete base course, asphalt concrete binder course, asphalt concrete top course, seam sealer, and tack coat as shown on the plans and specified, or as ordered by the ENGINEER or as specified by the City of Rochester Permit Office or as included in CORSCCD, or as specified by the governing agency.

**Asphalt concrete base 8" or > thick.**

ITEM 401A: HEAVY DUTY PAVEMENT RESTORATION

**Asphalt concrete base 3" to <8" thick.**

ITEM 401E: MEDIUM DUTY PAVEMENT RESTORATION

**Asphalt concrete base <3" thick.**

ITEM 401I: LIGHT DUTY PAVEMENT RESTORATION

**Concrete base 8" or > thick.**

ITEM 401M: CONCRETE BASE PAVEMENT RESTORATION

**Asphalt concrete top course in areas of cold milling.**

ITEM 401Q: TOP COURSE ASPHALT CONCRETE PAVEMENT RESTORATION

**As required by CORSCCD.**

ITEM 401R: TEMPORARY PAVEMENT PATCH (ASPHALT)

**As required by CORSCCD.**

ITEM 401S: TEMPORARY PAVEMENT PATCH (CONCRETE)

**METHOD OF MEASUREMENT:**

The quantity shall be the number of square feet, measured to the nearest square foot, of finished pavement surface area installed as measured within the limits of excavation shown on the plans or as approved by the ENGINEER. In areas of cold milling, the area of the pavement replacement over the sewer excavation will be deducted from the milled area for separate payment.

**BASIS OF PAYMENT:**

<b><u>ITEM NO.</u></b>	<b><u>ITEM</u></b>	<b><u>PAY UNIT</u></b>
401A:	HEAVY DUTY PAVEMENT RESTORATION	Square Foot
401E:	MEDIUM DUTY PAVEMENT RESTORATION	Square Foot
401I:	LIGHT DUTY PAVEMENT RESTORATION	Square Foot
401M:	CONCRETE BASE PAVEMENT RESTORATION	Square Foot
401N:	CONCRETE BASE PAVEMENT RESTORATION (50-249.9 SF)	Square Foot
401Q:	TOP COURSE ASPHALT CONCRETE PAVEMENT RESTORATION	Square Foot
401R:	TEMPORARY PAVEMENT PATCH (ASPHALT)	Square Foot
401S:	TEMPORARY PAVEMENT PATCH (CONCRETE)	Square Foot

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**PAYMENT ITEM #****DESCRIPTION**

ITEM 401T: MISCELLANEOUS COLD MILLING OF ASPHALT CONCRETE

**GENERAL DESCRIPTION:**

This work shall consist of the milling, shaping, removal and disposal of portions of existing asphalt concrete surfaces as shown on the plans and specified, or as directed by the ENGINEER.

**METHOD OF MEASUREMENT:**

The quantity shall be the number of square feet, measured to nearest square foot, of pavement surface milled. No deduction shall be made for the area of sewer excavation.

**BASIS OF PAYMENT:****ITEM NO.****ITEM****PAY UNIT**

401T

MISCELLANEOUS COLD MILLING OF  
ASPHALT CONCRETE

Square Feet

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<b><u>PAYMENT ITEM #</u></b>	<b><u>DESCRIPTION</u></b>
ITEM 402A	CONCRETE SIDEWALK RESTORATION
ITEM 402B	CONCRETE DRIVEWAY RESTORATION
ITEM 402C	ASPHALT DRIVEWAY RESTORATION – LIGHT DUTY
ITEM 402D	ASPHALT DRIVEWAY RESTORATION – MEDIUM DUTY
ITEM 402E	RESET EXISTING BRICK PAVERS/STONE SIDEWALK

**GENERAL DESCRIPTION:**

This work shall consist of the furnishing and placing sidewalk and driveway restoration including saw cutting, excavation, disposal of excavated materials, brick/stone salvage, gravel sub-base, stone base, concrete, reinforcement, asphalt concrete, tack coat, seam sealer and joint fill as shown on the plans and specified, or as ordered by the ENGINEER.

**METHOD OF MEASUREMENT:**

The quantity shall be the number of square feet, measured to the nearest square foot, of finished sidewalk and driveway restoration installed.

**BASIS OF PAYMENT:**

<b><u>ITEM NO.</u></b>	<b><u>ITEM</u></b>	<b><u>PAY UNIT</u></b>
402A	CONCRETE SIDEWALK RESTORATION	Square Foot
402B	CONCRETE DRIVEWAY RESTORATION	Square Foot
402C	ASPHALT DRIVEWAY RESTORATION – LIGHT DUTY	Square Foot
402D	ASPHALT DRIVEWAY RESTORATION – MEDIUM DUTY	Square Foot
402E	RESET EXISTING BRICK PAVERS/ STONE SIDEWALK	Square Foot

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**PAYMENT ITEM #****DESCRIPTION**

ITEM 402F	CONCRETE CURBING RESTORATION
ITEM 402G	NEW STONE CURBING RESTORATION
ITEM 402H	RESET EXISTING STONE CURBING

**GENERAL DESCRIPTION:**

This work shall consist of furnishing and placing curbing restoration including saw cutting, excavation, disposal of excavated materials, stone salvage, gravel base, concrete cradle and backing, stone curbing, concrete, reinforcement, grout, caulking, joint filler and mortar as shown on the plans and specified, or as ordered by the ENGINEER.

**METHOD OF MEASUREMENT:**

The quantity shall be the number of linear feet, measured to the nearest foot, of finished curbing restoration installed.

**BASIS OF PAYMENT:**

<b><u>ITEM NO.</u></b>	<b><u>ITEM</u></b>	<b><u>PAY UNIT</u></b>
402F	CONCRETE CURBING RESTORATION	Linear Foot
402G	NEW STONE CURBING RESTORATION	Linear Foot
402H	RESET EXISTING STONE CURBING	Linear Foot

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**PAYMENT ITEM #**

ITEM 402I

**DESCRIPTION**

TURF RESTORATION

**GENERAL DESCRIPTION:**

This work shall consist of furnishing and placing turf restoration including grading, topsoil, grass seed, fertilizer, mulch, mulch anchorage and maintenance as shown on the plans and specified, or as ordered by the ENGINEER.

**METHOD OF MEASUREMENT:**

The quantity shall be the number of square yards, measured to the nearest square foot, of turf surface area restoration installed.

**BASIS OF PAYMENT:**

**ITEM NO.**

402I

**ITEM**

TURF RESTORATION

**PAY UNIT**

Square Foot

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**PAYMENT ITEM #**

ITEM 402J

**DESCRIPTION**

CONCRETE GUTTER RESTORATION

**GENERAL DESCRIPTION:**

This work shall consist of furnishing and placing concrete gutter restoration including saw cutting, excavation, disposal of excavated materials, gravel base, concrete, reinforcement, caulking and joint filler as shown on the plans and specified, or as ordered by the ENGINEER.

**METHOD OF MEASUREMENT:**

The quantity shall be the number of linear feet, measured to the nearest foot, of finished gutter restoration installed.

**BASIS OF PAYMENT:**

**ITEM NO.**

**ITEM**

**PAY UNIT**

402J

CONCRETE GUTTER RESTORATION

Linear Foot

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<b><u>PAYMENT ITEM #</u></b>	<b><u>DESCRIPTION</u></b>
ITEM 501A	DOWNTIME (DIRECTED BY THE OWNER)

**GENERAL DESCRIPTION:**

This work of this item is defined as the period of time when the CONTRACTOR is directed by the OWNER to temporarily stop work (downtime) for the OWNER'S conveniences. The period of time will be as determined by the OWNER. The Downtime shall include all labor and equipment utilized on the Project Site.

**METHOD OF MEASUREMENT:**

The quantity shall be the number of hours, to the nearest one-half of an hour, for downtime. The OWNER shall determine the number of hours measured.

**BASIS OF PAYMENT:**

<b><u>ITEM NO.</u></b>	<b><u>ITEM</u></b>	<b><u>PAY UNIT</u></b>
501A	DOWNTIME (DIRECTED BY THE OWNER)	Hour

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**End of Section**

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**SECTION 01100  
COORDINATION AND MEETINGS**

1.01 SECTION INCLUDES

- A. Coordination
- B. Field Engineering
- C. Preconstruction Conference
- D. Progress Meetings
- E. Construction Progress Schedules
- F. Final Inspection Conferences
- G. Communication
- H. Emergency Call Out

1.02 COORDINATION

- A. Coordinate scheduling, submittals, and work of the various Sections of specifications to assure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. Coordinate completion and clean up of work of separate sections in preparation for Substantial Completion for portions of the Work designated for OWNER's partial use.

1.03 FIELD ENGINEERING

- A. Employ a Land Surveyor registered in the State of New York and acceptable to the OWNER.
- B. Locate and protect all survey control, survey monuments, property pins and reference points.
- C. Control datum for survey is that shown on Drawings.
- D. Provide field engineering services. Establish elevations, lines, and levels, utilizing recognized engineering survey practices.

1.04 PRECONSTRUCTION CONFERENCE

- A. OWNER will schedule a conference at the time of Notice of Award.
- B. Attendance required by OWNER and CONTRACTOR.

C. Agenda:

1. Regulatory Agencies
2. Utilities
3. Owner's Representatives
4. Submission of bonds and insurance certificates.
5. Distribution of Contract Documents or supplemental information.
6. Submission of list of subcontractors, list of products, Schedule of Values and Progress Schedule.
7. Designation of personnel representing the CONTRACTOR, and the OWNER.
8. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders and contract closeout procedures.
9. Scheduling.
10. Construction facilities and controls provided by OWNER
11. Temporary utilities provided by OWNER
12. Survey layout
13. Housekeeping procedures
14. Procedures for testing
15. Procedures for maintaining record documents
16. Requirements for start-up of equipment
17. Inspection and acceptance of equipment put into service during construction period

1.05 PROGRESS MEETINGS

- A. Attend scheduled meetings throughout progress of the Work at one to four week intervals, as determined by the OWNER.
- B. OWNER will make arrangements for meetings, prepare agenda with copies for participants, preside at meetings, record minutes, and distribute copies to participants and those affected by decisions made.
- C. Required Attendance: Job superintendent, major Subcontractors and suppliers, OWNER, Funding Agency and others, as appropriate to agenda topics for each meeting.

- D. Agenda:
1. Review minutes of previous meetings
  2. Review of work progress
  3. Field observations, problems, and decisions
  4. Identification of problems which impede planned progress
  5. Review of submittals schedule and status of submittals
  6. Review of off-site fabrication and delivery schedules
  7. Maintenance of progress schedule
  8. Corrective measures to regain projected schedules
  9. Planned progress during succeeding work period
  10. Coordination of projected progress
  11. Maintenance of quality and work standards
  12. Effect of proposed changes on progress schedule and coordination
  13. Other business relating to Work

1.06 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit initial progress schedule in duplicate as established in Notice of Award.
- B. Revise and resubmit as required.
- C. Submit schedule with each Application for Payment, identifying changes since previous version.
- D. Submit a computer generated or horizontal bar chart with separate line for each major section of Work. Or submit a computer generated network analysis diagram using the critical path method, generally as outlined in Associated General Contractors of America (AGC) publication, "The Use of CPM in Construction - A Manual for General Contractors and the Construction Industry".
- E. Show complete sequence of construction by activity, identifying work of separate stages and other logically grouped activities. Indicate early and late start, early and late finish, float dates and duration.
- F. Indicate estimated percentage of completion for each item of work at each submission.

- G. Indicate submittal dates required for shop drawings, product data, samples, and product delivery dates, including those furnished by OWNER and under Allowances as defined in the General Conditions.

1.07 FINAL INSPECTION CONFERENCES

- A. When required in individual Materials and Performance Sections or to meet a project Milestone, a work site Final Inspection Conference will be convened prior to commencing other work.
- B. Attendance of parties directly affecting, or affected by, work of the specific Section is required.
- C. OWNER will prepare agenda, preside at conference, record minutes and distribute copies after conference to participants.
- D. Review conditions of installation, preparation and installation procedures and coordination with related work.
- E. OWNER will issue a punch list of items which need repair, replacement and/or restoration.

1.08 COMMUNICATION

- A. Notify OWNER of start of work on project.
- B. Notify OWNER of hours to be worked.
- C. Notify OWNER in advance when work will be suspended for any reason.
- D. Notify OWNER of each subsequent startup.
- E. There will be a charge of \$200.00 for each time required notification is not provided.

1.09 EMERGENCY CALL OUT

- A. Have an employee available at all times for calls and problems which may arise during the project. Employee shall:
  - 1. Have authority to act and resolve any problems,
  - 2. Be available after normal working hours, weekends and holidays,
  - 3. Carry a pager or cellular phone.
- B. Provide the OWNER with employee's name, home phone number, place of residence and pager/cell number.
- C. Respond within one hour to a call from the OWNER.
- D. Notify the OWNER's office when problem has been resolved.

- E. The ENGINEER or OWNER will resolve or repair the problem if there is no response within one (1) hour of the call. If deemed an emergency situation by the OWNER, no written notice that the OWNER may correct defective work shall be required.
- F. All costs incurred by the OWNER or ENGINEER shall be billed to the CONTRACTOR with a minimum charge of One Thousand dollars (\$1,000.00) for each event.
- G. Failure of the CONTRACTOR or the emergency call out employee to respond to two (2) call outs will result in a work stop order, potential termination of the Contract and/or replacement of that employee as emergency call out employee.

END OF SECTION

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**SECTION 01101  
REFERENCE STANDARDS**

1.01 SECTION INCLUDES

- A. Quality assurance
- B. Schedule of references

1.02 QUALITY ASSURANCE

- A. For products or workmanship specified by association, trade, or Federal Standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current on date for receiving bids.
- C. Obtain copies of standards when required by Contract Documents and maintain at jobsite during submittals, planning, and progress of the specific work, until Substantial Completion.
- D. Should specified reference standards conflict with Contract Documents, request clarification from ENGINEER before proceeding.
- E. The contractual relationship of the parties shall not be altered by mention or inference contained in any reference document.

1.03 SCHEDULE OF REFERENCES

AASHTO	American Association of State Highway and Transportation Officials 444 North Capitol Street, N.W. Washington, DC 20001
ACI	American Concrete Institute Box 19150 Reford Station Detroit, MI 48219
AI	Asphalt Institute Asphalt Institute Building College Park, MD 20740
AIA	American Institute of Architects 1735 New York Avenue, N.W. Washington, DC 20006
AISC	American Institute of Steel Construction 400 North Michigan Avenue Eighth Floor Chicago, IL 60611

AISI American Iron and Steel Institute  
1000 16th Street, N.W.  
Washington, DC 20036

ANSI American National Standards Institute  
11 West 42nd Street  
New York, NY 10036

ASTM American Society for Testing and Materials  
1916 Race Street  
Philadelphia, PA 19103

AWS American Welding Society  
550 LeJeune Road, N.W.  
Miami, FL 33135

AWWA American Water Works Association  
6666 West Quincy Avenue  
Denver, CO 80235

CRSI Concrete Reinforcing Steel Institute  
933 Plum Grove Road  
Schaumburg, IL 60195

HYDRAULIC INSTITUTE STANDARDS  
712 Lakewood Center North  
14600 Detroit Avenue  
Cleveland, Ohio 44107

MUTCD Manual of Uniform Traffic Control Devices  
New York State Department of Transportation  
1530 Jefferson Road  
Rochester, New York 14623

NEW YORK STATE STANDARD SPECIFICATION  
New York State Department of Transportation  
1530 Jefferson Road  
Rochester, New York 14623

STATE BUILDING CODE  
New York State - Department of State  
162 Washington Avenue  
Albany, New York 12231

SSPC Steel Structures Painting Council  
4400 Fifth Avenue  
Pittsburgh, PA 15213

UL Underwriters' Laboratories, Inc.  
333 Pfingston Road  
Northbrook, IL 60062

END OF SECTION

**SECTION 01102  
CARE AND PROTECTION OF PROPERTY**

1.01 SECTION INCLUDES

- A. Protection of Property
- B. Work within Highway Right-of-Way
- C. Notice to Property Owner

1.02 PROTECTION OF PROPERTY

- A. Entering or occupying with men, tools, materials or equipment any land other than the right-of-way and easements without written, notarized consent from the property owner is prohibited. Provide a copy of the written, notarized consent to the ENGINEER. Assume full responsibility for use of said private properties and defend OWNER against all claims for damages from use of same.
- B. Provide and maintain all necessary watchman, barricades, lights and warning signs and take all necessary precautions for the protection and safety of the public, OWNER, ENGINEER and property.
- C. Continuously maintain adequate measures to protect all Work from damage and take all reasonable precautions to protect the public's and OWNER's property from injury or loss arising in connection with this Agreement.
- D. Make good any damage, injury or loss to the Work, property of the OWNER and the public resulting from lack of reasonable protective precautions.
- E. In an emergency affecting the safety of life, the Work, or adjoining property, the CONTRACTOR shall act to prevent such threatened loss or injury without special instructions or authorization from the ENGINEER and in accordance with the General Conditions. Also act, without appeal, if so authorized or instructed by the ENGINEER.
- F. Exercise extreme care to prevent damage to trees, flowers, shrubs, etc. Replace or repair any damaged trees, shrubs, flowers, etc.
- G. Replace or re-erect fences and guard rails taken down or disturbed, to the satisfaction of the ENGINEER.
- H. Conduct work in a manner to properly protect all Underground Facilities. Work near Underground Facilities shall be in accordance with the utility's requirements, rules and regulations. If any utility is damaged, immediately notify the utility involved so that proper inspection and repair can be made.
- I. The OWNER or ENGINEER will attempt to notify the CONTRACTOR of any hazardous condition during non-working hours by telephone. If the OWNER or ENGINEER is unable to reach the CONTRACTOR or the CONTRACTOR fails to correct the hazardous condition utilizing all necessary safety devices within one

hour after notification, the OWNER will make all necessary repairs at the expense of the CONTRACTOR. If the hazardous condition is of such a nature, in the opinion of the ENGINEER, that it should be remedied immediately and the CONTRACTOR is unable or refuses to do so, OWNER's personnel will make all necessary repairs at the expense of the CONTRACTOR.

- J. Prior to construction, install snow fence to protect trees and plantings as shown on the drawings or directed by the Engineer. Secure fence with stakes every five (5) feet.
- K. Maintain drainage throughout construction.

#### 1.03 NOTICE TO PROPERTY OWNERS

- A. The CONTRACTOR shall provide property owners at least one day advance written notice of pending construction. Keep driveways open and in good condition at all times.

#### 1.04 WORK WITHIN HIGHWAY RIGHTS-OF-WAY

- A. Perform and complete all work within the state, county, city and town rights-of-way to the full satisfaction of the various Departments of Public Works concerned.
- B. Conduct operations associated with the Work so as not to interfere with the movement of traffic on highways and with operations of the particular Department of Public Works.
- C. If at any time during the work, traffic or facilities of the State of New York, county, City of Rochester or town are endangered, immediately do such work as the representative of the particular Department of Public Works concerned may direct to restore safety. The expense of restoring safety based on the directions of the particular Department of Public Works representative shall be born solely by the CONTRACTOR.
- D. Permit inspection by the State of New York, county, City of Rochester, town or village at all times as the Work progresses.
- E. Provide written notice to the State of New York, county, City of Rochester, town or village five (5) days before such work is to begin within their right-of-way.

END OF SECTION

**SECTION 01103**  
**INTERRUPTION OF CUSTOMER SERVICE**

1.01 SECTION INCLUDES

- A. Interruption of Service
- B. Planned Shutdowns and Notifications
- C. Shutdowns

1.02 INTERRUPTION OF SERVICE

- A. Do not shut down or interrupt flow through any facility unless specifically permitted to do so, in writing, by the OWNER.
- B. Do not operate main line valves, pumps, electrical controls and other facilities controlling flow. Assist the OWNER in closing all valves necessary for interruption or shutdown of flow.
- C. When an interruption of service occurs, work continuously and with expedience until completion of all work necessary to restore service to its normal state.

1.03 PLANNED SHUTDOWNS AND NOTIFICATIONS

- A. Notify OWNER and ENGINEER in writing of proposed shutdown of any facility, and approximate duration thereof, a minimum of three (3) days in advance. Include date, time and extent of duration of shutdown in the written notification to OWNER.
- B. Notify all customers, in writing, twenty-four (24) hours prior to shutdown with the notification form provided by OWNER. Completely fill out notification form and distribute it to all affected customers prior to shutdown.
- C. Immediately prior to individual service and lateral work, notify the customer again to verify that all water use has been stopped.
- D. Bear all responsibility for any loss or damage arising out of the failure of any such customer to receive notice of proposed shutdown or interruption of service.
- E. Identify material, size and location of utility or service prior to making shutdown. Do not shut down or cause any interruption of flow until all labor, material and equipment necessary to perform the work are present at the work site.
- F. Provide temporary service where utility can not be restored within four hours.

- G. Restore service as soon as possible. Immediately notify OWNER of said restoration of service.

1.04 EMERGENCY SHUTDOWNS

- A. In the event of a rupture of a water main or other failure of any facility, whether the result of the CONTRACTOR's activities or other unrelated matters, act in accordance with the provisions of the Section entitled, "Care and Protection of Property".
- B. As soon as the shutdown or interruption of service has actually taken place, notify the Owner of the area affected and the proposed number of hour's duration of the shutdown. In addition, notify the customers who are affected by the shutdown by going door-to-door.

END OF SECTION

**SECTION 01104  
TEMPORARY CONTROLS**

1.01 SECTION INCLUDES

- A. Water Control
- B. Dust Control
- C. Erosion and Sediment Control
- D. Noise Control

1.02 WATER CONTROL

- A. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
- B. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.

1.03 DUST CONTROL

- A. Execute Work by methods to minimize raising dust from construction operations.
- B. Provide positive means to prevent air-borne dust from dispersing into atmosphere. This shall include as a minimum, sprinkling and sweeping on paved areas and sprinkling and mulching in unpaved areas.
- C. Do not use calcium chloride unless directed by the ENGINEER/OWNER.

1.04 EROSION AND SEDIMENT CONTROL

- A. Plan and execute construction by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
- B. Minimize amount of bare soil exposed at one time.
- C. Provide temporary measures such as berms, dikes, and drains, to prevent water flow.
- D. Construct fill and waste areas by selective placement to avoid erosive surface silts or clays.
- E. Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.
- F. Utilize erosion control procedures, including mulching, on site. Furnish erosion control as required and, immediately following (weather permitting), completion of site and access clearing.

- G. Allow sediment to settle out of water that interferes with construction before such water enters any surface waterway. Pump water as far as possible from waterway banks when dewatering. Do not damage or kill vegetation by excessive watering or accumulating silt in the discharge area. Install settling basins and plastic filter fabric to achieve environmental objectives as ordered by the ENGINEER.

1.05 NOISE CONTROL

- A. Provide all construction equipment with adequate muffler devices.
- B. Restrict work to the hours between 7:00 a.m. and 8:00 p.m., unless further restricted as a condition of permits, local regulations, or as specified in the WORK ORDER.

1.06 SURFACE WATER CROSSINGS

- A. Protect slopes at surface water crossings or drainage ways by installing riprap, sand bags, sod, jute mesh or excelsior blankets as conditions require.
- B. Use water diversion berms, sodding, jute mesh or excelsior blankets on slopes exceeding 15 percent.

1.07 ENVIRONMENTAL CONTROLS

- A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.
- B. Prohibited construction procedures include, but are not limited to:
  - 1. Dumping of spoil material in any stream corridor, any wetland, surface waterway or at unspecified locations.
  - 2. Indiscriminate, arbitrary, or capricious operation of equipment in any stream corridors, wetland, or surface waterway.
  - 3. Damaging vegetation beyond the extent necessary for construction of facilities.
  - 4. Open burning of project debris.
  - 5. Pumping of silt laden water from trenches or other excavations into any surface waterway, stream corridor, or wetland.

END OF SECTION

**SECTION 01105  
TRAFFIC REGULATION**

1.01 SECTION INCLUDES

- A. Work within Right-of-Ways
- B. Signs, Signals, and Devices
- C. Construction Parking
- D. Flagmen
- E. Flares and Lights
- F. Haul Routes
- G. Traffic Signs and Signals
- H. Sign Removal

1.02 REFERENCES

- A. MUTCD (available at the OWNER'S and ENGINEER's office for review)

1.03 WORK WITHIN RIGHT-OF-WAYS

- A. Prevent damage to vehicles on highways and to facilities of the State of New York, county, or town in which the work is being done. Conduct operations so as not to interfere with the movement of traffic on highways and with operations of the particular Department of Public Works involved.
- B. Provide written notice to the City of Rochester, State of New York, County or Town Department of Public Works five (5) days before work is to begin in their right-of-way.

1.04 SIGNS, SIGNALS, AND DEVICES

- A. Post Mounted and Wall Mounted Traffic Control and Informational Signs: Specified in Part 201 MUTCD.
- B. Traffic Cones and Drums, Flares and Lights: As approved by local jurisdictions: Specified in Parts 292 and 294 in MUTCD.
- C. Flagman Equipment: As approved by local jurisdictions and Part 293 in MUTCD.
- D. Work Zone Warning Signs: As approved by local jurisdiction or as specified in MUTCD Section 238 and Section 300.

- 1.05 CONSTRUCTION PARKING CONTROL
  - A. Control vehicular parking to prevent interference with public traffic, parking and access by emergency vehicles.
  - B. Prevent parking on or adjacent to access roads or in non-designated areas.
- 1.06 FLAGMEN
  - A. Provide trained and equipped flagmen to regulate traffic when construction operations or traffic encroach on public traffic lanes.
- 1.07 FLARES AND LIGHTS
  - A. Use flares and lights during hours of low visibility to delineate traffic lanes and to guide traffic as specified in Part 294 of MUTCD.
- 1.08 HAUL ROUTES
  - A. Consult with authority having jurisdiction in establishing public thoroughfares to be used for haul routes and site access.
  - B. Confine construction traffic to designated haul routes.
  - C. Provide traffic control at critical areas of haul routes to regulate traffic and minimize interference with public traffic.
- 1.09 TRAFFIC SIGNS AND SIGNALS
  - A. Locate traffic signs and/or signals at approaches to site, on-site, crossroads, detours, parking areas, and elsewhere as needed to direct construction and affected public traffic, as specified in Part 201 of MUTCD.
  - B. Relocate as work progresses, to maintain effective traffic control.
- 1.10 REMOVAL
  - A. Remove equipment and devices when no longer required.
  - B. Repair damage caused by installation.
- 1.11 TRAFFIC REGULATION
  - A. Maintain safe and continuous through traffic.
  - B. Maintain ingress and egress for all adjacent driveways, service roads and public streets.

END OF SECTION

**DIVISION 2: SITE WORK**

02200 EARTHWORK	8
02225 TRENCHING	5
02227 BACKFILLING	3
02229 ROCK REMOVAL	2
02230 SELECT FILL	2
02732 SEWER LATERALS	5
02735 MANHOLE AND CATCH BASIN ADJUSTMENT	4
02919 TEMPORARY PAVEMENT	2
02920 RESTORATION OF PAVEMENTS	7
02936 SEEDING	5

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**SECTION 02200  
EARTHWORK**

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Provide labor, materials, equipment and supplies to perform the required clearing and grubbing, excavation, backfill, and grading indicated on the Contract Drawings.

1.02 REFERENCED STANDARDS

- A. OSHA's Construction Standards for Excavation, 29 CFR 1926, Subpart P: Excavation, latest revision, as published in the F.R. Vol. 54, No. 209, dated 10/31/89.
- B. New York State Department of Transportation Standard Specifications, May 4, 2006.

1.03 DEFINITIONS

- A. The following terms shall have the meanings ascribed to them in this Section, wherever they appear in this specification.
- B. Rock: Limestone, sandstone, shale, granite, or similar material in solid beds or masses in its original or stratified position which, in the opinion of the Engineer, can be removed only by blasting, drilling, wedging, or use of pneumatic tools, and all boulders with a volume greater than one (1.0) cubic yard. Removal of materials which can be loosened with a pick or backhoe, frozen materials, soft laminated shale or hardpan, pavements, curbs, and similar materials shall be considered as earth excavation.
- C. Subgrade Surface: Surface upon which subbase or topsoil is placed.
- D. Subbase: Select granular material or other porous material, which is placed immediately beneath pavement or concrete slabs.
- E. Maximum Density: The dry unit weight in pounds per cubic foot of the soil at "Optimum Moisture Content" when determined by ASTM D 698 (Method C).

1.04 SUBMITTALS

- A. Samples: Furnish pit location and current DOT acceptance number with each sample.
  - 1. Select Granular Material: 40 - 50 lbs.
  - 2. Selected Fill: 40 - 50 lbs.
  - 3. Crushed Stone: 40 - 50 lbs.
  - 4. Pea Gravel: 40 - 50 lbs.
  - 5. Sand: 40 - 50 lbs.
  - 6. Filter Fabric: 1 sq. yd.
- B. Product Data: Manufacturer's specifications, performance characteristics and operating instructions for compaction equipment.

- C. Sheeting, Shoring, Bracing: If deemed necessary, submit to the Engineer a detailed plan of any intended slope protection, by sheeting, shoring, or bracing, which shall be in conformance with OSHA's 29 CFR Part 1926, Subpart P, latest revision, and signed by a licensed Professional Engineer. This submittal will not relieve the Contractor of complete responsibility for the successful performance of the intended sheeting, shoring, and bracing methods.

1.05 JOB CONDITIONS

- A. Protect newly graded areas from traffic and erosion, and keep them free of trash and debris until physical completion of the work.
- B. Protect existing public and private utilities and/or structure below ground surface, adjacent to the work site.
- C. Protect existing trees and plants during performance of the work. Box trees and plants within the grading limit lines with temporary snow fencing or solidly constructed wood barricades as required. Protect root systems from smothering. Do not store excavated material, or allow vehicular traffic or parking within the branch drip line. Restrict foot traffic to prevent excessive compaction of soil over root systems.
- D. Cold Weather Requirements: When freezing temperatures are predicted, do not excavate to final required elevations for Concrete Work unless concrete can be placed immediately. Retain enough earth over the bottom elevation of footings to prevent frost penetration.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Select Granular Material: Shall be angular crusher run limestone as delivered unsorted from the crusher and shall be well graded, durable and composed of rock pieces, chips and fines. Select Granular Material shall be free from organic or other deleterious materials and in also meet the requirements of (DOT Subbase Course Type 2):

<b>Sieve</b>	<b>Percent Passing</b>
2 inch	100
1/4 inch	25 - 60
No. 40	5 - 40
No. 200	0 - 10

Magnesium Sulphate Soundness Test: 20 percent maximum loss by weight after 4 test cycles.

- B. Select Fill: Covered under Section 2230.
- C. Suitable Fill Material: For use as fill in landscaping and other such applications. Suitable Fill Material shall consist of available site material consisting of mineral soil (inorganic), blasted or broken rock and similar materials of natural or man made origin, or mixtures thereof. Maximum particle size shall not exceed 2/3 of the layer thickness prior to compaction. Material containing cinders, industrial waste, sludge, building rubble, organic matter including topsoil, sod, muck and peat shall be considered unsuitable for fill and backfill.

- D. Suitable Native Material: Shall be available site material consisting of mineral soil (inorganic), loose materials free from rocks and/or hard chunks of clay, free of sharp materials, and free of frozen materials. If materials on site are found to be not suitable, the Contractor shall import suitable material.
- E. Crushed Stone and Crushed Gravel: Shall be clean, durable crushed stone or gravel consisting of regular fragments obtained by crushing. It shall be free from sand, silt, clay, shale, broken slag, organic material or any other deleterious materials. The material shall be obtained from sources which are approved by the New York State Department of Transportation (NYSDOT), and shall conform to the NYSDOT Standard Specifications, latest edition, Material Designation 703-0201 and 703-0202 respectively, in the sizes stated below.

NYSDOT (Table 704-4 Size)

- 1B
- 1A
- 1ST
- 1
- 2
- 3A
- 3
- 4A
- 4
- 5

- F. Pea Gravel: Screened Gravel, DOT Material Designation 703-0203, Size 1ST (Table 703-4)
- G. Sand cushion: Sand meeting NYS DOT Standard Specifications Section 703-06
- H. Sand: ASTM C 33.
- I. Stone Filling: (Meeting the requirements of DOT 620-2.01 and 620-2.02)

Fine Stone Filling:	90-100%	smaller than 8 inches
	50-100%	larger than 3 inches
	0-10%	smaller than No. 10 Sieve
Light Stone Filling:	90-100%	lighter than 100 pounds
	50-100%	larger than 6 inches
	0-10%	smaller than 1/2 inch
Medium Stone Filling:	50-100%	heavier than 100 pounds
	0-10%	smaller than 4 inches
Heavy Stone Filling	50-100%	heavier than 600 pounds
	0-10%	smaller than 6 inches

- J. Dry Rip-Rap: (Meeting the requirements of DOT 620-2.01 and 620-2.03) Dry Rip-Rap shall consist of stones shaped as nearly as practicable in the form of right rectangular prisms. At least 50%, by weight of the stones shall weigh in excess of 300 pounds each, and the remainder of the stones shall weigh from 100 to 300 pounds each.

## 2.02 COMPACTION EQUIPMENT

- A. Compaction equipment used for the Work is subject to approval by the Engineer. Any equipment not originally manufactured for compaction purposes and equipment which is not in proper working order will not be approved. Furnish manufacturer's specifications covering data not obvious from a visual inspection of the equipment to determine its classification and performance characteristics.

## 2.03 SHEETING, SHORING AND BRACING

- A. Steel sheet piling: Continuous interlock type complete with all required accessories conforming to ASTM A 328 or to ASTM A 572.
  - 1. Provide steel sheet piling of design, configuration and length to sustain pressure of earth to be retained.
- B. Timber Sheeting, Shoring and Bracing: Timber sheeting, structural grade timber or lumber uprights, stringers and cross braces of sufficient dimension to resist pressure of work to be retained, in conformance with OSHA's 29 CFR Part 1926 Subpart P, latest revision.

## PART 3 EXECUTION

### 3.01 CLEARING AND GRUBBING

- A. Remove all trees, shrubs and other vegetation and all existing improvements both above and below grade only to the extent required to provide new construction.
- B. Protect all trees which are to remain with fencing erected beyond the drip line of outermost branches. Contractor shall take all precautions necessary to prevent damage to trees or shrubs to be retained.
- C. Where limbs are removed to accommodate construction, they shall be removed carefully, and exposed wood treated with approved dressing. Where roots are exposed or damaged by construction, they shall be carefully and cleanly cut, and the area backfilled to prevent desiccation.
- D. Where necessary, the trees shall be pruned to restore the appearance of the tree, or to restore the balance between the root system and top growth.
- E. Any tree which is designated to remain that dies or becomes damaged beyond repair shall be replaced by the Contractor at his expense, with a tree of a size and species as directed by the Engineer.

### 3.02 REMOVAL OF TOPSOIL

- A. Strip and stockpile topsoil that will be reused in the Work. Place, grade, and shape stockpiles as directed by the Engineer for protection against erosion and for proper drainage.

### 3.03 UNDERGROUND UTILITIES

- A. Support and protect to the satisfaction of the utility owner, active utilities from any damage during excavation operations.

- B. In areas where there appears to be conflict between the existing underground utilities and the construction of the work covered by this Contract, it shall be the responsibility of the Contractor to dig test pits, uncover the existing utility, and promptly inform the Engineer of the existence of a conflict for his review and determination regarding resolving such situations. The Contractor shall perform the required task of uncovering existing utilities well ahead of the time he intends to perform the new work in such areas. No payment will be made for uncovering existing utilities where they appear to be in conflict with the construction of the new work.

### 3.04 EXCAVATION AND TRENCHING

- A. Effective January 2, 1990, the Contractor shall familiarize himself, and strictly comply with OSHA's Construction Standards for Excavation, 29 CFR Part 1926, Subpart P: Excavation, latest revision, as published in the Federal Register, Vol. 54, No. 209, dated Thursday October 31, 1989. The intended effect of these revised Standards is to increase the protection and safety of employees working in excavations.
- B. Excavate earth as required for the Work.
- C. Unauthorized Excavations (removal of any material below subgrade elevations indicated on the Drawings, or beyond lateral dimensions indicated or specified herein, without specific written instruction from the Engineer): Backfill and compact unauthorized excavations as specified for authorized excavations of the same classification, unless otherwise directed by the Engineer.
- D. Slope the sides of excavations to retain soil repose. Sheet and shore excavations where sloping is not possible due to space restrictions or stability of material. Maintain sides and slopes of excavation in a safe condition to conform to OSHA and NYS Department of Labor rules and regulations, latest revisions, until completion of backfilling.
- E. Concrete Slabs and Bases: Excavate to the following depths below bottom of concrete for addition of select granular material, unless otherwise indicated:
  - 1. Interior : 6 inches.
  - 2. Exterior : 12 inches.
- F. Bell and Spigot Pipe: Unless otherwise indicated on the drawings, excavate trenches 24 inches wide for pipes up to 18" diameter plus the outside diameter of the pipe. Excavate trenches 36 inches wide for pipes greater than 18" diameter plus the outside diameter of the pipe. Cut trench bottom true and even. Excavate adequate bell holes to allow ample room for pipe connections and to allow for uniform bearing of pipe on a minimum of 6" depth of stone bedding or as shown on the applicable pipe bedding detail, for its full length.
- G. Conduit, Cable, Tubing and Piping (other than bell and spigot): Provide sufficient trench width for installation and to accommodate special backfill when specified.
- H. Comply with applicable governing restrictions during excavation and trenching. Shore and brace, or slope sides of excavations when directed in order to conform to governing laws of OSHA, NYS Labor Department.

- I. Stockpile excavated materials classified as suitable material where directed, until required for fill. Place, grade and shape stockpiles for proper drainage as directed.

### 3.05 SHEETING, SHORING AND BRACING

- A. Where sloping of excavations is not possible due to space restrictions, provide temporary sheeting with shoring and bracing as required to prevent damage or settlement to adjacent grounds and structures resulting from excavation operations. Shore and brace sheeting in compliance with OSHA's 29 CFR Part 1926, Subpart P, latest revision. Promptly remove temporary sheeting and shoring when no longer required.
- B. Provide permanent steel sheet piling or pressure creosoted timber sheet piling wherever subsequent removal of temporary sheet piling might permit lateral movement of soil under adjacent structures. Cut off tops 12 inches below grade.

### 3.06 DEWATERING

- A. Prevent surface and subsurface water from flowing into excavations and trenches which will interfere with the progress of the work. Pump out any accumulated water, and dispose of in a manner approved by the Owner and the Engineer.

### 3.07 EXISTING DRAINAGE DITCHES

- A. Provide positive drainage of surface water at all times during construction of work required under this Contract.
- B. Restore existing ditches to their original condition or better, immediately after installing the new work.
- C. The Contractor shall be responsible for any damages to public and/or private property resulting from blockage of drainage due to his construction activities and/or any delay in restoration of existing drainage ditches.
- D. Fertilize and seed slopes and bottom of ditches to prevent erosion after restoration of these ditches.

### 3.08 PLACING FILL AND BACKFILL

- A. Backfill as promptly as practical, but only after approval by the Engineer. Do not backfill with excavated material unless it meets the requirements of this section.
- B. Place backfill and fill materials in layers not more than 12 inches loose depth, except under pavements where layers shall be not more than 6 inches of loose depth. Before compaction, moisten or aerate each layer as necessary to facilitate compaction to the required density. Do not place backfill or fill material on surfaces that are muddy, frozen or contain frost or ice.
- C. Under Exterior Concrete Slabs and Bases:
  - 1. Up to subgrade surface elevation: Place selected fill when fill or backfill is required.
  - 2. Subbase material: Place 12 inches of select granular material over subgrade surface.

- D. Under Exterior Pavement and Walks:
  - 1. Up to subgrade surface elevation: Place selected fill when fill or backfill is required.
  - 2. Subbase material: Select granular material.
- E. Landscaped Areas: Place suitable excavated native material or select fill if ordered in writing by the Engineer up to subgrade surface elevation. Do not use material containing rocks over 4 inches diameter within the top 12 inches of suitable material.

### 3.09 COMPACTION

- A. Compact each layer of fill and backfill to the percentage of maximum density specified below. Compact bearing surface material at a moisture content suitable to obtain the required densities, but at not less than 3 percent drier than the optimum content as determined by ASTM D-1557.
  - 1. Structures (area within 10 ft outside perimeter): 95 Percent
  - 2. Lawn or unpaved areas: 85 percent
  - 3. Pavements and walks: 95 percent

### 3.10 GRADING

- A. Rough Grading: Trim and grade excavations required by this contract, to a level 4 inches below finished grades indicated unless otherwise specified herein or where greater depths are indicated. Provide smooth uniform transition to adjacent areas.
- B. Finish Grading: Finish surfaces free from irregular surface changes, and as follows:
  - 1. Grassed areas: Finish areas to receive topsoil to within not more than 1 inch above or below the required subgrade surface elevations.
  - 2. Pavements, Walks, and Building Slabs: Grade subbase material smooth and even, free of voids, compacted as specified to within 1/4 inch above or below the required subbase elevation.
- C. Spread approved topsoil directly upon prepared subgrade surface to a depth measuring 4 inches after natural settlement of topsoil has occurred in areas to be seeded or to receive sod. Provide greater depth to adjust grades when directed by the Engineer.

### 3.11 RESTORATION

- A. Restore grades to indicated levels where settlement or damage due to performance of Work has occurred. Correct conditions contributing to settlement. Remove and replace improperly placed or poorly compacted fill materials.
- B. Restore asphalt concrete pavements, drives, gutters, curbs, and other exterior surfaces damaged during performance of the Work, to match the appearance and

performance of existing adjacent surfaces as closely as practicable and in conformance with the applicable municipality's requirements.

- C. Restore damaged lawn areas by topsoiling and seeding, or sodding. Water restored lawn areas as required until physical completion of the Work.

### 3.12 DISPOSAL OF EXCESS AND WASTE MATERIALS

- A. Remove and dispose of excess and unsuitable materials, including materials resulting from clearing and grubbing.
- B. Transport surplus topsoil to area designated by the Owner or the Engineer. Smooth grade deposited topsoil.

END OF SECTION

**SECTION 02225  
TRENCHING**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Trenches for pipelines and appurtenances
- B. Maintaining trenches
- C. Encountering underground facilities
- D. Existing structures and pavements within the trench limits
- E. Trees, bushes and plantings
- F. Surplus material
- G. Dust control
- H. Voids under adjacent structures

1.02 DEFINITIONS

- A. Trenching or Excavation
  - 1. Grubbing, stripping, removing, storing and rehandling of all materials of every name and nature necessary to be removed for all purposes incidental to the construction and completion of all the work under construction;
  - 2. All dikes, ditches, flumes, cofferdams, pumping, bailing, draining, well points, or otherwise disposing of water;
  - 3. The removing and disposing of all surplus materials from the excavations in the manner specified;
  - 4. The maintenance, accommodation and protection of travel and the temporary paving of highways, roads and driveways;
  - 5. The supporting and protecting of all tracks, rails, buildings, curbs, sidewalks, pavements, overhead wires, poles, trees, vines, shrubbery, pipes, sewers, conduits or other structures or property in the vicinity of the work, whether over or underground or which appear within or adjacent to the excavations and the restoration of the same in case of settlement or other injury;
  - 6. All temporary bridging and fencing and the removing of same.
- B. Earth

1. All materials such as sand, gravel, clay, loam, ashes, cinders, pavements, muck, roots or pieces of timber, soft or disintegrated rock, not requiring blasting, barring, or wedging from their original beds, and specifically excluding all ledge or bedrock and individual boulders or masonry larger than one-half cubic yard in volume.
- C. Backfill
1. The refilling of excavation and trenches to the line of filling indicated on the Contract Drawings or as directed using materials suitable for refilling of excavations and trenches; and the compacting of all materials used in filling or refilling by rolling, ramming, watering, puddling, etc., as may be required.
- D. Spoil
1. Surplus excavated materials not required or not suitable for backfill or embankments.
- E. Embankments
1. Fills constructed above the original surface of the ground or such other elevation as specified or directed.
- F. Limiting Subgrade
1. The underside of the pipe barrel for pipelines.
- G. Excavation Below Subgrade
1. Excavation below the limiting subgrade of pipelines.
  2. Excavate to such new lines and grades as required when material encountered at the limiting subgrade is not suitable for proper support of pipelines.

PART 2 PRODUCTS - None

PART 3 EXECUTION

A.01 PREPARATION

- A. Identify required lines, levels, contours, and datum. Locate all utilities and underground obstructions prior to starting excavations, including cutting pavements.
- B. Cut pavement and pavement base over the proposed trench before excavating for pipeline installation. Utilize a jackhammer, wheel cutter ("Pizza Cutter") or power driven saw. Cut pavement to the required trench width as approved by the OWNER.

- C. Relocate, remove and later restore, or replace existing structures in the proposed trench limits and those structures which would be damaged or impede progress.
- D. Protect the trunks of trees adjacent to the Work that are not to be cut. Tie back overhanging branches and limbs not to be cut to prevent injury from excavating machinery or any other operations related to the work.
- E. Do not cut or remove branches, limbs and roots except for those plantings included in clearing and grubbing areas. In the case of unavoidable damage to plantings, neatly trim the injured portions without splitting or crushing.
- F. Remove and temporarily store in soil, any plants and flowers which would be injured by the work. Replant in their original position after the Work has been substantially completed. Maintain until re-established. Replace with plantings of the same kind, quality and size that existed prior to construction when the original plantings die or their growth, beauty or usefulness is diminished as a result of the work.
- G. Maintain support of existing power, lighting, telephone, traffic control and utility poles adjacent to excavations as required by the owners of the poles.
- H. Do not operate on paved surfaces equipment which has treads or wheels that would cut or damage the pavement.
- I. Avoid damage to existing pavement other than pavement within the limits of the trench. Provide the pads of outriggers with protective covers, or place planks or timbers under the pads to prevent damaged to pavements. No payment shall be made for replacement or restoration of pavements beyond the payment limits which are damaged during the Work.
- J. Strip and stockpile topsoil in areas to be restored as field for eventual redistribution to its original profile location. Strip the entire depth of topsoil to a width of the trench payment limit plus 2 feet or greater as may be required by conditions or other installations. Stockpile topsoil on the parcel of land from which it was stripped at locations approved by the ENGINEER. Remove 10" and larger rocks from the topsoil.

### 3.02 EXCAVATION

- A. Excavate trenches to the lines and grades specified and as required. Backfill with special granular materials, concrete or other materials as directed by the ENGINEER, any excavated space carried beyond or below the lines and grades shown on the Contract Drawings, or as directed by the ENGINEER. Backfill unauthorized excavations at the CONTRACTOR's expense.
- B. Excavate the trench sides vertically between the centerline of the pipe and an elevation 1 foot above the top of the pipe unless this conflicts with the requirements of OSHA. In the case of rock excavation, excavate to 6 inches below invert elevation of pipe and 12 inches wider than the nominal pipe diameter. Maintain a minimum clearance of 6 inches around the pipe.
- C. Provide and maintain proper and satisfactory means and devices for the removal of all water entering the excavations, and remove all such water as

fast as it may collect, in such a manner as shall not interfere with the progression of the work or the proper placing of pipes, or other work.

- D. Prevent damage to surrounding pavement, gutters and structures while excavating.
- E. Furnish, place and maintain such sheeting, bracing and shoring as may be required to support the sides and ends of excavations in such manner as to prevent any movement which could, in any way, damage the pipe, structures, or other work; diminish the width necessary for construction; otherwise damage or delay the work of the Contract; endanger existing structures, pipes or pavements; or cause the excavation limits to exceed the right-of-way limits.

In no case will bracing be permitted against pipes or structures in trenches or other excavations.

Drive sheeting vertically with the edges tight together as the excavation progresses, and in such manner as to maintain pressure against the original ground at all times. Design all bracing to maintain sheeting in its proper position.

The adequacy of all sheeting and bracing is the sole responsibility of the CONTRACTOR.

Remove and dispose all material which slides, falls or caves into the established limits of excavations due to any cause whatsoever, at the CONTRACTOR's expense. No extra compensation will be paid to the CONTRACTOR for any materials ordered for refilling the void areas left by the slide, fall or cave-in.

- F. Discontinue machine excavation in the vicinity of pipes, conduits and other underground structures and facilities and complete the excavation with hand tools as required by Industrial Code Rule 753.
- G. When determination of the exact location of a pipe or other underground structure is necessary for completing the work properly, excavate test holes to determine such locations.
- H. When the bottom of any excavation is taken out beyond the limits indicated or prescribed, backfill and compact the resulting void with #1 or #2 crusher run compacted to 95% maximum modified Proctor density.
- I. Remove material which, in the opinion of the ENGINEER, is found to be unsuitable for foundation of the pipeline and appurtenances during excavation. Payment shall be made under the appropriate item of the bid.
- J. Use suitable surplus excavated materials for backfill of excavations in rock or to replace other materials unacceptable for use as backfill except in areas which require select backfill. Surplus excavated materials may be stockpiled at appropriate locations as needed for future use or as directed by the ENGINEER.
- K. Remove from the site all surplus excavated materials not needed.

- L. Replace existing structures (including concrete gutters, concrete sidewalks and curbs that are crossed by the proposed utility) and stone shoulders or other stone areas which are damaged or removed during the Work.
- M. When existing driveway culverts are encountered, replace with adequate size (minimum 12-inch diameter). Methods, materials and alignment to be determined by the applicable highway department.
- N. Minimize the creation and dispersion of dust. Sweep and sprinkle with water as required by conditions.
- O. Completely fill all voids which occur under existing sidewalks, curbs, gutters or other structures during the excavation with Type 5 Select Fill.
- P. Place and maintain a 2" thick layer of compacted temporary asphalt over backfilled trenches until permanent pavement is placed. Materials and workmanship for temporary pavement shall conform to the State of New York Department of Transportation specifications, the City of Rochester's Standard Specifications, and the specifications of any applicable municipality. The plant mix (cold patch or other approved material) shall be suitable for providing a smooth surface for traffic. Temporary pavement, if required, shall be paid for under the appropriate item in the bid.

END OF SECTION

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**SECTION 02227  
BACKFILLING**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Backfilling around and above pipe and appurtenances
- B. Consolidation and compaction
- C. Backfill in paved areas, lawn areas and field areas
- D. Surplus material
- E. Fine grading

1.02 REFERENCES

- A. ANSI/ASTM D1556 - Test Method for Density of Soil in Place by the Sand-Cone Method.
- B. ASTM D2167 - Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method.
- C. ASTM D2922 - Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
- D. ASTM D3017 - Test Methods for Moisture Content of Soil and Soil-Aggregate Mixtures.

PART 2 PRODUCTS

2.01 SELECT FILL MATERIALS

- A. As specified in Section 02230.

2.02 SUITABLE NATIVE MATERIALS

- A. Suitable Native Material: Shall be available site material consisting of mineral soil (inorganic), loose materials free from rocks and/or hard chunks of clay, free of sharp materials, and free of frozen materials. If materials on site are found to be not suitable, the CONTRACTOR shall import suitable material.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify installation has been inspected by the ENGINEER.

### 3.02 PREPARATION

- A. Cut out soft areas of subgrade not capable of in situ compaction. Backfill with select fill and compact to 95% maximum modified Proctor density.
- B. When required to obtain the optimum moisture content, add, at no additional cost to OWNER, sufficient water during compaction to assure the specified maximum density of the backfill. If, due to rain or other causes, the material exceeds the optimum moisture content, it shall be allowed to dry, assisted if necessary, before resuming compaction or filling efforts.

### 3.03 BACKFILLING

- A. Backfill all excavations to the original surface of the ground or to such other grades as may be shown, specified or directed.

Backfill with suitable excavated materials which can be satisfactorily compacted during refilling of the excavation. In the event the excavated materials are not suitable, use select fill as specified or ordered by the ENGINEER.

Refill and compact settlements and repair finished work damaged by settlement at no additional cost to OWNER.

- B. Backfill the zone around pipes (under, around and to a depth of 12 inches above the pipe) with washed #1 & #2 stone bedding in accordance with the Pipe Bedding Details. Place the material in by shovel in such a manner as not to damage pipe or appurtenances and in layers not to exceed 6 inches in depth. Compact to 95% maximum modified Proctor density.
- C. Systematically backfill to allow maximum time for natural settlement. Do not backfill over porous, wet, frozen or spongy subgrade surfaces.
- D. Backfill trenches under streets, roads, driveways, walks, gutters and curbs or other areas requiring structural support with select fill, or as directed by the ENGINEER.

Place and compact the select fill or native soil in uniform layers not exceeding 6" in compacted depth. Compact to 95% maximum modified Proctor density. Maintain optimum moisture content of backfill materials to attain required compaction density. Use compaction equipment suitable for material excavated, and pipe or appurtenance installed.

- E. For other areas use native soil which was removed in the course of the construction excavations or replacement fill. Distribute stones in the backfill to prevent the formation of voids. Do not incorporate in the backfill stones over 6 inches in any one dimension.
- F. Trenches in open fields, lawn areas and wooded areas, may be backfilled by filling in the entire trench, except for the zone around the pipe and the topsoil when stripped and stockpiled, in one operation and compacting the backfill with construction equipment, leaving the fill mounded slightly over

the trench. Maintain the surface over the trench during the guarantee period.

For trenches in areas to be restored under the field restoration item, backfill to allow for the original depth of the topsoil which was stockpiled. Upon completion of the subsoil backfilling, place the stockpiled topsoil on top of the subsoil. Remove large rocks (2" and above) and boulders from the topsoil. The cost of this work shall be included in the field restoration item of the bid.

- G. Employ a placement method that does not disturb or damage other work. Do not backfill against unsupported foundation walls.
- H. Remove surplus backfill materials from site.
- I. Each day complete fine grading operations of the work completed the previous day in areas other than pavement. In pavement areas, complete fine grading and install temporary asphalt the same day.
- J. Fine grade by leveling disturbed areas to as close to final finish grade as possible, leaving the fill mounded slightly over the trench. Remove all debris and place temporary asphalt as specified in the bid or as directed by the ENGINEER. Payment for temporary asphalt shall be made under the appropriate item of the bid.

#### 3.04 FIELD QUALITY CONTROL

- A. The CONTRACTOR shall be responsible for all damage or injury done to pipes, structures, property or persons due to improper placing or compacting of backfill.
- B. Compaction testing shall be performed in accordance with ANSI/ASTM D1556.

END OF SECTION

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**SECTION 02229  
ROCK REMOVAL**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Removal of rock by mechanical methods.
- B. Rock excavation and disposal.

1.02 DEFINITIONS

- A. Ledge Rock: Solid mineral material with a volume in excess of one (1) cubic yard or solid mineral material that cannot be removed with a 3/4 cubic yard capacity power shovel and which requires drilling, wedging, barring or hammering.

1.03 SUBMITTALS

- A. Shop Drawings: Indicate proposed method of rock removal.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Expansive Disintegration Compounds: Grout-type mix of materials that expand upon curing.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify site conditions under provisions of General Conditions.
- B. Note subsurface irregularities affecting Work of this section.
- C. The Contractor shall provide seismic monitoring, additional XC Insurance, permits and conducting a pre-blast survey.

3.02 PREPARATION

- A. Identify required lines, levels, contours, and datum.

3.03 ROCK REMOVAL

- A. Excavate and remove rock by the mechanical method. Hammer or drill holes and utilize tools, wedges or expansive disintegration compounds to fracture rock.

3.04 EXCAVATION, BACKFILL AND DISPOSAL

- A. Remove rock from the excavation to the required lines and grades.
- B. Excavate to 6 inches below invert elevation of pipe, conduit or structure, and 12 inches wider than the nominal pipe or conduit diameter or structure width. Maintain a minimum clearance of 6 inches around pipe.
- C. Correct over-excavation of rock in accordance with requirements of Section 02225.
- D. Install bedding and backfill in accordance with Section 02227.
- E. Remove surplus excavated materials from site.

END OF SECTION

**SECTION 02230  
SELECT FILL**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Types of Select Fill
- B. Placement and Installation
- C. Disposal of Displaced Material

1.02 REFERENCES

- A. ASTM D422, Standard Method for Particle-Size Analysis of Soils.

1.03 SUBMITTALS

- A. Submit name of supplier and source for each type of select fill material.
- B. Provide sample and test report for each type of select fill material.

PART 2 PRODUCTS

2.01 SELECT FILL MATERIALS

- A. Type 1 is #1 Crusher Run Stone - NYSDOT Standard Specification Item No. 304.03: Hard durable limestone or approved equal with the following gradation:

<u>Sieve Size Designation</u>	<u>Percent Passing By Weight</u>
2 inch	100
1/4 inch	25 - 60
No. 40	5 - 40
No. 200	0 - 10

- B. Type 2 is #2 Crusher Run Stone - NYSDOT Standard Specification Item No. 304.02: Hard durable limestone or approved equal with the following gradation:

<u>Sieve Size Designation</u>	<u>Percent Passing By Weight</u>
3 inch	100
2 inch	90 - 100
1/4 inch	30 - 65
No. 40	5 - 40
No. 200	0 - 10

- C. Type 3 is Run-of-Bank Gravel: Run-of-bank gravel or other approved granular material free from organic matter with a gradation:

<u>Sieve Size</u> <u>Designation</u>	<u>Percent Passing</u> <u>By Weight</u>
1-1/2 inch	100
1/4 inch	30 - 65
No. 200	0 - 10

- D. Type 4 is Sand: Coarse sand having the following gradation:

<u>Sieve Size</u> <u>Designation</u>	<u>Percent Passing</u> <u>By Weight</u>
3/8 inch	100
No. 4	90 - 100
No. 8	80 - 100
No. 16	50 - 85
No. 30	25 - 60
No. 50	10 - 30
No. 100	2 - 10

E. Type 5 is Controlled Density Fill (CDF): "K-Krete", "Flowable Fill", or approved equal with a compressive strength of 50 to 100 psi. Fly ash or other pozzolan-containing materials are not acceptable in the mix design. The consistency shall be suitable for pumping or flowing into the annular space between a casing pipe and the carrier pipe.

- F. Type 6 Select Fill (Washed #1, or Washed #1 and #2 Mix).

### PART 3 EXECUTION

#### 3.01 STORAGE AND PROTECTION

- A. Store loose granular materials on solid flat surfaces in a well-drained area.
- B. Protect materials and prevent mixing with foreign matter.

#### 3.02 INSTALLATION

- A. Place select fill in accordance with Section 02227, "Backfill" or as otherwise specified or directed.
- B. Employ a placement method that does not disturb or damage other work.

#### 3.03 DISPOSAL OF DISPLACED MATERIALS

- A. Remove and properly dispose of surplus or displaced materials.

END OF SECTION

**SECTION 02732  
SEWER LATERALS**

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Furnish and install sewer laterals, wyes and cleanouts of the sizes indicated on the Contract Drawings or as ordered by the Engineer, including, excavation, backfill, compaction of backfill, restoration of non-paved areas.
- B. Work specifically indicated to be covered under separate payment items shall be performed in accordance with and paid for under that item.

1.02 SUBMITTALS

- A. Submit product data including:
  - 1. Manufacturer's specifications on pipe, pressure ratings, fittings and pipe installation instructions, and dimensional data.
  - 2. Statement of compliance with ANSI/AWWA and ASTM Specifications.

PART 2 PRODUCTS

2.01 Contractor shall be prepared to provide reducers, couplings and fittings to make connections to various types of piping; including: vitrified clay, PVC, orangeberg, cast iron, HDPE, etc.

2.02 POLYVINYL CHLORIDE (PVC) SEWER LATERAL (GRAVITY)

- A. PVC SDR-21 conforming to ASTM D-2241 Specifications.
  - 1. Shall be White in Color.
  - 2. Joints: Shall be push-on with neoprene gaskets. Solvent welded joints shall be utilized for the riser portions at the cleanout. Gaskets shall meet the requirements of ASTM F477. The joints shall meet the requirements of ASTM D-3212. The solvent cements shall meet the requirements of ASTM D-2564.
- B. Adapters: Shall be used to facilitate insertion of PVC SDR-21 laterals into PVC SDR-35 fittings, conforming to ASTM D-3034.
- C. Transition Coupling: Provide a transition coupling suitable for connecting HDPE DR-11 Pipe to PVC SDR-21 Pipe, as necessary.
- D. Cleanout and Riser: PVC SDR-21, conforming to ASTM D-2241 or PVC Schedule 40, conforming to ASTM D-2665 and F477. Cleanout plug shall be cast iron plug IP THD, conforming to ASTM A126 Class B.
- E. Neoprene Coupling: Couplings shall consist of a neoprene sleeve with shear rings, stainless steel tension bands, and tightening mechanism. Couplings shall conform to ASTM C-594.

- F. Cleanout Frames and Covers (For Paved Areas Only): Castings for cleanout frames and covers shall be true to pattern in form and dimensions without sharp unfilleted angles or corners; and shall be free from pouring faults, sponginess, cracks, blow holes and other defects in locations affecting their strength and value for the service intended.
1. Cast Iron Castings: Cast iron castings shall conform to the requirements of ASTM A 48 Class 30B. All castings shall be coated with a coal tar pitch varnish which will result in a smooth, taugth coating that is not tacky or brittle.
  2. Manufacturer: Castings shall be Syracuse Casting Sales Corporation Number 4155, or OPW Fueling Components Number OPW 104-A, or approved equal. Catalog numbers indicated are given to show the required type and configuration only. Castings shall be the product of a recognized manufacturer with satisfactory experience in the production of castings for the type indicated and specified.
  3. Frames and Covers: Frames and covers shall be accurately made and covers shall fit in any position without rocking. The horizontal and vertical fitting surfaces shall be milled to a true and even surface to insure uniform bearing. Units shall be interchangeable. Shop Drawings shall be submitted for approval with an affidavit from the manufacturer certifying compliance with the material specifications. All cleanout covers shall have concealed or blind pick holes.
  4. Cleanout Cover Imprint: The words "Sewer C.O." in size not less than one and one half (1-1/2) inches in height shall be stamped or cast into all manhole covers.
- G. Bedding Material: As specified in Section 02200.
- H. Concrete Encasement: As specified in Section 03300.

## PART 3 EXECUTION

### 3.01 PREPARATION

- A. Prior to the start of construction, notify the OWNER and those served on the system, of the temporary shut down of service.
- B. Excavate and uncover the existing lateral at the point of proposed relocation, to verify the location, elevation, diameter and material of the existing pipe, prior to starting the work specified hereafter. Contractor shall inspect the condition of the existing lateral and have all necessary equipment and materials necessary to connect the lateral prior to interrupting service. These materials include but are not limited to couplings, piping, cleanouts and adapters. Contractor shall not shut down any lateral which cannot be readily relocated.
- C. Contractor shall immediately notify the Engineer in the event that the existing lateral that is not suitable of reconnection.
- D. Inspect pipe and fitting prior to installation. Remove defective materials from the site immediately. Do not install defective material.

- E. Provide the Engineer with suitable templates or caliper for checking pipe dimensions. Only lengths of pipe accepted by the Engineer shall be placed into operation.
- F. Carefully install the appropriate piping, fittings, and adapters to complete the Work. Maintain positive slope on piping at all locations. Laterals to be relocated may be located above or below proposed work, provided that positive slope is maintained on the piping at all locations. In locations where abrupt changes in grade or alignment occur provide clean-outs as directed by the engineer.

### 3.02 INSTALLATION

- A. Excavation and Backfill: Refer to Section 02200
- B. Install where shown on the plans.
- C. Install in accordance with the manufacturer's printed instructions.

### 3.03 PUSH-ON JOINTS

- A. Clean joint and ring gasket of grease, oil, tar, or other foreign substances.
- B. Use sterile lubricant on ring gaskets.

### 3.04 SOLVENT WELDED JOINTS (Only on Clean-out Stacks)

- A. Clean joint of grease, oil, tar, or other foreign substances.
- B. Apply primer to parts being connected.
- C. Apply PVC solvent weld cement directly over primer.

### 3.05 LATERAL CONNECTIONS

- A. Connections to wye branches, stubs, ends of existing laterals, or risers shall be made at existing joints. Excavate and expose the sewer; remove all plugs and covers; and properly prepare the joints for connection by removing all dirt and debris. The connection shall be made utilizing appropriate gaskets, joint materials and fittings, or neoprene coupling.

### 3.06 LATERAL RISERS

- A. Install a riser at an existing or new wye branch or saddle. Excavate a channel of sufficient size to receive the riser pipe. Remove all plugs and covers; and properly prepare the joints for connection by removing all dirt and debris. The connection shall be made utilizing appropriate gaskets, joint materials and fittings. The piping shall be placed to the depth and location required to connect to an existing lateral or the design invert of a new lateral.

### 3.07 LAYING PIPE

- A. Lay pipe to line and grade with joints close and even. Hand excavate to provide bell holes for ease of joint assembly, and for uniform bearing of pipe barrel on stone bedding. Do not use wood or other blocking material which does not provide full length support.

- B. Keep trench free of water. Use power equipment and accepted grips or slings to lower pipe into trench.
- C. Tunnel under tree roots, concrete gutters, and utilities to prevent cutting of main roots or damage to gutter or utility foundations.
- D. In case of conflict with line or grade by surface or underground obstacles:
  1. Consult with the Engineer to determine the most appropriate alternate line or grade.
  2. Engineer's decision is final and binding.
  3. DO NOT permit sewer lateral to rest on any rigid object such as rock, culvert, or utility main. The sewer lateral shall have a clearance from any rigid object of not less than 6 inches.
- E. During the progress of the work, keep the installed pipe clean from all sediments, debris, and other foreign material.
- F. Pipe under construction shall not be used for drainage of the excavation.
- G. Close all open ends of pipes and fittings securely with removable watertight plugs to be connected to in the future, at end of work day, during storms, when the work is left at any time, and at such times as the Engineer may direct. A wooden post shall be placed at the ends of all plugged pipes and fittings. The wooden post shall consist of a 12 foot long, 2 inch x 4 inch timber. The top of the wooden post shall be painted red for sanitary sewers, green for storm sewers and brown for combined sewers.

### 3.08 CUTTING

- A. Cut accurately to permit working into place without springing. Use sharp tools. Cut at right angle to axis.
- B. Prepare ends for appropriate connections. DO NOT lay cut pipe within three lengths of a fitting or the end of a line without written approval.

### 3.09 CONCRETE ENCASEMENT

- A. Encase sewer lateral in concrete having a 28 day strength of 3000 psi, when ordered by the Engineer.
- B. Install encasement where shown on the plans.
- C. Install encasement in accordance with Section 03300, Concrete.

### 3.10 TESTING

- A. Exfiltration / Infiltration Test: As defined in Section 02730
- B. Low Pressure Air Test: As defined in Section 02730

### 3.11 PIPE BEDDING

- A. The trench bottom shall be constructed to provide a firm stable and uniform support for the entire length of the pipe. A maximum of six (6) inches of bedding shall be installed under the piping to provide a firm stable and uniform support for the entire length of the pipe. PVC piping shall be bedded in any of the following materials as defined in Section 02230 of these Specifications:
  - 1. Type 6 Select Fill (Washed #1, or Washed #1 and #2 Mix),
- B. Bedding material shall be worked under the sides of the pipe to provide satisfactory haunching of the pipe. Initial bedding shall be placed a minimum of six (6) inches over the top of the pipe.
- C. After approval of the bedding around the pipe as specified above, hand place pipe bedding (select fill) over the pipe for a depth of at least twelve (12) inches.
- D. Following this operation the trench may be backfilled by machine using extreme caution to prevent damage to the pipe because of shock loads. Assign a responsible person to supervise this operation. Position supervisor (Contractor) so that s/he can observe the backfill material as it is pushed into the trench.
- E. Special construction will be required as indicated on the plans where crossing under pavement, drives, etc.

### 3.12 BARRIERS TO PREVENT FLOW OF GROUNDWATER IN SEWER TRENCHES

- A. To prevent uninterrupted flow of groundwater along sewer trenches, incidental migration of soil particles and subsequent settlement, cohesive soils shall be used to backfill sewer trenches for a distance of about 10 feet downstream from any structure (10± feet to be measured from outside wall faces.)
- B. In most instances, the natural subsoil consists of cohesive soil that can be used for backfilling as described above. Where, in the opinion of the Engineer, the material resulting from the excavation is granular or non-cohesive and would not constitute a barrier to the movement of water, approved cohesive soil from stockpiles shall be used.
- C. Cohesive soil, placed to form barriers at structures, shall be placed in 9 to 10 inch lifts or layers, and shall be compacted by using approved tampers. Compaction shall be 90% of modified proctor density which is equivalent to AASHTO Designation T-180-70.
- D. Where proposed sewers are located in paved streets, the Engineer may require that cohesive soil barriers be omitted, or that they be constructed at locations other than at manholes and chambers.
- E. The cost of furnishing or stockpiling cohesive soil, and the cost of all materials and labor required to construct cohesive soil barriers shall be the responsibility of the contractor.

END OF SECTION

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**SECTION 02919  
TEMPORARY PAVEMENT**

PART 1 GENERAL

1.01 WORK INCLUDED

- A. This section covers the construction of a temporary pavement for vehicular traffic, where permanent restoration can not be completed due to weather or seasonal availability of paving materials. Contractor shall provide all labor, equipment, and materials necessary to furnish, place, and maintain the temporary pavement.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Cold Mix Asphalt: shall meet all of the requirements NYS DOT Type 1 Cold Mix Bituminous, item No. 405.0101.
- B. Temporary Asphalt Base shall meet the requirements of Type 1 Select Fill.
- C. Concrete with vapor barrier in accordance with the City of Rochester winter requirements.

PART 3 EXECUTION

3.01 TEMPORARY PAVEMENT PLACEMENT

- A. A temporary pavement shall be provided following excavation and backfill operations or where ordered by the Engineer to accommodate vehicular traffic.
- B. The temporary pavement shall be composed of a minimum of 2 inches of Type 1 Cold Mix Bituminous Pavement.
- C. The temporary pavement shall be kept reasonably smooth and hard at all times. It should remain drained, free of potholes, bumps, irregularities, and depressions.
- D. The necessary equipment and personnel to attain and maintain a satisfactory riding surface shall be available at all times and should be used as needed.
- E. Grade and cross slope shall match existing driveway or roadway.
- F. Special attention to maintenance of the temporary pavement shall be given during weekends, holidays, and during the winter season.
- G. The specified asphalt material shall be placed in accordance with the appropriate construction details as outlined in NYS DOT Section 405.
- H. The subbase select fill course shall be placed in accordance with the appropriate construction details as specified in Section 02230.

- I. Cold mix asphalt shall be placed only when hot mix asphalt is not available due to weather restrictions or as directed by the Engineer.
- J. Upon completion of the period that temporary pavement will be required, the asphalt material and subbase course shall be removed.

END OF SECTION

**SECTION 02920  
RESTORATION OF PAVEMENTS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Asphalt installation
- B. Construction of rigid concrete slabs

1.02 REFERENCES

- A. New York State Department of Transportation's Standard Specifications - Construction and Materials dated May 4, 2006 or latest revision (NYSDOT Standard Specification).
- B. City of Rochester, Department of Environmental Services, Standard Construction Contract Documents, November 1991 or latest revision
- C. ASTM A82 - Standard Specification for Steel Wire, Plain, for Concrete Reinforcement.
- D. ASTM A185 - Standard Specification for Welded Wire Fabric, Plain, for Concrete Reinforcement.

1.03 QUALITY ASSURANCE

- A. Perform Work in accordance with NYSDOT Standard Specifications: Section 400 Bituminous Pavements, Section 500 Rigid Pavements, Section 600 - Incidental Construction, and Section 700 - Materials Details.

1.04 ENVIRONMENTAL REQUIREMENTS

The following weather and environmental limitations shall apply unless otherwise directed by the ENGINEER:

- A. Do not place asphalt base or binder courses when base surface temperature is less than 40 degrees F, or when the surface is wet or frozen.
- B. Do not place asphalt top course when base surface or ambient temperature is less than 45 degrees F, or when the surface is wet or frozen.
- C. Do not place concrete when base surface or ambient temperature is less than 40 degrees F, or when the surface is wet or frozen.

1.05 SUBMITTALS

- A. Product Data: Provide data on all materials, admixtures and curing compounds.
- B. Provide mix design.

- C. Demonstrate compliance with the appropriate portions of the NYSDOT Standard Specifications.

## PART 2 PRODUCTS

### 2.01 MATERIALS

#### A. Asphalt:

1. Base Course: NYSDOT Standard Specification Item No. 402.37.
2. Binder Course: NYSDOT Standard Specification Item No. 402.19.
3. Top Course: NYSDOT Standard Specification Item No. 402.09.

#### B. Concrete Materials:

1. NYSDOT Standard Specification Section 501 - Portland Cement Concrete - General Class A.
  - a) Compressive Strength: 4000 psi minimum @ 28 days.

### 2.02 ACCESSORIES

- A. Tack Coat: NYSDOT Standard Specification Item No. 407.0101, Tack Coat.

### 2.03 FORM MATERIALS

- A. Forms: Steel material, profiled to suit conditions.
- B. Expansion Joints: Full depth, 1/2 inch thick, premolded, bituminous-impregnated felt material.

### 2.04 REINFORCEMENT

- A. Welded Steel Wire Fabric: NYSDOT Standard Specification Section 709-02 in conformance with ASTM A82 or A185.
  1. Driveways: 6" x 6" 8/8 (Wire = 0.1620")
  2. Sidewalks: 6" x 6" 10/10 (Wire = 0.1350")
  3. Sidewalks or other rigid slabs in areas of vehicular traffic and loading: 6" x 6" 8/8 (Wire 0.1620")

## PART 3 EXECUTION

### 3.01 REQUIREMENTS

- A. Furnish all materials, labor, plant, tools, traffic control devices and equipment and complete all work necessary to replace and protect street

pavement, driveways, gutters, curbs, walks and other pavements and slabs removed or damaged during the Work.

- B. Replace street pavements, driveways, gutters, curbs, walks and other pavements in accordance with the requirements of the City of Rochester, Town, County or State Public Works Department having jurisdiction.
- C. When the Work results in the removal or damage to pavement, pavement foundations, or appurtenances, remove the affected portions to the extent ordered by the ENGINEER and replace so that the entire roadway will have a true, uniform surface and the proper grade, alignment and cross section.
- D. All sidewalks, gutters and curbs which have been damaged by the CONTRACTOR shall be restored to original condition or per Contract Drawings at no additional cost to the OWNER. Materials and methods for all restoration shall be subject to approval by the ENGINEER.

### 3.02 EXAMINATION

- A. Verify base conditions under provisions of the General Conditions.
- B. Verify that compacted subgrade or granular base is dry and ready to support paving and imposed loads.
- C. Verify gradients and elevations of subgrade are correct.

### 3.03 PREPARATION

#### A. General

- 1. Cut existing pavement with an approved power driven pavement saw at the pavement payment limits or to a point that encompasses all cracked, broken, damaged or undermined pavement. Cuts shall be parallel or perpendicular to the trench to produce straight, even edges. Do not over-cut pavement at corners.
- 2. Remove temporary pavement and backfill materials to depth required for permanent base and surface courses. Remove loose or damaged material and trim existing surface course back to solid pavement to ensure bonding with new surface course.
- 3. Grade and compact subgrade. Remove soft or weaving spots in subgrade and replace with appropriate select fill material.
- 4. Consolidate subbase with a road roller, or other approved compaction device in confined areas, with a minimum of three (3) passes or until there is no visible creeping or settling under the roller.

#### B. Asphalt

- 1. Apply tack coat in accordance with manufacturer's instructions.

2. Apply tack coat to contact surfaces of curbs, gutters and existing asphalt.
3. Use clean fine grit "black beauty", or approved equal to blot excess tack coat.
4. Coat surfaces of the sides of appurtenances, and manhole and catch basin frames with vegetable based oil to prevent bond with asphalt pavement. Do not tack coat these surfaces.

C. Concrete

1. Compact existing select fill subgrade or furnish and compact a minimum 6-inch base of Type 1 Select Fill in any areas where gravel subgrade does not exist.
2. Moisten base to minimize absorption of water from fresh concrete.
3. Use accelerating admixtures in cold weather only when approved by ENGINEER. Use of admixtures will not relax cold weather placement requirements.
4. Use of calcium chloride is strictly prohibited.
5. Use set retarding admixtures during hot weather only when approved by the ENGINEER.

3.04 INSTALLATION OF ASPHALT PAVEMENT

- A. Place binder course to compacted thickness identified in schedule at end of section.
- B. Place wearing course within twenty-four (24) hours of placing and compacting binder course. Place wearing course on all bindered patches prior to weekends or holidays.
- C. Place wearing course to compacted thickness identified in schedule at end of section.
- D. Compact pavement by rolling a minimum of three (3) passes without displacing pavement from position. Hand compact with approved methods and equipment in areas inaccessible to rolling equipment.
- E. Develop rolling with consecutive passes to achieve an even, smooth finish without roller marks.
- F. Immediately after placement, protect pavement from mechanical damage until vehicular loading can be applied.
- G. Apply tack coat to joints, a minimum of twelve (12) hours after the final asphalt course is installed.

- H. Apply clean fine grit "black beauty", or approved equal, to tack coated joints to protect vehicular traffic. Grit material shall be free of stones, weeds, sticks and other foreign matter and shall be approved by the ENGINEER prior to use.

### 3.05 CONSTRUCTING RIGID CONCRETE SLABS

#### A. Forming

1. Check subbase course for proper cross section. Regrade high areas to proper elevation. Fill in low areas with required select fill and compact.
2. Use steel forms free from warp and of sufficient strength to resist the pressure of the concrete without springing. For finished concrete, use forms that extend for the full depth of the concrete to be placed. Forms shall be approved by the ENGINEER before commencing concrete placement.
3. Place forms to correct location, alignment, dimensions, and profile. Secure with braces and stakes to retain both horizontal and vertical alignment until removal.
4. Assemble formwork to permit easy dismantling without damaging concrete.
5. Place expansion joints in vertical position, and straight lines. Secure during concrete placement.

#### B. Reinforcement

1. Place reinforcement at mid-height of slabs-on-grade.
2. Interrupt reinforcement at expansion joints.

#### C. Placing Concrete

1. Place concrete in accordance with NYSDOT Standard Specification Section 500.
2. Ensure reinforcement, inserts, embedded parts, formed joints and appurtenances are not disturbed during concrete placement.
3. Place concrete continuously between predetermined construction joints. Do not break or interrupt successive pours such that cold joints occur except for concrete subbase.

#### D. Joints

1. Sidewalks: Place expansion joints extending to the full depth of the concrete at 25 foot intervals and around fixed structures abutting or extending into or through the concrete. Saw cut contraction joints

3/16 inch wide at an optimum time after finishing. Cut 1/3 into depth of slab at 5-foot intervals between expansion joints.

E. Finishing

1. Sidewalks: Light broom, radius to 1/4 inch radius, and trowel joint edges.
2. Driveways, Curbs and Gutters: Light broom or smooth finish to match existing in vicinity.
3. Place curing compound on exposed concrete surfaces immediately after finishing. Apply in accordance with manufacturer's instructions.

F. Protection

1. Immediately after placement, protect concrete from premature drying, excessive hot or cold temperatures, and mechanical damage.

3.06 TOLERANCES

- A. Flatness: Maximum variation of 1/4 inch measured with 10-foot straight edge.
- B. Scheduled Compacted Thickness: Within 1/4 inch.
- C. Variation from True Elevation: Within 1/4 inch.

3.07 FIELD QUALITY CONTROL

- A. Three concrete test cylinders shall be taken for every 75 or less cubic yards of concrete placed each day, at the cost of the OWNER.
- B. One additional test cylinder shall be taken during cold weather and cured on site under same conditions as concrete it represents.
- C. One slump test shall be taken for each set of test cylinders taken.

3.08 SCHEDULES

A. Asphalt Pavements

1. Street: Comply with the requirements of the Public Works Department having jurisdiction but no less than 1½-inch top course and 1½-inch binder course (measured after compaction).
2. Driveways and Parking Areas: Match existing pavement courses and thickness but no less than 1-inch top course and 2-inch binder course (measured after compaction).

B. Concrete Pavements

1. Driveways: Match existing thickness, but no less than 6 inches.

2. Sidewalks: Match existing thickness, but no less than 5 inches, except for driveway areas where a minimum of 6 inches shall be placed.
3. Road Subbase: Match existing thickness, but no less than 8 inches.
4. Gutters and other miscellaneous slabs: Match existing thickness or utilize a minimum thickness determined by the ENGINEER.

END OF SECTION

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**SECTION 02936  
SEEDING**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Preparation of subsoil
- B. Placing topsoil
- C. Seeding, hydroseeding, mulching and fertilizing
- D. Maintenance

1.02 REFERENCES

- A. FS O-F-241 - Fertilizers, Mixed, Commercial.

1.03 DEFINITIONS

- A. Weeds: Include Dandelion, Jimsonweed, Quackgrass, Horsetail, Morning Glory, Rush Grass, Mustard, Lambsquarter, Chickweed, Cress, Crabgrass, Canadian Thistle, Nutgrass, Poison Oak, Blackberry, Tansy Ragwort, Bermuda Grass, Johnson Grass, Poison Ivy, Nut Sedge, Nimble Will, Bindweed, Bent Grass, Wild Garlic, Perennial Sorrel, and Brome Grass.
- B. Substantial Completion of Seeding: The Work shall not be accepted as substantially complete until such time as restoration of seeded areas has been completed in accordance with this Section, with the exception of Section 02936, Article 1.06, Maintenance and Protection of Seeded Areas and Article 3.07 Maintenance.

1.04 QUALITY ASSURANCE

- A. Provide seed mixture in containers showing percentage of seed mix, year of production, net weight, date of packaging, and location of packaging.
- B. All seed to be fresh, clean and from current season's crop.

1.05 REGULATORY REQUIREMENTS

- A. Comply with regulatory agencies for fertilizer and herbicide composition.
- B. Provide certificate of compliance from authority having jurisdiction indicating approval of seed mixture.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect and handle products to site under provisions of General Conditions.

- B. Deliver grass seed mixture in sealed containers. Seed in damaged packaging is not acceptable.
- C. Deliver fertilizer in waterproof bags showing weight, chemical analysis, and name of manufacturer.

1.06 MAINTENANCE AND PROTECTION OF SEEDED AREAS

- A. Maintain and protect seeded areas from vehicular and pedestrian traffic immediately after placement until grass is well established and exhibits a vigorous growing condition.

PART 2 PRODUCTS

2.01 SEED MIXTURE

- A. Seed Mixture for Lawn Areas:
  - 29.40% Kentucky Bluegrass, 80% germination
  - 32.64% Creeping Red Fescue, 85% germination
  - 35.64% Perennial Ryegrass, 90% germination
  - 0.30% Crop
  - 0.50% Weed
  - 1.52% Inert
- B. Seed Mixture for Field and other Non-Lawn Areas:
  - 50% Annual Ryegrass, 90% germination
  - 50% Perennial Ryegrass, 90% germination
- C. Seed Mixture for Low Maintenance Areas:
  - 15.0% Birdsfoot Trefoil (Empire), 80% germination
  - 85.0% Red Fescue (Pennlawn), 85% germination
- D. Germination rates shall be based on test results from the previous year.

2.02 SOIL MATERIALS

- A. Topsoil for Lawn Areas: Screened, fertile, friable, agricultural soil, typical for locality, capable of sustaining vigorous plant growth, taken from drained site; free of subsoil, clay, stone or impurities, plants, weeds and roots; pH value of minimum 5.5 and maximum 7.5.
- B. Topsoil for Field and other Non-lawn Areas: Use the stockpiled topsoil which was stripped from these areas.

- C. Topsoil for Low Maintenance Areas: Use stockpiled and screened topsoil as defined above.
- D. Stockpile materials onsite at locations approved by the ENGINEER. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.

#### 2.03 ACCESSORIES

- A. Fertilizer: FS O-F-241, Type I Grade A, recommended for grass, with fifty percent of the elements derived from organic sources; of proportion necessary to eliminate any deficiencies of topsoil to the following proportions: Nitrogen 10 percent, phosphoric acid 6 percent, soluble potash 4 percent.
- B. Water: Clean, fresh and free of substances or matter which could inhibit vigorous growth of grass.
- C. Erosion Fabric: Jute matting, open weave.
- D. Stakes: Softwood lumber, chisel pointed.
- E. String: Inorganic fiber.

#### 2.04 TESTS

- A. Testing is not required if recent tests are available for imported topsoil. Submit these test results to the ENGINEER for approval. Indicate, by test results, information necessary to determine suitability.

### PART 3 EXECUTION

#### 3.01 EXAMINATION

- A. Verify that prepared soil base is ready to receive the work of this section.

#### 3.02 PREPARATION OF SUBSOIL

- A. Prepare sub-soil to eliminate uneven areas and low spots. Maintain lines, levels, profiles and contours. Make changes in grade gradual. Blend slopes into level areas.
- B. Remove foreign materials, weeds and undesirable plants and their roots. Remove contaminated sub-soil.
- C. Scarify subsoil to a depth of 3-inches where topsoil is to be placed. Repeat cultivation in areas where equipment, used for hauling and spreading topsoil, has compacted sub-soil.

#### 3.03 PLACING TOPSOIL

- A. Spread topsoil to a minimum depth of 4-inches in lawn areas. In field areas reapply topsoil that was stripped and stockpiled to its original depth. In areas designated as low maintenance, reapply topsoil that was stripped and

stockpiled, and if necessary add topsoil to obtain a minimum depth of 3-inches. Rake until smooth.

- B. Place topsoil during dry weather and on dry unfrozen subgrade.
- C. Remove vegetable matter and foreign non-organic material from topsoil while spreading.
- D. Grade topsoil to eliminate rough, low or soft areas, and to ensure positive drainage. The compacted topsoil shall match the preconstruction grade.

#### 3.04 FERTILIZING

- A. Apply fertilizer at a rate of 5 pounds per 1000 square feet.
- B. Apply after smooth raking of topsoil and prior to roller compaction.
- C. Mix thoroughly into upper 2-inches of topsoil.
- D. Water lightly to aid the dissipation of fertilizer.

#### 3.05 HYDROSEEDING

- A. If CONTRACTOR elects not to place fertilizer as per Article 3.04, fertilizer is to be incorporated into the seeded slurry.
- B. Apply seeded slurry with a hydraulic seeder at a rate of 5 pounds per 1000 square foot evenly.
- C. Seeded slurry shall contain wood cellulose fiber, green in color, applied at a rate of 1,000 to 1,500 pounds per acre.
- D. Seeded slurry to contain soil seal applied at the manufacturer's recommended rate.
- E. Apply water with a fine spray immediately after each area has been mulched. Saturate soil to a depth of 4-inches.
- F. Planting Season: April 1 to July 1 and August 15 to October 15.

#### 3.06 PROTECTION OF RESTORED AREAS

- A. Identify seeded areas with stakes and string around area periphery. Set string height to 30-inches.
- B. Cover seeded slopes where grade is 4-inches per foot or greater with erosion fabric. Roll fabric onto slopes without stretching or pulling.
- C. Lay fabric smoothly on surface, bury top end of each section in 6-inch deep excavated topsoil trench. Provide 12-inch overlap of adjacent rolls. Backfill trench and rake smooth, level with adjacent soil.
- D. Secure outside edges and overlaps at 36-inch intervals with stakes.

- E. Lightly dress slopes with topsoil to ensure close contact between fabric and soil.
- F. At sides of ditches, lay fabric laps in direction of water flow. Lap ends and edges minimum 6-inches.

3.07 MAINTENANCE

- A. Water seeded areas until these areas exhibit a dense, vigorous growth of grass. After three weeks, reseed those areas which do not exhibit a dense, vigorous growth of grass.
- B. Roll surface to remove minor depressions or irregularities.
- C. Control growth of weeds. Apply herbicides in accordance with manufacturer's instructions. Remedy damage resulting from improper use of herbicides.
- D. Immediately reseed areas which show bare spots.
- E. Protect seeded areas with warning signs during maintenance period.

3.08 SCHEDULE

- A. Areas maintained as Lawns: Grass seed mixture specified, 4-inches topsoil hydroseed.
- B. Field and other non-lawn Areas: Grass seed mixture specified, native soil, and hydroseed.
- C. Low Maintenance Areas: Grass seed mixture specified, native and, if necessary, screened topsoil to achieve a minimum depth of 3-inches, hydroseed.

END OF SECTION

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**DIVISION 3: CONCRETE**  
03300 CAST-IN-PLACE CONCRETE

7

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**SECTION 03300**  
**CAST-IN-PLACE CONCRETE**

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Foundations, slabs, etc.
- B. Thrust blocks, miscellaneous work, etc.
- C. Pipe encasement.

1.02 REFERENCES

- A. ACI 301 - Specifications for Structural Concrete for Buildings.
- B. ACI 347 - Recommended Practice for Concrete Formwork.
- C. ACI 315 - Details and Detailing of Concrete Reinforcement.
- D. CRSI - Manual of Practice.
- E. ASTM C33 - Concrete Aggregates.
- F. ASTM C94 - Ready-Mixed Concrete.
- G. ASTM C150 - Portland Cement.
- H. ASTM C260 - Air-Entraining Admixtures for Concrete.
- I. ASTM C494 - Chemical Admixtures for Concrete.
- J. ASTM D944 - Preformed Expansion Joint Filler for Concrete (Bituminous Type)
- K. Corps of Engineers Specifications CRD-C572.

1.03 QUALITY ASSURANCE

- A. Perform work in accordance with ACI 301, ACI 347, ACI 315, CRSI Manual of Practice Documents 63 and 65, and CRD C572, as applicable.
- B. Obtain materials from same source throughout the Work.

1.04 SUBMITTALS

- A. Submit drawings in accordance with Section 00700, including dimensions, bar schedules, bending details, stirrup spacing, and pertinent data.
- B. Maintain up-to-date set of approved shop drawings on the job site. Fabrication of material must conform to these drawings.

1.05 TESTS

- A. Testing and analysis of concrete shall be provided by an independent testing firm, hired and paid for by the OWNER.

## 1.06 PRODUCT DATA

- A. Submit product data for all material provided.
- B. Provide product data for specified products, as applicable.
- C. Submit manufacturer's instructions.

## 1.07 STORAGE OF MATERIAL

- A. Obtain Engineer's approval of storage facilities. Permit easy access for inspection and identification of shipments.
- B. Store cement off the ground in a dry, weatherproof, adequately ventilated structure, with provisions to prevent adsorption of moisture by the cement.
- C. Store aggregates in two foot layers on planking, to assure good drainage, to preclude inclusion of foreign matter, and to preserve the gradation. Separate size groups by means of wood bulkheads. Cover storage piles.
- D. Store reinforcing steel off the ground and under cover. Protect from rusting, oil contamination, and distortion.

## PART 2 PRODUCTS

### 2.01 FORMWORK LUMBER AND ACCESSORIES

- A. Form Lumber: All form lumber in contact with exposed concrete will be in accordance with ACI 347.
- B. Form Ties: Removable metal of fixed length; 1 inch break back dimension; free of defects that will leave holes no larger than 1-1/4 inches diameter in concrete surface; with waterproofing washer.
- C. Form Release Agent: Colorless material which will not stain concrete, absorb moisture or impair natural bonding or color characteristics of coating intended for use on concrete.
- D. Fillets for Chamfered Corners: Wood strips or Rigid plastic type; 3/4 x 3/4 inch size; maximum possible lengths.
- E. Nails, Spikes, Lag Bolts, Through Bolts, Anchorages: Sized as required; of strength and character to maintain formwork in place while placing concrete.

### 2.02 REINFORCING STEEL

- A. Reinforcing steel: ASTM A615, 60 ksi yield grade, billet steel deformed bars, uncoated finish.
- B. Wire mesh: ASTM A185
- C. Chairs, Bolsters, Bar Supports: sized and shaped for strength and support of reinforcement during installation and placement of concrete, including loading pads on bottom to prevent vapor barrier puncture.
- D. Tie wire: Minimum gauge annealed type.

2.03 CONCRETE MATERIALS

- A. Cement: ASTM C150, moderate - Type I or II. DO NOT use air-entraining or other types of cement without the Engineer's written approval.
- B. Aggregates: Fine - NYSDOT Standard Specifications 703-01, Coarse - NYSDOT Standard Specifications 703-02.
- C. Water: Clean and not detrimental to concrete.

2.04 ADMIXTURES

- A. Air Entrainment: ASTM C260.

2.05 ACCESSORIES

- A. Non-shrink Grout: Premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents; capable of developing minimum compressive strength of 4000 psi in 28 days.

2.06 CONCRETE MIX

- A. Mix concrete in accordance with ASTM C94.
- B. Provide concrete for all of the following characteristics:

**CONCRETE DATA**

<b><u>Description</u></b>	<b><u>Strength PSI</u></b>	<b><u>Coarse Agg. In.</u></b>	<b><u>Slump in In. Max.</u></b>	<b><u>Max. Water Cement Ratio W/C</u></b>	<b><u>Min. Cem Factor Sacks/CY</u></b>
Pipe encasement	3000	1	4	.55	5.3
Footings, Base Slabs & Founda- tion Walls. Exposed to weather	4000	1	3	.55	5.8
Exterior Sus- pended slabs, BMS, Cols	4000	3/4	4	.55	5.8
Slabs on Grade	4000	3/4	3	.55	5.8
Basement walls, Found. walls Exp. to weather and Misc. Conc.	4000	1	4	.45	5.8

- C. Use accelerating admixtures in cold weather only when approved by Engineer. Use of admixtures will not relax cold weather placement requirements. Use of Calcium Chloride will not be permitted.
- D. Use set-retarding admixtures during hot weather only when approved by Engineer.

- E. Add air entraining agent to concrete mix for concrete work subject to freeze-thaw cycling and exposed to exterior.

## 2.07 CURING

### A. Acceptable manufacturers:

1. Sika Corporation
2. Master Builders, Inc.
3. Anti Hydro Company.
4. Substitutions under provisions of Section 00700.

### B. Materials:

1. Curing compound: ASTM C309, or chemical type ASTM C309, Type 1, clear.
2. Curing paper: Waterproof, ASTM C171.

## PART 3 EXECUTION

### 3.01 FORMWORK

- #### A. Inspection: Verify lines, levels, and measurements before proceeding with formwork.

#### B. Preparation:

1. Hand-trim sides and bottoms of earth forms; remove loose dirt prior to placing concrete.
2. Minimize form joints. Symmetrically align joints and make watertight to prevent leakage of mortar.
3. Arrange and assemble formwork to permit dismantling, stripping, so that concrete is not damaged during its removal.
4. Arrange forms to allow stripping without removal of principal shores, where required to remain in place.

#### C. Erection:

1. Provide bracing to ensure stability of formwork. Strengthen formwork liable to be over-stressed by construction loads.
2. Camber slabs and beams to achieve ACI 301 tolerances.
3. Construct formwork to maintain tolerances in accordance with ACI 301.

#### D. APPLICATION OF FORM RELEASE AGENT

1. Apply form release agent on formwork in accordance with manufacturer's instructions. Apply prior to placing reinforcing steel, anchoring devices, and embedded items.

2. Do not apply form release agent where concrete surfaces are scheduled to receive special finishes which may be affected by agent. Soak contact surfaces of untreated forms with clean water. Keep surfaces wet prior to placing concrete.

E. FORM REMOVAL

1. Notify Engineer prior to removing formwork. Leave forms in place for at least the minimum times given in the following table:

<b><u>Ambient Temp.</u></b>	<b><u>Wall Forms</u></b>	<b><u>Slab Forms</u></b>
Above 95 F	3 days	7 days
60 - 95 F	2 days	5 days
50 - 60 F	3 days	7 days
Below 50 F	7 days	7 days

2. Do not damage concrete surfaces during form removal.

3.02 REINFORCING STEEL

- A. Before placing concrete, clean reinforcement of foreign particles or coatings.
- B. Place, support, and secure reinforcement against displacement. Do not deviate from alignment or measurement.
- C. Do not displace or damage vapor barrier.
- D. Locate reinforcing splices not indicated on Drawings at points of minimum stress. Indicate location of splices on shop drawings.
- E. Weld reinforcing bars in accordance with ANSI/AWS D1.4.
- F. Lap mesh joints one full mesh, support at proper height in an approved manner.

3.03 CONCRETE

- A. Inspection: Verify anchors, seats, plates, reinforcement, and other items to be cast into concrete are accurately placed, held securely, and will not cause hardship in placing concrete.
- B. PREPARATION
  1. Install vapor barrier after select granular material has been compacted, under slabs on fill. Lap joints minimum 6 inches and seal. Do not disturb or damage vapor barrier while placing concrete. Repair damaged vapor barrier.
- C. PLACING CONCRETE
  1. Notify Architect/Engineer minimum 24 hours prior to commencement of concrete operations.
  2. Place concrete in accordance with ACI 301.
  3. Hot Weather Placement: ACI 301.

4. Cold Weather Placement: ACI 306.
5. Ensure reinforcement, inserts, embedded parts, formed joints are not disturbed during concrete placement.

D. FINISHING

1. Provide concrete surfaces to be left exposed, concrete walls, beams, joists, with smooth finish.
2. Provide Class C tolerances to floor slabs and toppings according to ACI 301.

E. CURING

1. Inspection: Verify concrete surfaces are ready for curing.
2. Membrane curing compound: Apply curing compound in two coats with second coat at right angles to first, and in accordance with manufacturers' instructions.
3. Ponding: Maintain 100 percent water coverage over slab areas, continuously for 7 days.
4. Spraying: Spray water over slab areas; maintain wet for 7 days.
5. Absorptive mat: Spread absorptive mat over slab areas. Lap edges and ends 12 inches. Spray with water until mat saturation. Maintain saturation for 7 days.
6. Polyethylene film: Spread polyethylene film over slab areas. Lap edges and ends 3 inches and seal with pressure sensitive polyester tape. Maintain in place with plywood sheets for three days.

F. PATCHING

1. Notify Architect/Engineer immediately upon removal of forms.
2. Minor defective areas:
  - a. Chip away to a depth of about one inch, leaving edges perpendicular to the surface; wet the area to be patched and a space of at least 6 inches wide around it to prevent water being absorbed out of the mortar.
  - b. Apply acrylic emulsion to the chipped edge in accordance with the manufacturer's recommendations, before concrete operations. Acceptable products: Admix 100 by Larsen Products, Acrylic Concrete Binder by Bondseal Co., Polytops 40 by Chem-Master Corporation or equal.
  - c. Apply patching mortar consisting of one part cement to three parts sand, consistency as dry as possible within the requirements of handling and placing; thoroughly compact the mortar by ramming it into place.

- d. Screed off so as to leave the patch slightly higher than surrounding surfaces; leave undisturbed for a period of one to two hours to permit initial shrinkage, and then perform final finishing.
  - e. Finish the patch to match adjacent surfaces and keep wet for at least seven days; provide and install all required protective coverings.
3. Major defective areas:

If the defects are serious or affect the strength of the structure, or if patching does not satisfactorily restore the quality and appearance of the surface, the Engineer may require shotcrete to be used or the concrete to be removed and replaced complete in accordance with the provisions of this Section, all at no additional cost to the Owner.

#### G. DEFECTIVE CONCRETE

1. Modify or replace concrete not conforming to required levels and lines, details, and elevations.
2. Repair or replace concrete not properly placed or of the specified type.

#### H. FIELD QUALITY CONTROL

1. Field inspection and testing will be performed as described above.
2. Maintain records of placed concrete items. Record date, location of pour, quantity, air temperature, and test samples taken.

#### I. PROTECTION

1. Protect finished work in accordance with ACI Standards.
2. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
3. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.

#### J. SCHEDULE

1. Notify ENGINEER at least 24 hours in advance of placing concrete.
2. Notify ENGINEER of completion of form work and steel reinforcing.
3. Form work and steel reinforcing shall be completed at least 24 hours in advance of placing concrete.

END OF SECTION

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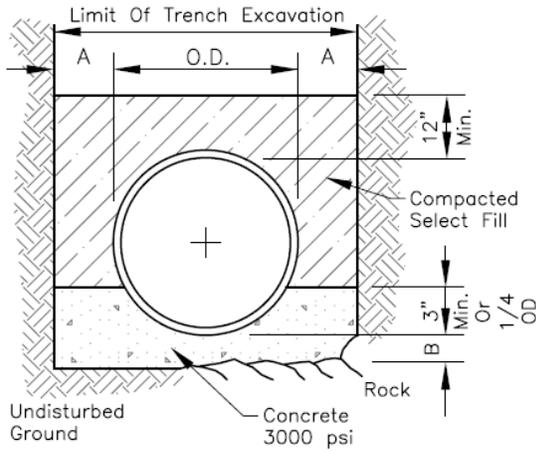


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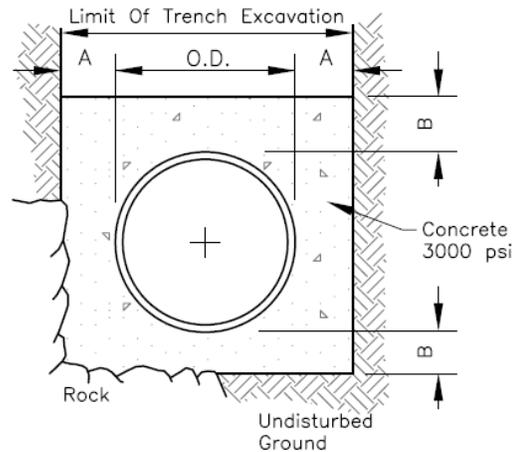
## **APPENDIX A DRAWINGS**

<b><u>FIGURE #</u></b>	<b><u>FIGURE TITLE</u></b>
Figure 1.01	Pipe Bedding Details
Figure 2.03	Sewer Connections to Existing Manhole
Figure 3.01	Saddle Type Cored Tee Connection To Existing Sewer
Figure 3.02	Insert Type Cored Tee Connection to Existing Sewer
Figure 3.03	New Lateral Wye Connection To New Sewer
Figure 3.04	New Lateral Wye Connection To Existing PVC Sewer
Figure 3.05	New Lateral Wye Connection To Existing Non-PVC Sewer
Figure 3.06	Lateral Riser Connection
Figure 3.07	Typical Connections To Stone Sewers
Figure 3.08	Typical Cored Connection To Brick Or Block Sewer
Figure 5.01	Lateral Abandonment Detail
Figure 6.01	Type A & B Catch Basin
Figure 6.02	Type A & B Catch Basin Shallow Depth
Figure 6.03	Type A & B Catch Basin With Bottom Connection
Figure 6.04	Type A & B Catch Basin In Concrete Gutter
Figure 6.05	Type A & B Catch Basin Frame And Grate
Figure 6.06	Type C Catch Basin
Figure 6.07	Type C Catch Basin Frame And Grate
Figure 6.08	Type D Catch Basin
Figure 6.09	Type D Catch Basin Access Frame And Cover
Figure 6.12	Temporary Brick Riser For New Catch Basin

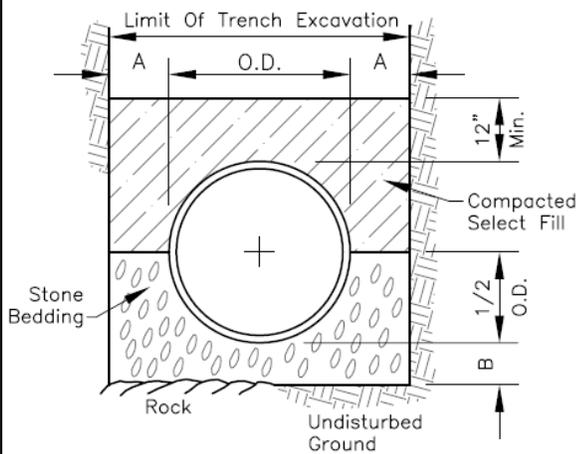
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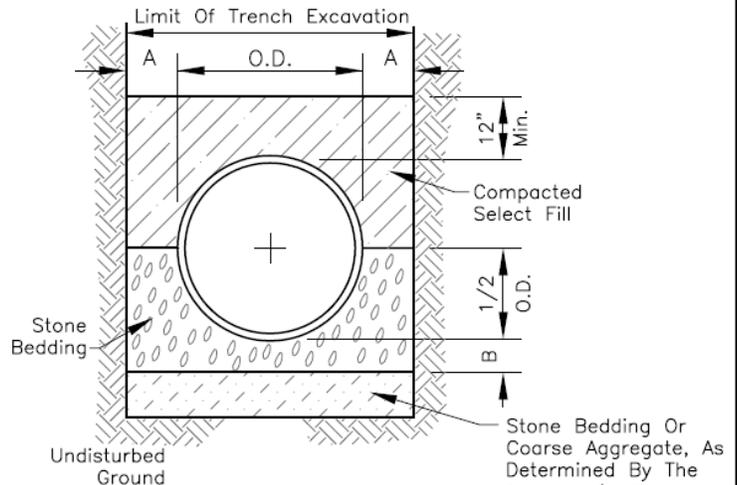
**CONCRETE CRADLE  
CLASS "A"**



**CONCRETE ENCASEMENT**



**FIRST CLASS  
CLASS "B"**



**SPECIAL BEDDING  
IN UNSTABLE MATERIAL**

PIPE DIA.	DIM. A	DIM. B
UP TO 18"	1.0'	6"
21" TO 36"	1.5'	9"
OVER 36"	1.5'	12"

**NOTES:**

1. Trench backfill shall be as required by the highway owner.
2. Select fill shall be sand, gravel, and similar material which shall be free from clay, loam, organic material, debris, frozen material and shall contain only small amounts of stone, pebbles, or lumps over one inch in greatest dimension, but none over two inches in greatest dimension.
3. Stone bedding shall mean approved imported aggregate meeting the requirements of the New York State Department of Transportation, Standard Specification, "Crushed Stone", primary size 1 or a mixture of primary size 1 and 2, washed.
4. Coarse aggregate shall mean approved imported aggregate meeting the requirements of the New York State Department of Transportation, Standard Specification, "Crushed Stone", primary size 3 or a mixture of primary size 3 and 4.
5. This Figure 1.01 applies to Pure Waters sanitary, storm, and combined mainline sewers and lateral pipe installations, as well as forcemains.

**MONROE COUNTY PURE WATERS**

Feb 2005

**BEDDING DETAILS**

**FIGURE 1.01**

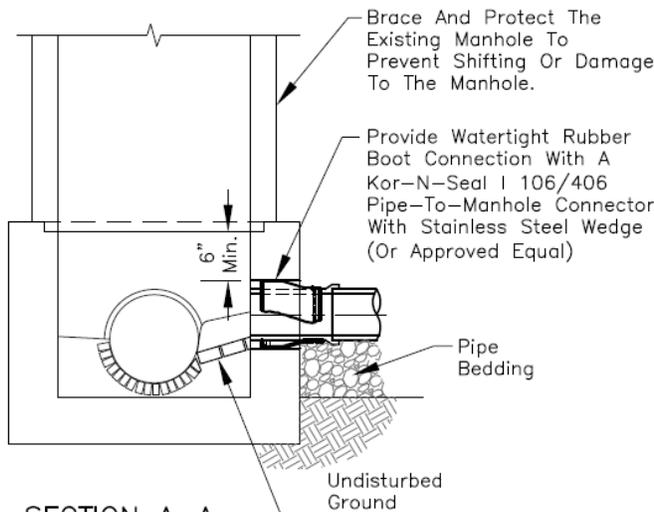
**SPECIAL NOTE:**

Storm sewers shall not be connected to sanitary sewers, and sanitary sewers shall not be connected to storm sewers.

**NOTES:**

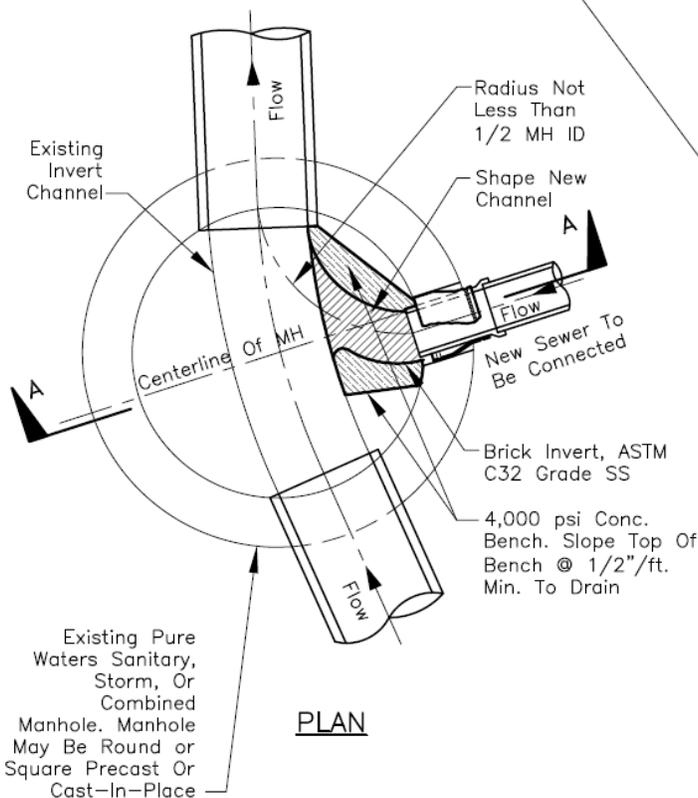
1. Notify Pure Waters a minimum of 48 hours in advance of construction for inspection of connection. Telephone (585) 753-7600, Option 5.
2. New openings for pipe may be cored or drilled. Impact devices are not allowed for creating openings in existing manholes or chambers. Cored openings in manhole riser sections shall be not less than 6-inches from a riser joint.
3. When a connection to an existing manhole cannot be made with the specified Kor-N-Seal Connector (or approved equal), fill the void between the core and new pipe with Epoxy Mortar, Sikadur 33 by Sika, or Flexolith Gel by Tamms (no sleeve required) as directed and approved by the District.
4. Stub at manhole shall not exceed 100 degrees alignment entering against the existing upstream sewer.
5. Provide a pipe joint within 4-feet maximum of the outside face of manhole for reinforced concrete or ductile iron pipe.
6. Construct the crown of new sewer not lower than the crown of the existing main sewer. Construct the invert of the new sewer 3-inches minimum above the existing main sewer invert.
7. Construct top of new bench to springline of new sewer pipe.
8. Coat all disturbed surfaces of the manhole with 2 coats of Duralkote 500 epoxy or approved equal for interior of base and 2 coats of bitumastic for all exterior surfaces.

Layout: Layout 1

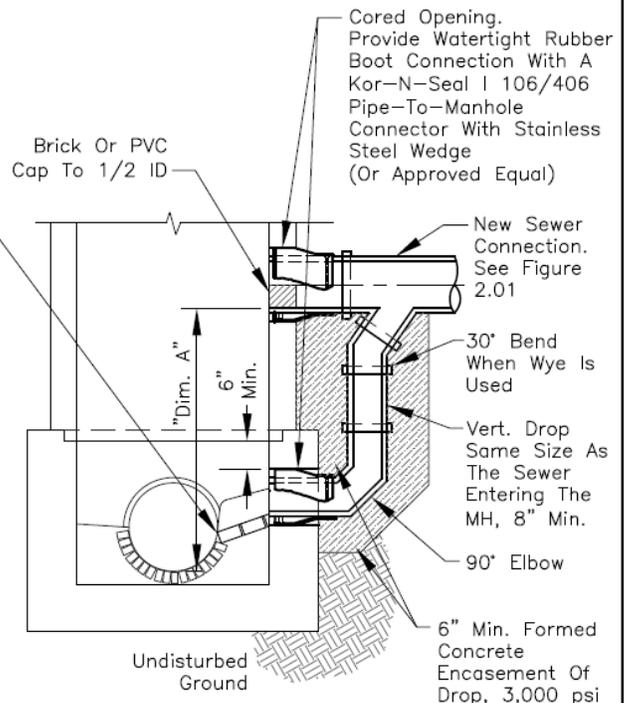


**SECTION A-A**

Brace And Protect The Existing Manhole To Prevent Shifting Or Damage To The Manhole.  
Provide Watertight Rubber Boot Connection With A Kor-N-Seal I 106/406 Pipe-To-Manhole Connector With Stainless Steel Wedge (Or Approved Equal)  
Pipe Bedding  
Undisturbed Ground  
Cut Out Existing Bench And Invert As Necessary. Provide New Brick Invert And Concrete Bench. Shape As Shown In The Plan View. Slope all Surfaces To Drain.



**PLAN**



**SECTION A-A**

**(FOR OUTSIDE DROP CONNECTION)**

Where Dim. "A" Is Equal To Or Greater Than 2' For Sanitary Sewers, Or Equal To Or Greater Than 5' For Storm Sewers

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MONROE COUNTY PURE WATERS

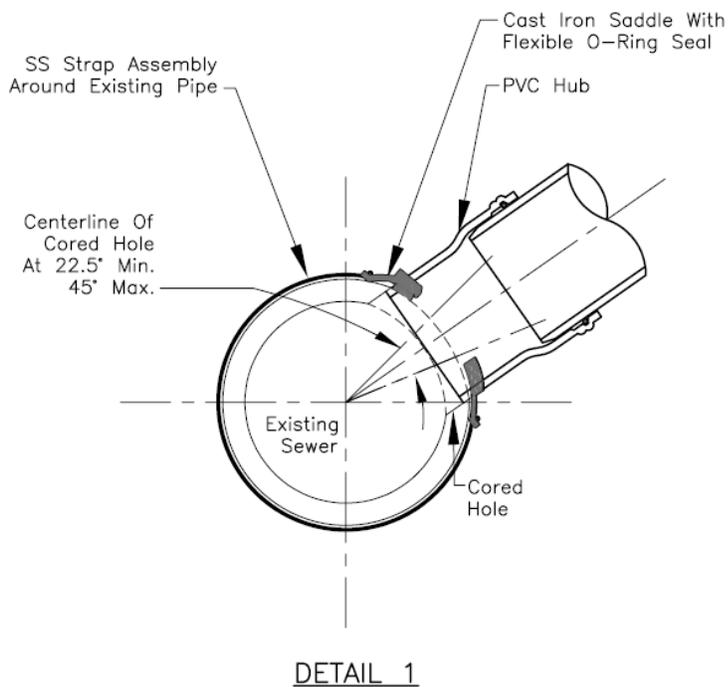
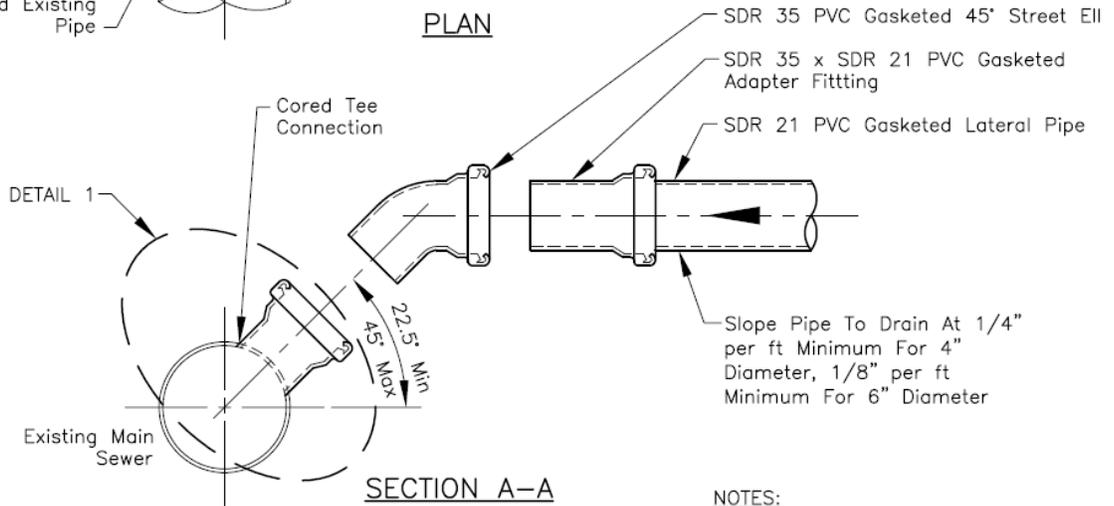
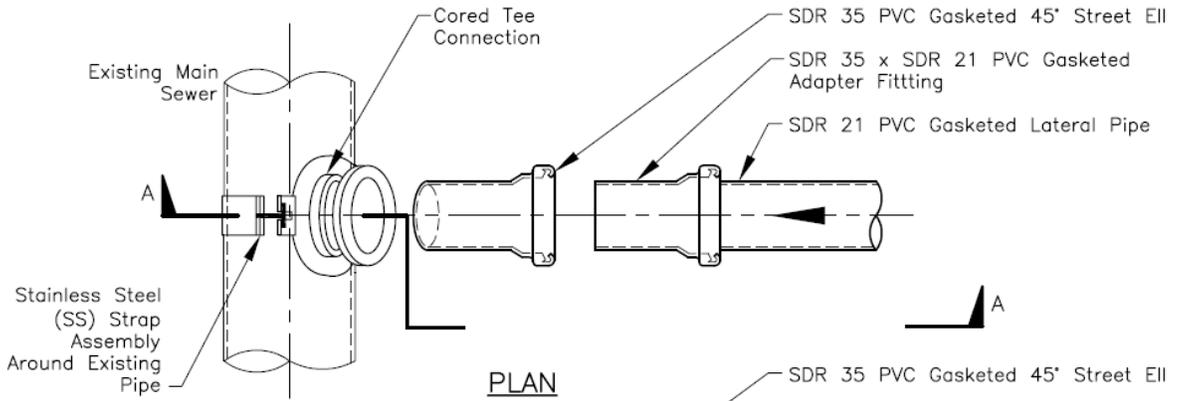
FEBRUARY 2011

SEWER CONNECTIONS  
TO EXISTING MANHOLE

FIGURE 2.03

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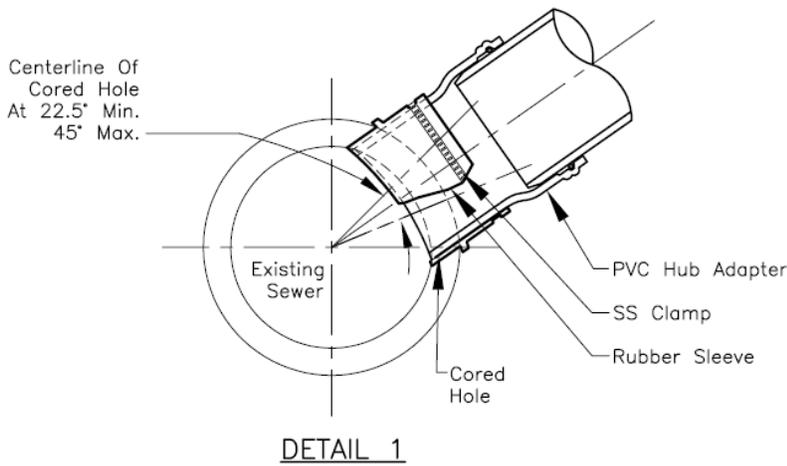
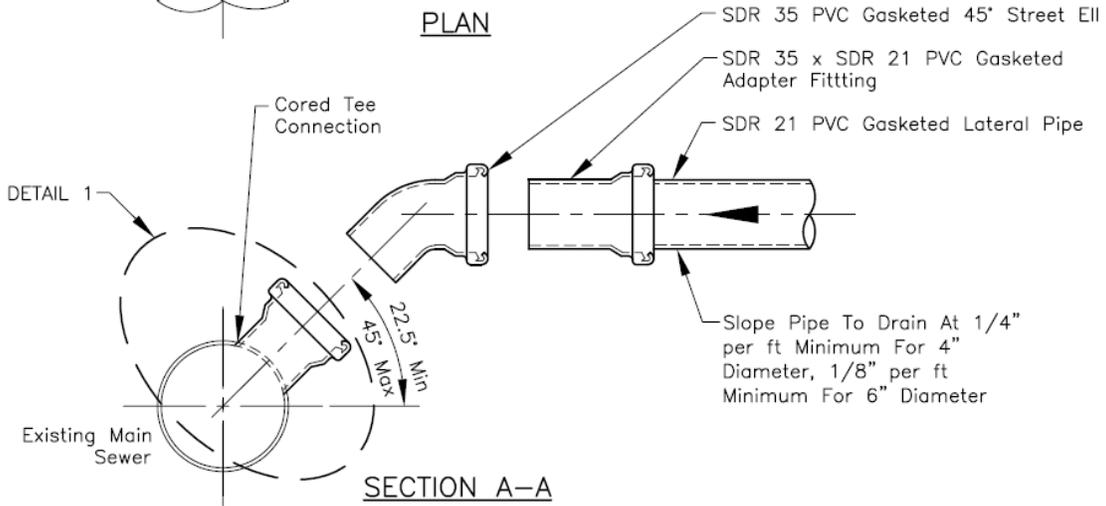
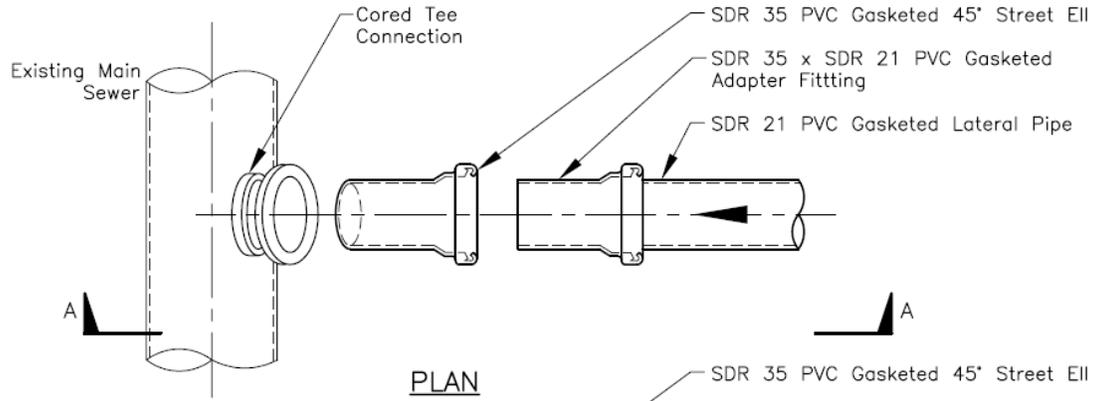
1. Lateral connection must be cored. Pneumatic devices or hammering knock-out methods are not acceptable for creating opening for new lateral pipe.
2. Size of cored opening shall be limited to one-half the nominal diameter of the mainline sewer.
3. Expose full circumference of main sewer for 12" along the length of the main. Core hole a minimum of 6" away from existing pipe hubs.
4. Take necessary precautions to prevent damage to the existing sewer, and to prevent debris from entering the sewer.
5. Thoroughly clean surface of existing pipe of foreign matter and loose particles prior to placement of saddle connection.
6. Saddle connection: Tee Sewer Saddle, Geneco by General Engineering Company, or approved equal.
7. Lateral connections must be witnessed by a representative of the District. Notify Pure Waters a minimum of 48 hours in advance of construction for inspection of the lateral connection. Telephone (585) 760-7600, Option 5.

MONROE COUNTY PURE WATERS

Feb 2005

SADDLE TYPE CORED TEE CONNECTION  
TO EXISTING SEWER

FIGURE 3.01



INSERTA TEE SIZE	HOLE DIAMETER
4" (100mm)	4-1/2" (112.5mm)
6" (150mm)	6-1/2" (162.5mm)
8" (200mm)	8-3/4" (218.8mm)
10" (250mm)	10-7/8" (271.9mm)
12" (300mm)	12-7/8" (321.8mm)
15" (375mm)	15-13/16" (395.3mm)

Required method of cutting hole is with hole saw for PVC and polyethylene, and diamond bit for concretes, clay, and ductile iron.

**NOTES:**

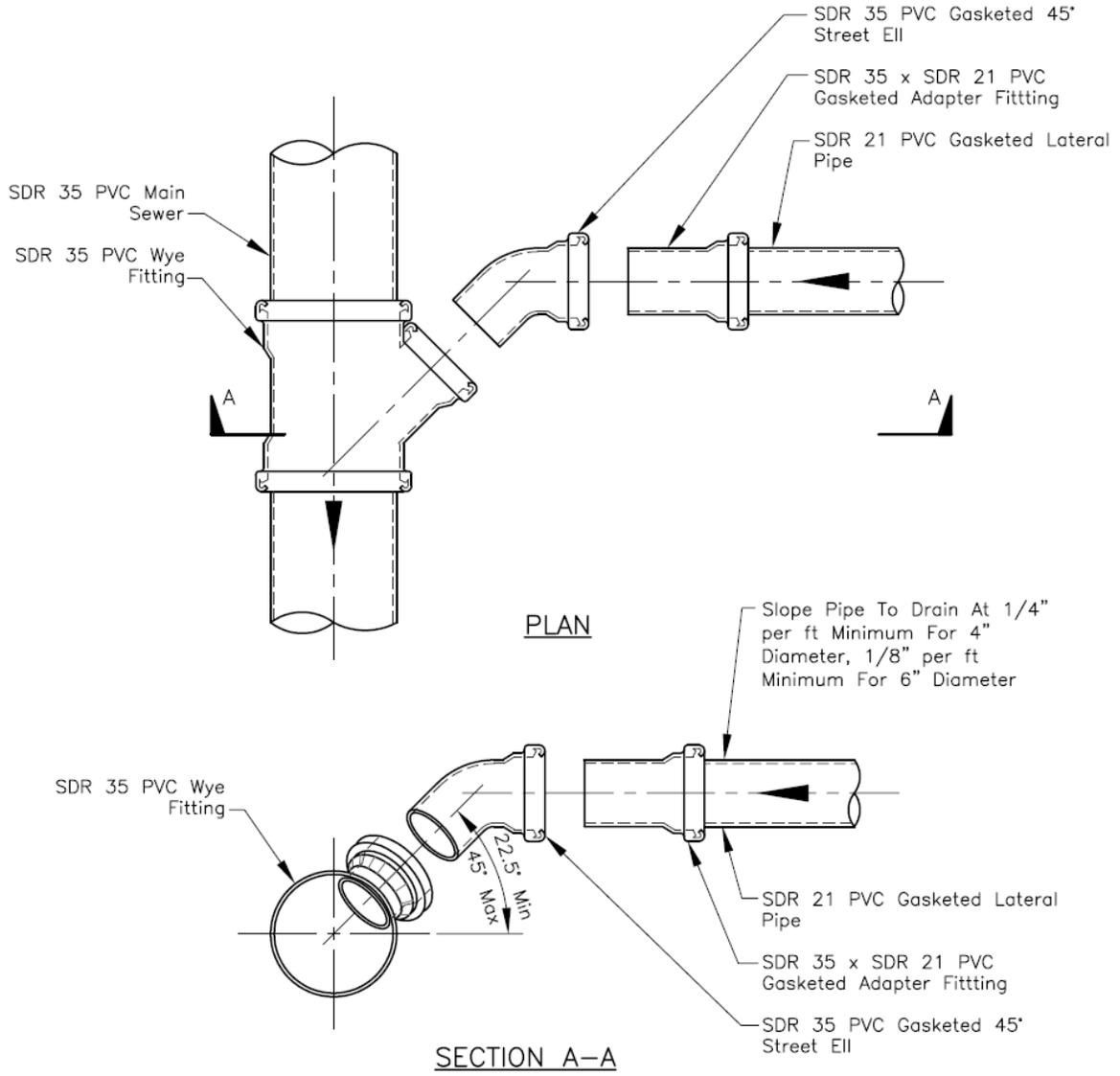
1. Lateral connection must be cored. Pneumatic devices or hammering knock-out methods are not acceptable for creating opening for new lateral pipe.
2. Size of cored opening shall be limited to one-half the nominal diameter of the mainline sewer.
3. Expose face of pipe from crown to invert for 12" along the length of the main. Core hole a minimum of 6" away from existing pipe hubs.
4. Take necessary precautions to prevent damage to the existing sewer, and to prevent debris from entering the sewer.
5. Thoroughly clean surface of existing pipe of foreign matter and loose particles prior to placement of Tee connection.
6. Tee connection: Inserta Tee by Inserta Fittings Co., or approved equal.
7. Lateral connections must be witnessed by a representative of the District. Notify Pure Waters a minimum of 48 hours in advance of construction for inspection of the lateral connection. Telephone (585) 760-7600, Option 5.

MONROE COUNTY PURE WATERS

Feb 2005

INSERT TYPE CORED TEE CONNECTION TO EXISTING SEWER

FIGURE 3.02



**NOTES:**

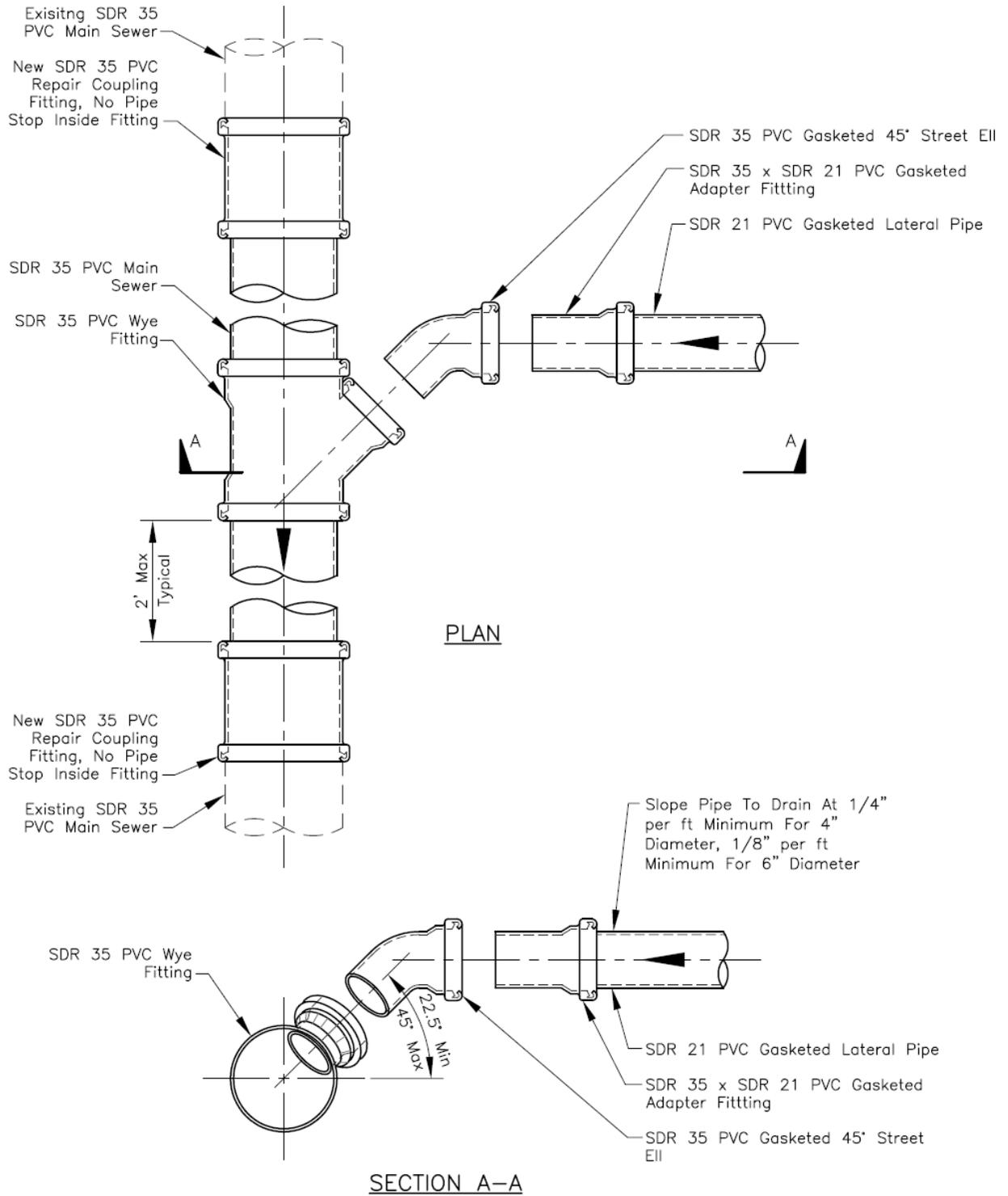
1. Main sewer pipe, lateral pipe, wye and other fittings shall be gasketed type fittings. Solvent weld joints are not allowed, except at cleanouts, see Figures 4.01-4.07.
2. See Figure 1.01 for pipe bedding and backfill.

MONROE COUNTY PURE WATERS

NEW LATERAL WYE CONNECTION  
TO NEW SEWER

Feb 2005

FIGURE 3.03



**NOTES:**

1. Main sewer pipe, lateral pipe, wye and other fittings shall be gasketed type fittings. Solvent weld joints are not allowed, except at cleanouts, see Figures 4.01-4.07.
2. See Figure 1.01 for pipe bedding and backfill.

MONROE COUNTY PURE WATERS

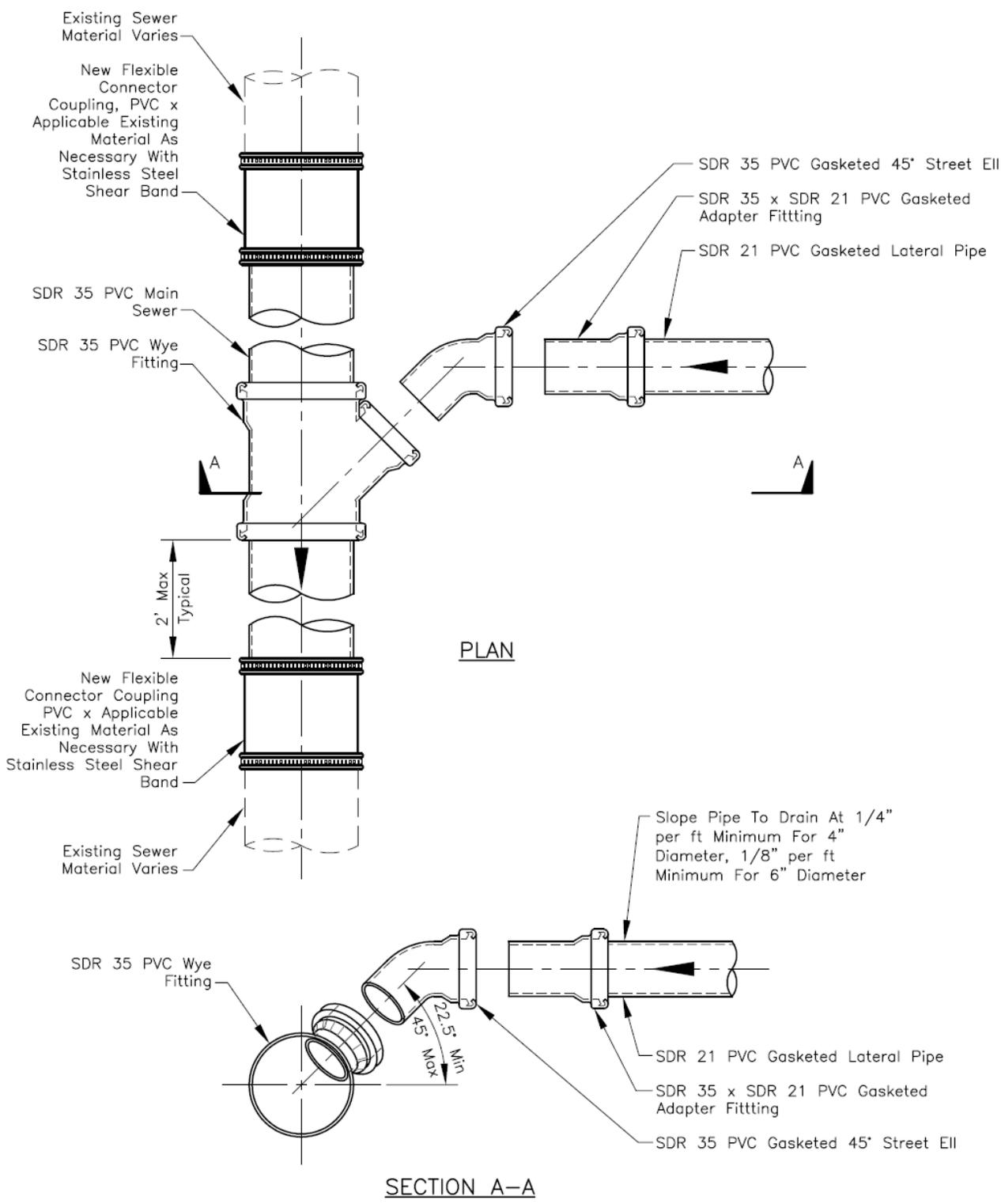
NEW LATERAL WYE CONNECTION  
TO EXISTING PVC SEWER

Feb 2005

FIGURE 3.04

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**NOTES:**

1. Main sewer pipe, lateral pipe, wye and other fittings shall be gasketed type fittings. Solvent weld joints are not allowed, except at cleanouts, see Figures 4.01-4.07.
2. See Figure 1.01 for pipe bedding and backfill.
3. This detail does not apply to existing PVC sewers. See Figure 3.04 for connection to existing PVC Sewer.

MONROE COUNTY PURE WATERS

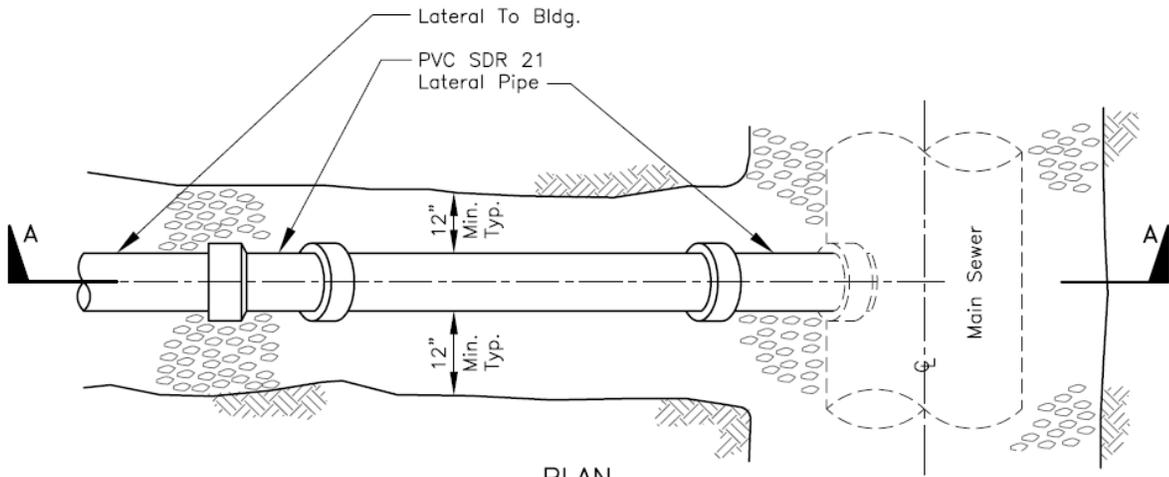
NEW LATERAL WYE CONNECTION TO EXISTING NON-PVC SEWER

Feb 2005

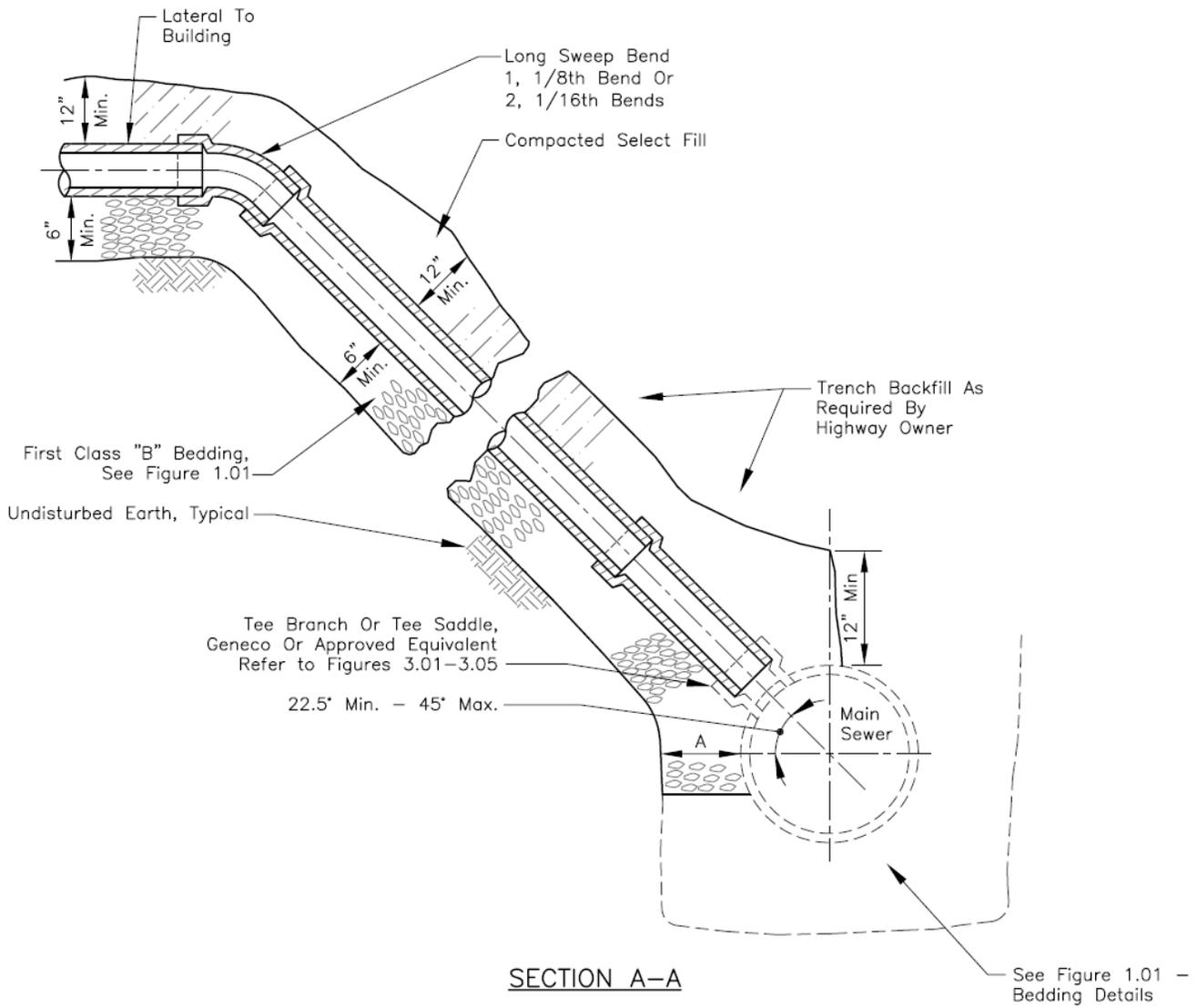
FIGURE 3.05

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PLAN



SECTION A-A

MONROE COUNTY PURE WATERS

Feb 2005

LATERAL RISER CONNECTION

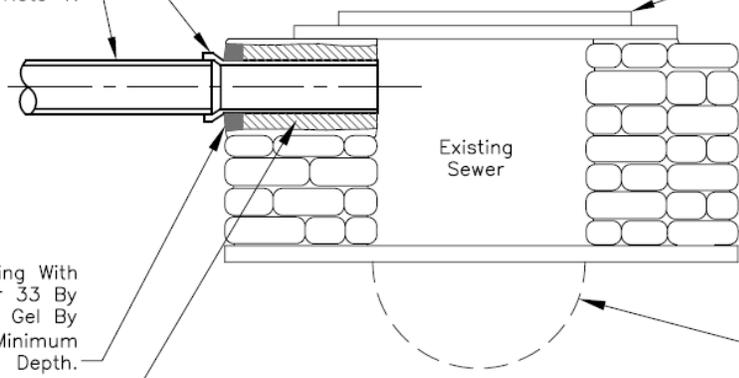
FIGURE 3.06

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Locate New Connection In  
 Top Third Of Section.  
 Remove Stones One At A  
 Time And Insert New Pipe.  
 Cut Pipe Flush To Interior  
 Wall Of Sewer

New Sanitary Or Storm  
 Lateral Pipe - See Note 1.

Cap Cover



Seal All Around Opening With  
 Epoxy Mortar, Sikadur 33 By  
 Sika Corp, Or Flexolith Gel By  
 Tamms, To A 2" Minimum  
 Depth.

Fill Remaining Void With  
 Regular Cement Mortar, Type  
 II Cement.

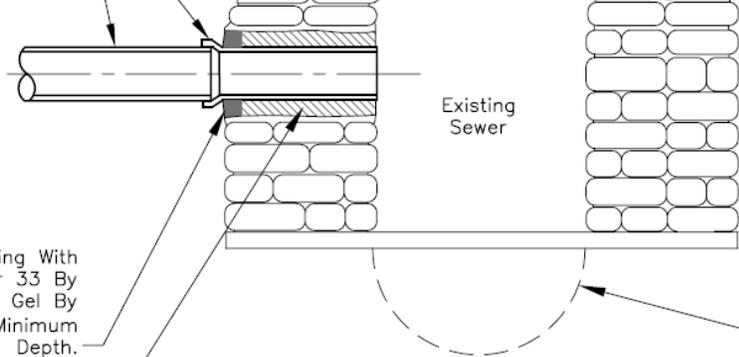
**STONE BOX SEWER CONNECTION DETAIL**

Typical Stone Box  
Combined Sewer

Some Sections May Have  
Rounded Invert - See  
Note No. 2

Locate New Connection In  
 Upper Half Of Section.  
 Remove Stones One At A  
 Time And Insert New Pipe.  
 Cut Pipe Flush To Interior  
 Wall Of Sewer

New Sanitary Or Storm  
 Lateral Pipe - See Note 1.



Seal All Around Opening With  
 Epoxy Mortar, Sikadur 33 By  
 Sika Corp, Or Flexolith Gel By  
 Tamms, To A 2" Minimum  
 Depth.

Fill Remaining Void With  
 Regular Cement Mortar, Type  
 II Cement.

**STONE ARCH SEWER CONNECTION DETAIL**

Typical Stone Box  
Combined Sewer

Some Sections May Have  
Rounded Invert - See  
Note No. 2

**NOTES:**

1. Lateral connections larger than 6" diameter will require special design and approval. Laterals larger than 6" diameter will not be maintained by the District.
2. Refer to District record drawings for configuration of specific stone sewer.
3. Lateral connections to stone sewers must be witnessed by a representative of the District. Notify Pure Waters a minimum of 48 hours in advance of construction for inspection of the lateral connection. Telephone (585) 760-7600, Option 5.
4. Take necessary precautions to prevent damage to the existing sewer, and to prevent debris from entering the sewer.

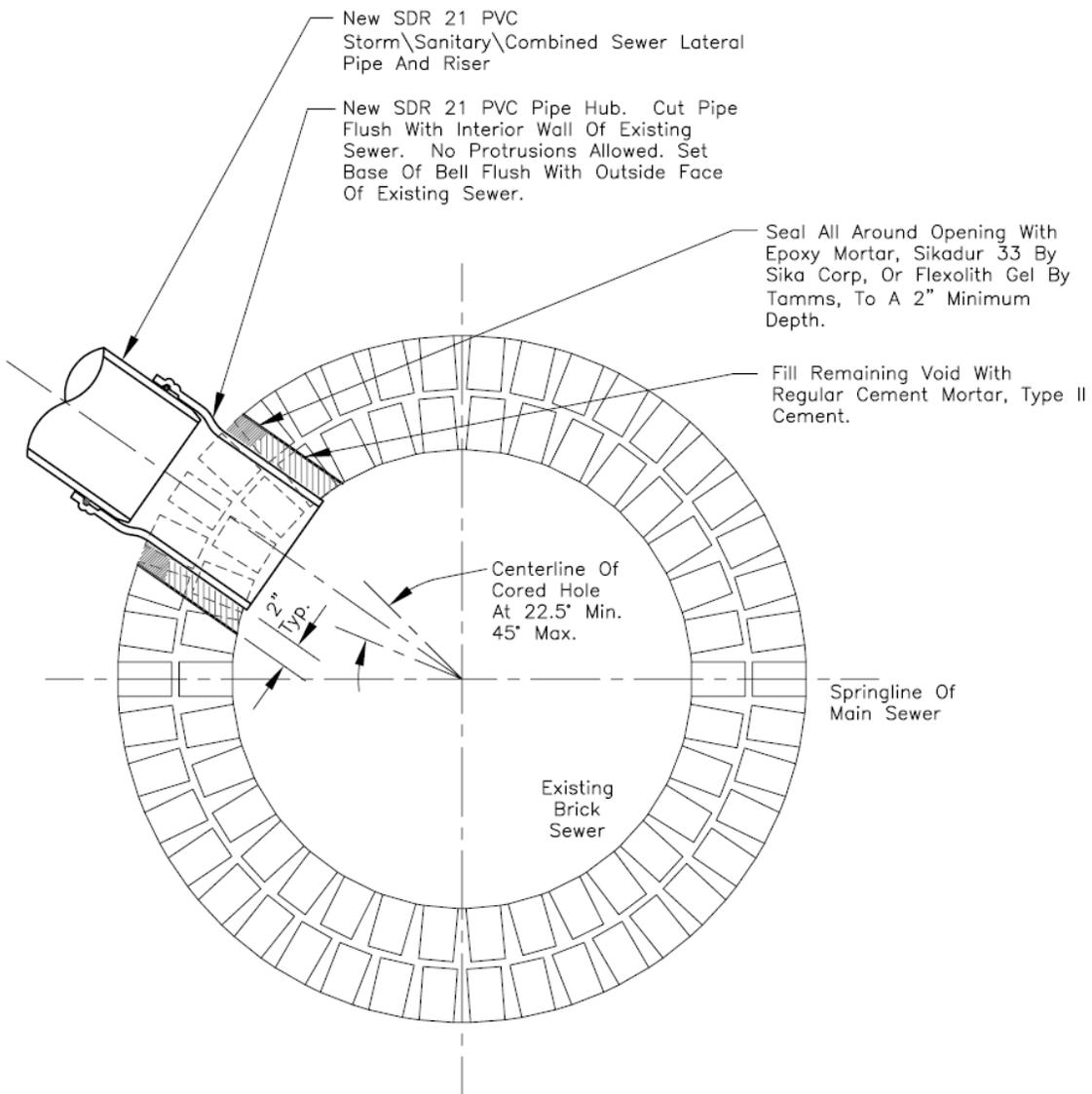
**MONROE COUNTY PURE WATERS**

Feb 2005

**TYPICAL CONNECTIONS  
TO STONE SEWERS**

**FIGURE 3.07**

Filename: RedBookFinal2005\Red-Fig3.08.dwg  
 Time Printed: Tues Feb 15 09:45 2005



CORED CONNECTION TO BRICK OR BLOCK SEWER DETAIL

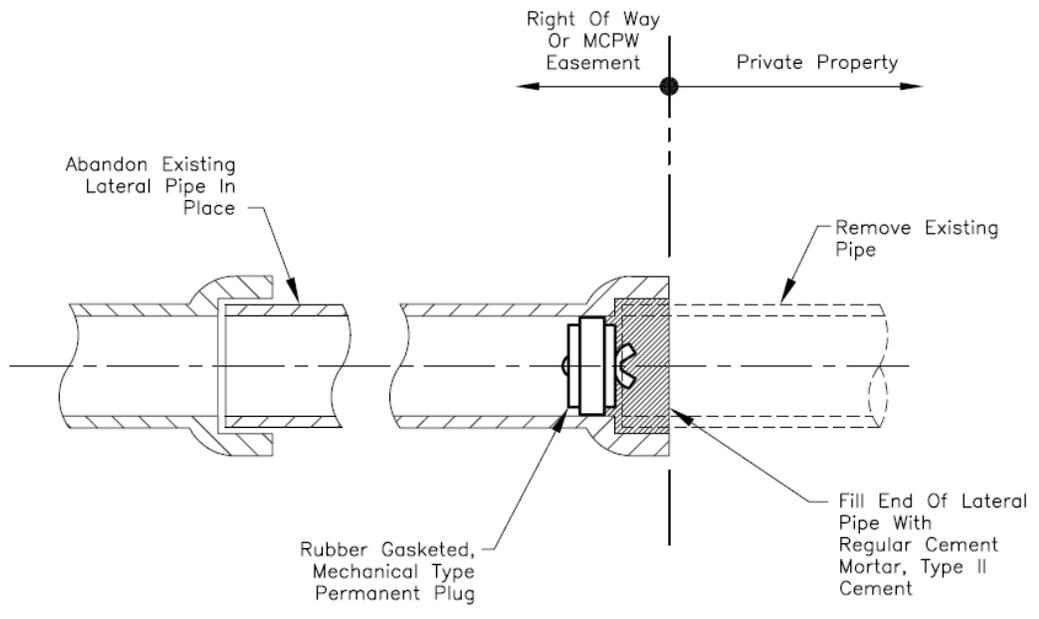
NOTES:

1. Lateral connection must be cored. Pneumatic devices or hammering knock-out methods are not acceptable for creating opening for new lateral pipe.
2. Lateral connections must be witnessed by a representative of the District. Notify Pure Waters a minimum of 48 hours in advance of construction for inspection of the lateral connection. Telephone (585) 760-7600, Option 5.
3. Take necessary precautions to prevent damage to the existing sewer, and to prevent debris from entering the sewer.
4. Lateral connections larger than 6" diameter will require special design and approval. Laterals larger than 6" diameter will not be maintained by the District.

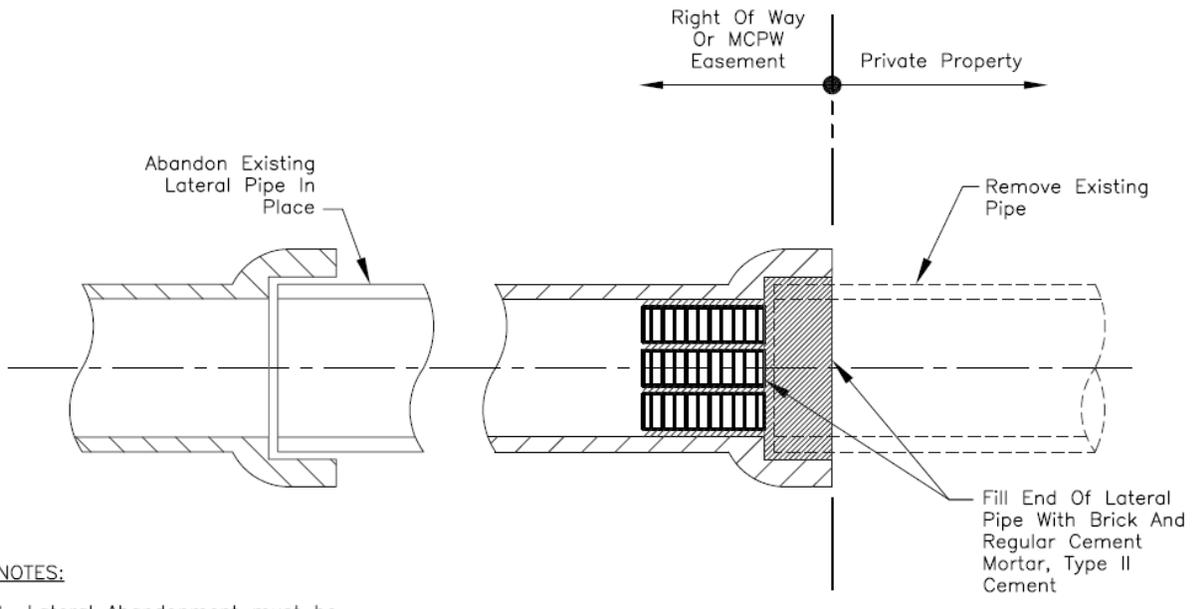
MONROE COUNTY PURE WATERS

Feb 2005	TYPICAL CORED CONNECTION TO BRICK OR BLOCK SEWER	FIGURE 3.08
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File name: RedBookFinal2005\Red-Fig5.01.dwg  
 Time Printed: Tues Feb 15 09:45 2005



**LATERAL ABANDONMENT FOR PIPE  
 DIAMETER OF 6" OR LESS**



**LATERAL ABANDONMENT FOR PIPE  
 DIAMETER GREATER THAN 6"**

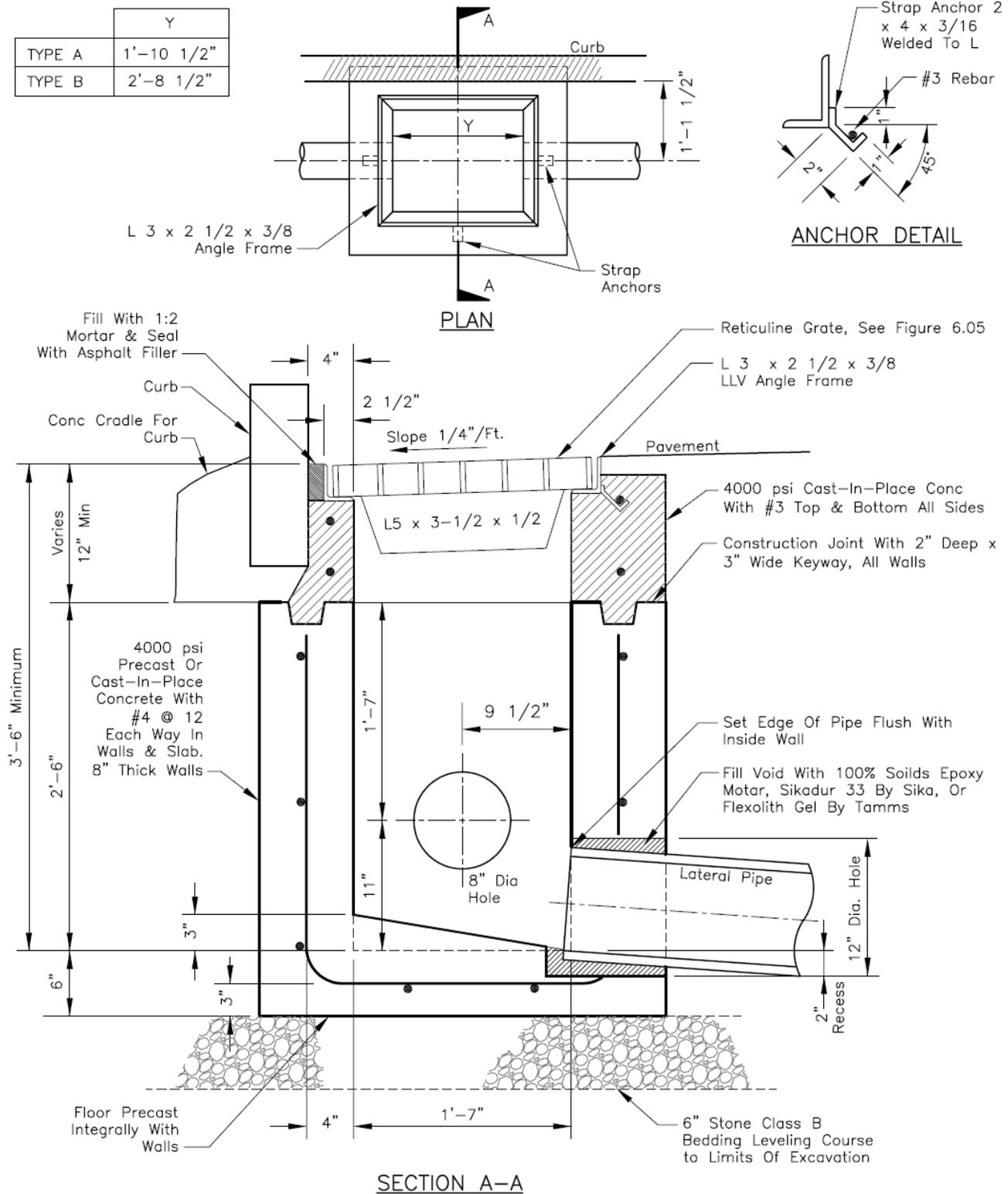
**NOTES:**

1. Lateral Abandonment must be witnessed by a representative of the District. Notify Pure Waters a minimum of 48 hours in advance of construction for inspection of the lateral abandonment. Telephone (585) 760-7600, Option 5.
2. Brick for plug: ASTM C-32, Grade SS.

MONROE COUNTY PURE WATERS

Feb 2005	<b>LATERAL ABANDONMENT DETAIL</b>	<b>FIGURE 5.01</b>
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	Y
TYPE A	1'-10 1/2"
TYPE B	2'-8 1/2"



**NOTES:**

1. Coat interior of catch basin with 2 coats of Duralkote 500 Epoxy or approved equal.
2. Coat exterior of catch basin with 2 coats of bituminous coating.

*Typical Detail for City Of Rochester Street Improvement Projects. Other Use Requires RPWD Approval.*

*Former City of Rochester Std. Dwg. No. R604-2*

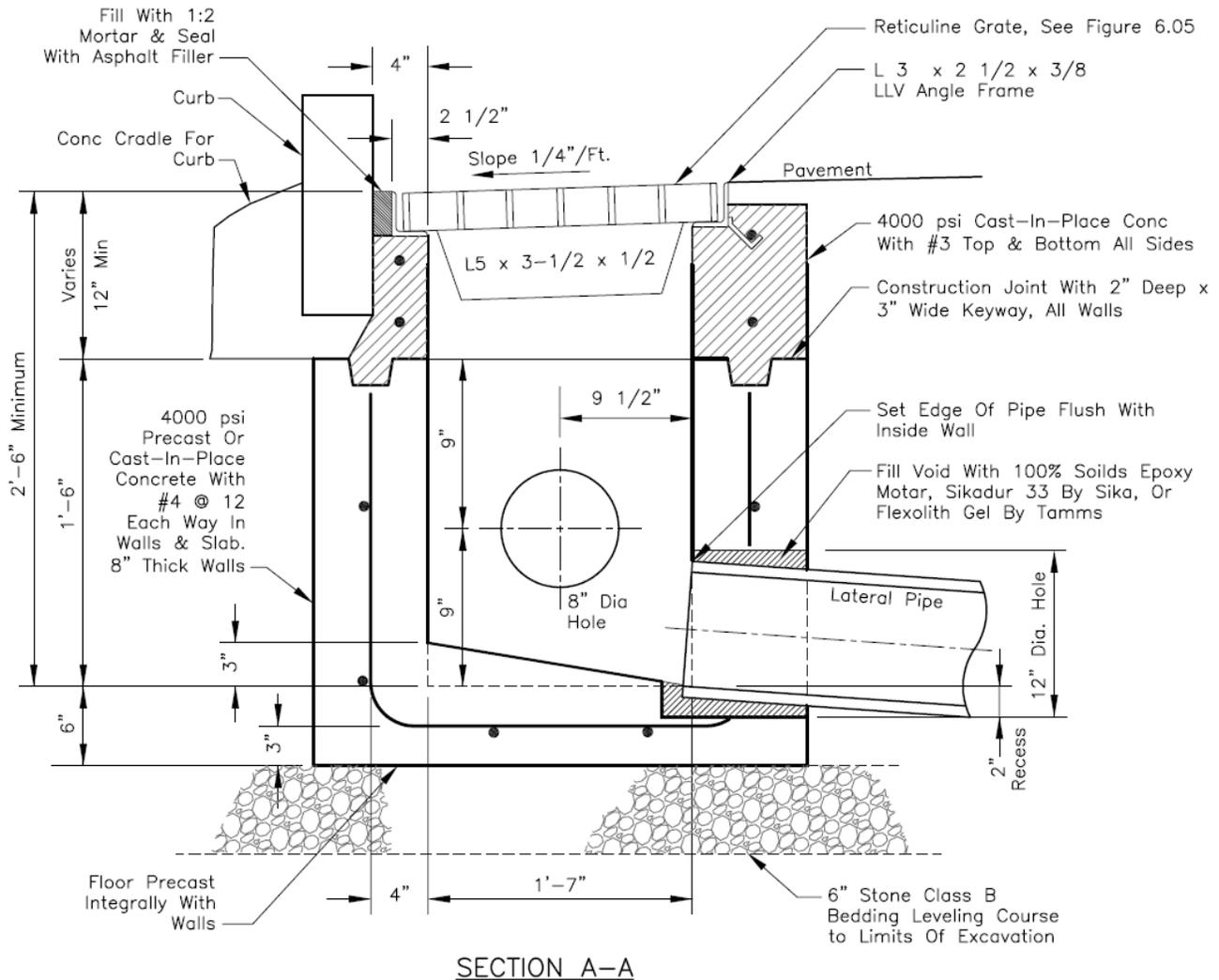
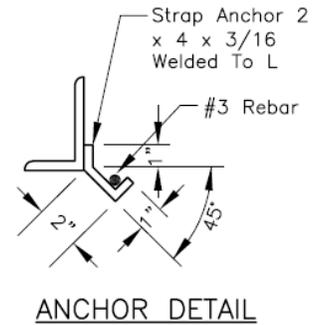
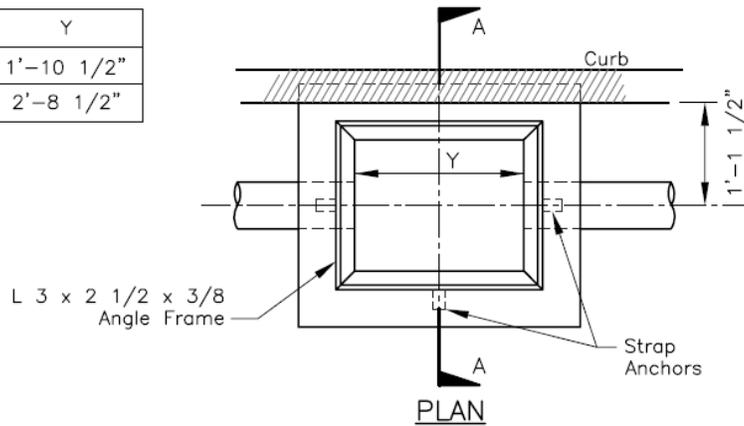
MONROE COUNTY PURE WATERS

MARCH 2007

TYPE A & B  
CATCH BASIN

FIGURE 6.01

	Y
TYPE A	1'-10 1/2"
TYPE B	2'-8 1/2"



**NOTES:**

1. Coat interior of catch basin with 2 coats of Duralkote 500 Epoxyvbr approved equal.
2. Coat exterior of catch basin with 2 coats of bituminous coating.

*Typical Detail for City Of Rochester Street Improvement Projects. Other Use Requires RPWD Approval.*

*Former City of Rochester Std. Dwg. No. R604-3*

MONROE COUNTY PURE WATERS

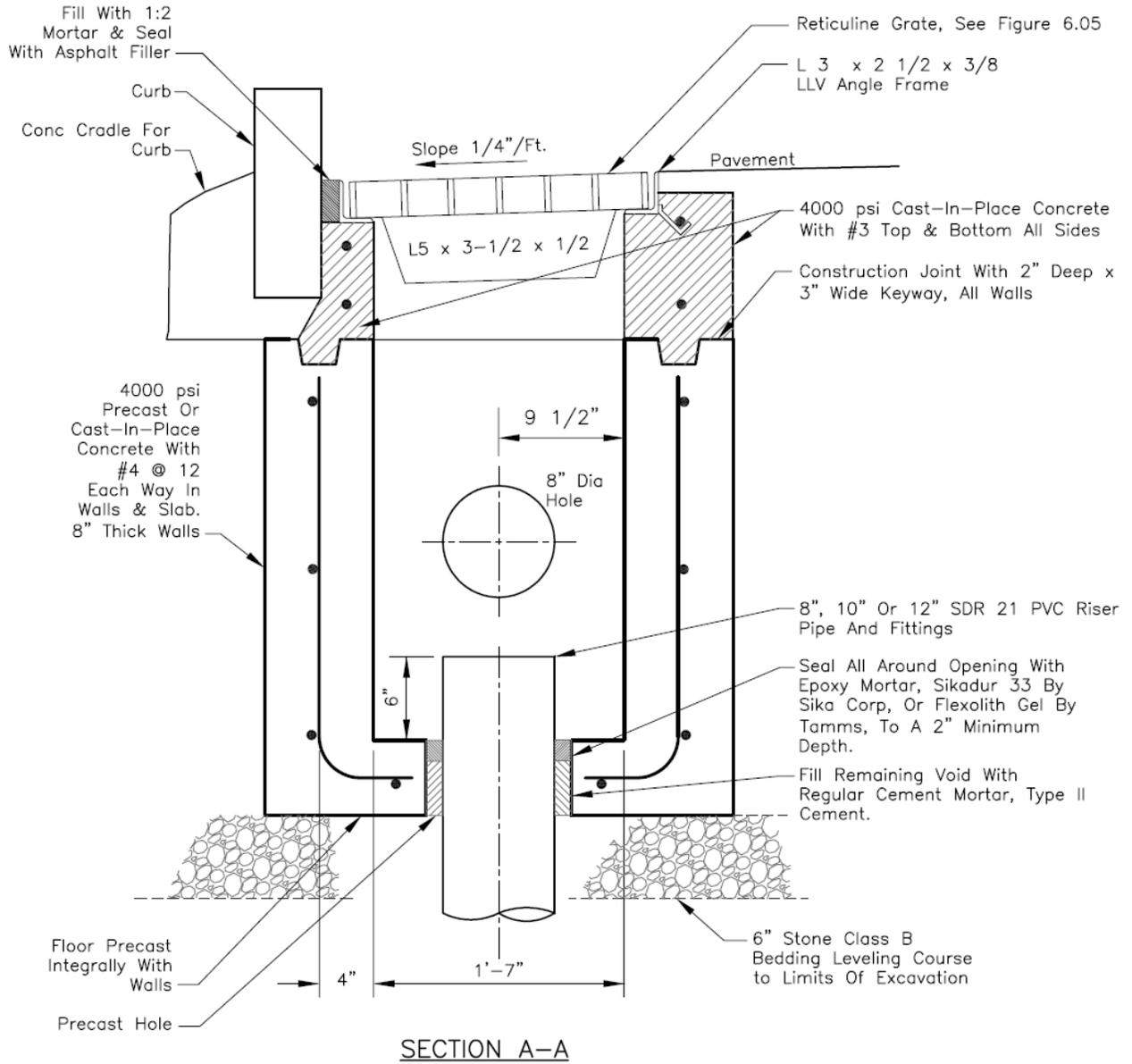
MARCH 2007

TYPE A & B CATCH BASIN  
SHALLOW DEPTH

FIGURE 6.02

Filename: RedBookFinal2005\Red-Fig6.03 Rev03-07.dwg

Time Printed: Wed Mar 7 12:40 2007



**NOTES:**

1. Coat interior of catch basin with 2 coats of Duralkote 500 Epoxy or approved equal.
2. Coat exterior of catch basin with 2 coats of bituminous coating.

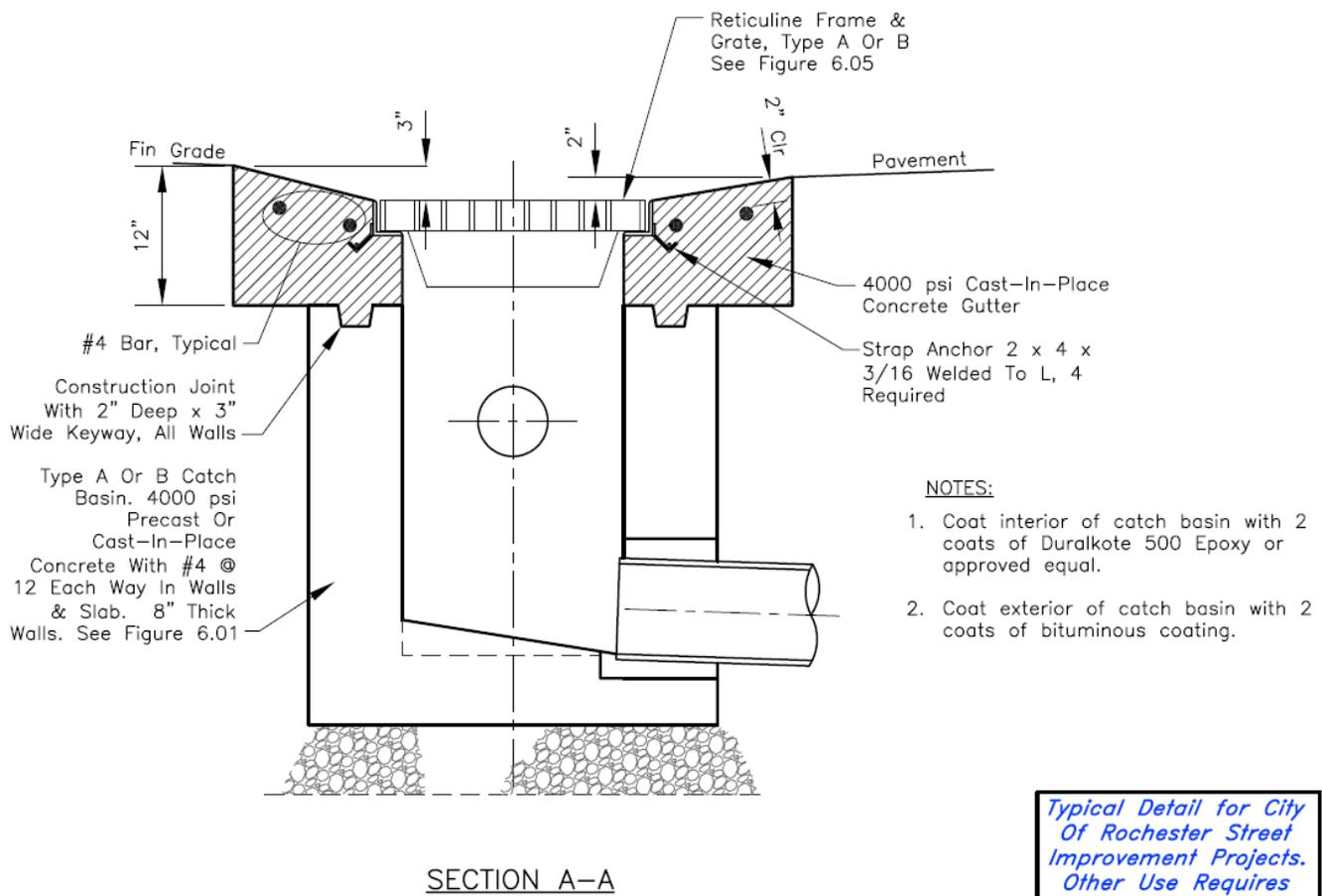
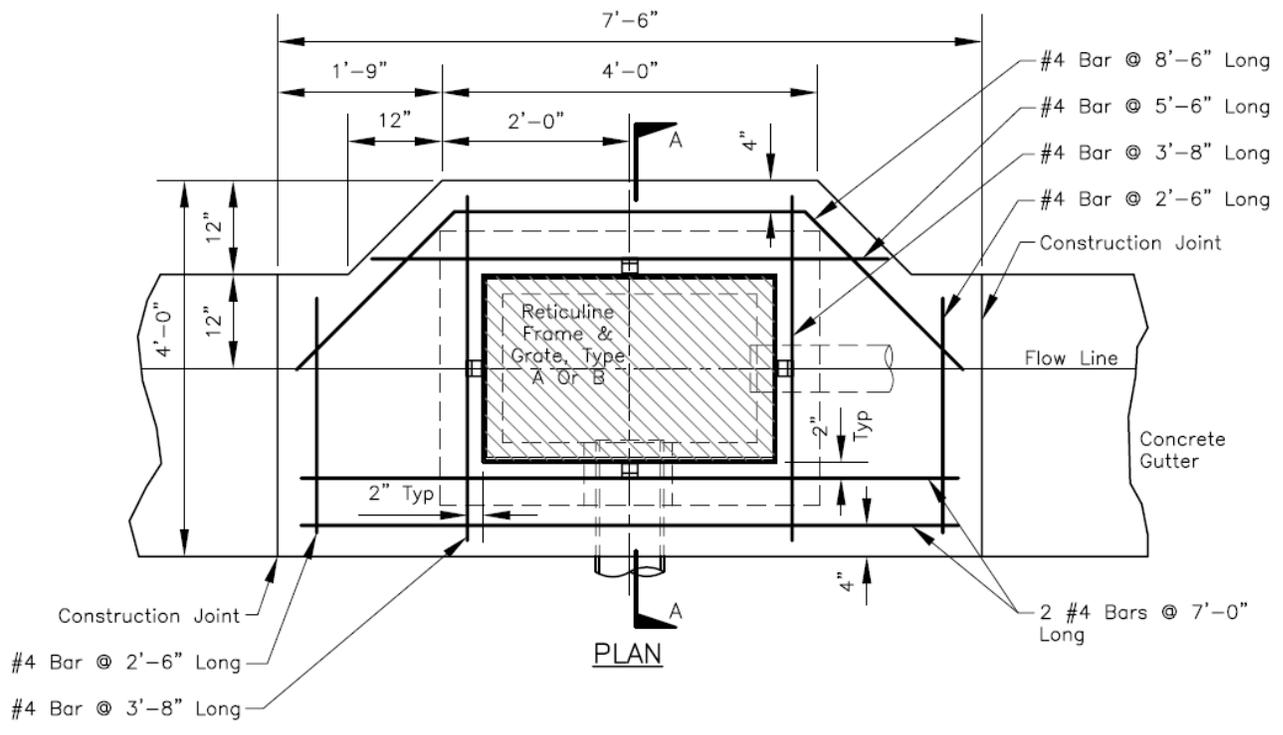
*Special Detail.  
Use Requires RPWD  
Approval.*

*Former City of Rochester  
Std. Dwg. No. R604-4*

MONROE COUNTY PURE WATERS

MARCH 2007	<b>TYPE A &amp; B CATCH BASIN WITH BOTTOM CONNECTION</b>	<b>FIGURE 6.03</b>
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File name: RedBookFinal2005\Red-Fig6.04 Rev03-07.dwg  
 Time Printed: Wed Mar 7 12:45 2007



*Typical Detail for City Of Rochester Street Improvement Projects. Other Use Requires RPWD Approval.*  
 Former City of Rochester Std. Dwg. No. R624-3

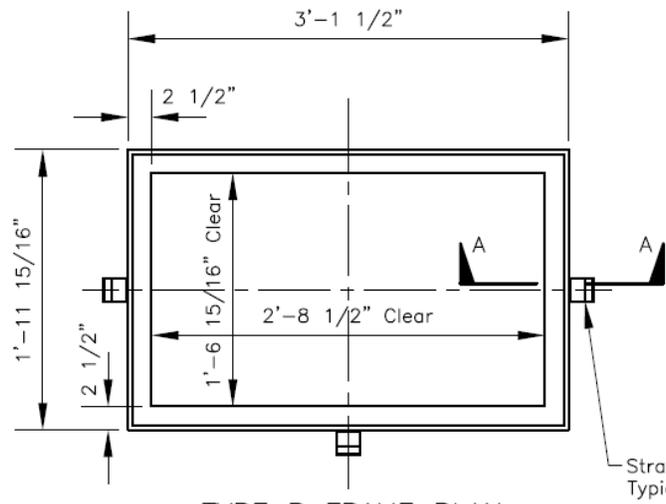
MONROE COUNTY PURE WATERS

MARCH 2007

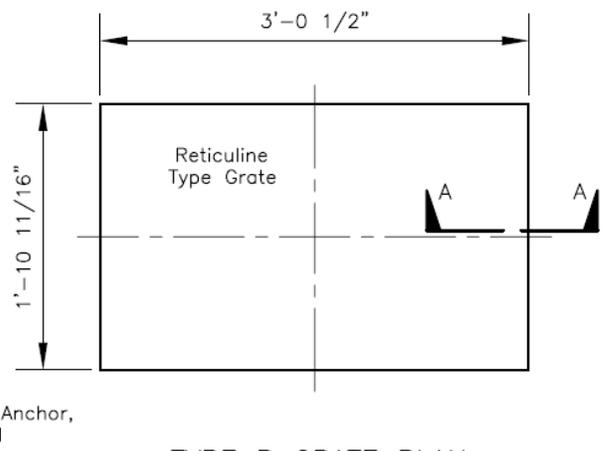
TYPE A & B CATCH BASIN  
IN CONCRETE GUTTER

FIGURE 6.04

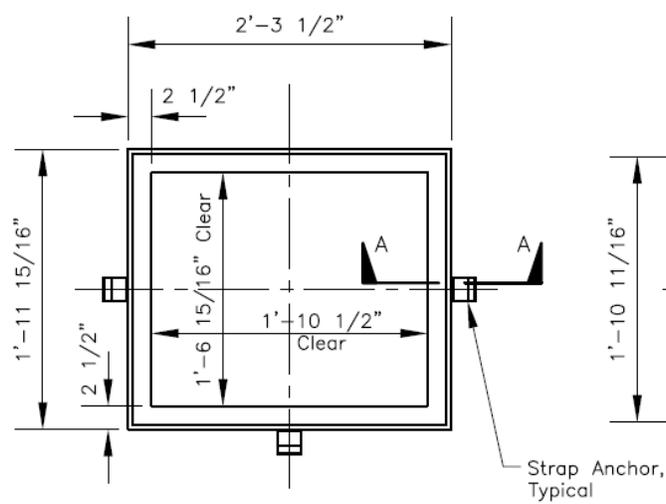
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 Time Printed: Tues Feb 15 09:45 2005



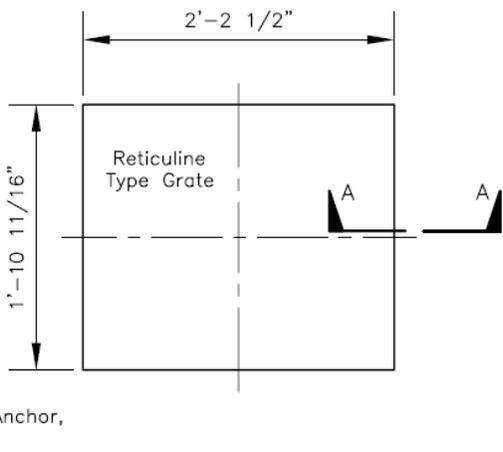
**TYPE B FRAME PLAN**



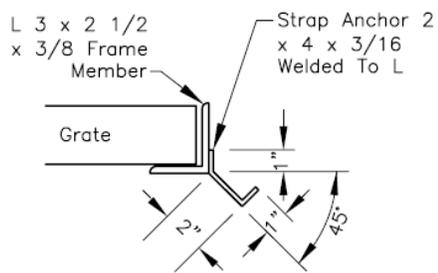
**TYPE B GRATE PLAN**



**TYPE A FRAME PLAN**



**TYPE A GRATE PLAN**



**SECTION A-A  
ANCHOR DETAIL**  
(For Reticuline Grate,  
3 Required)

**NOTES:**

1. Frames and grates shall be galvanized steel reticuline type, Syracuse Castings Model NYSDOT #1 for Type A, and Model NYSDOT #3 for Type B, or approved equal. Units shall be designed for H-20 loading. Complete unit shall be hot dip galvanized after fabrication, ASTM A123.

*Typical Detail for City  
Of Rochester Street  
Improvement Projects.  
Other Use Requires  
RPWD Approval.*

*Former City of Rochester  
Std. Dwg. No. R655-1*

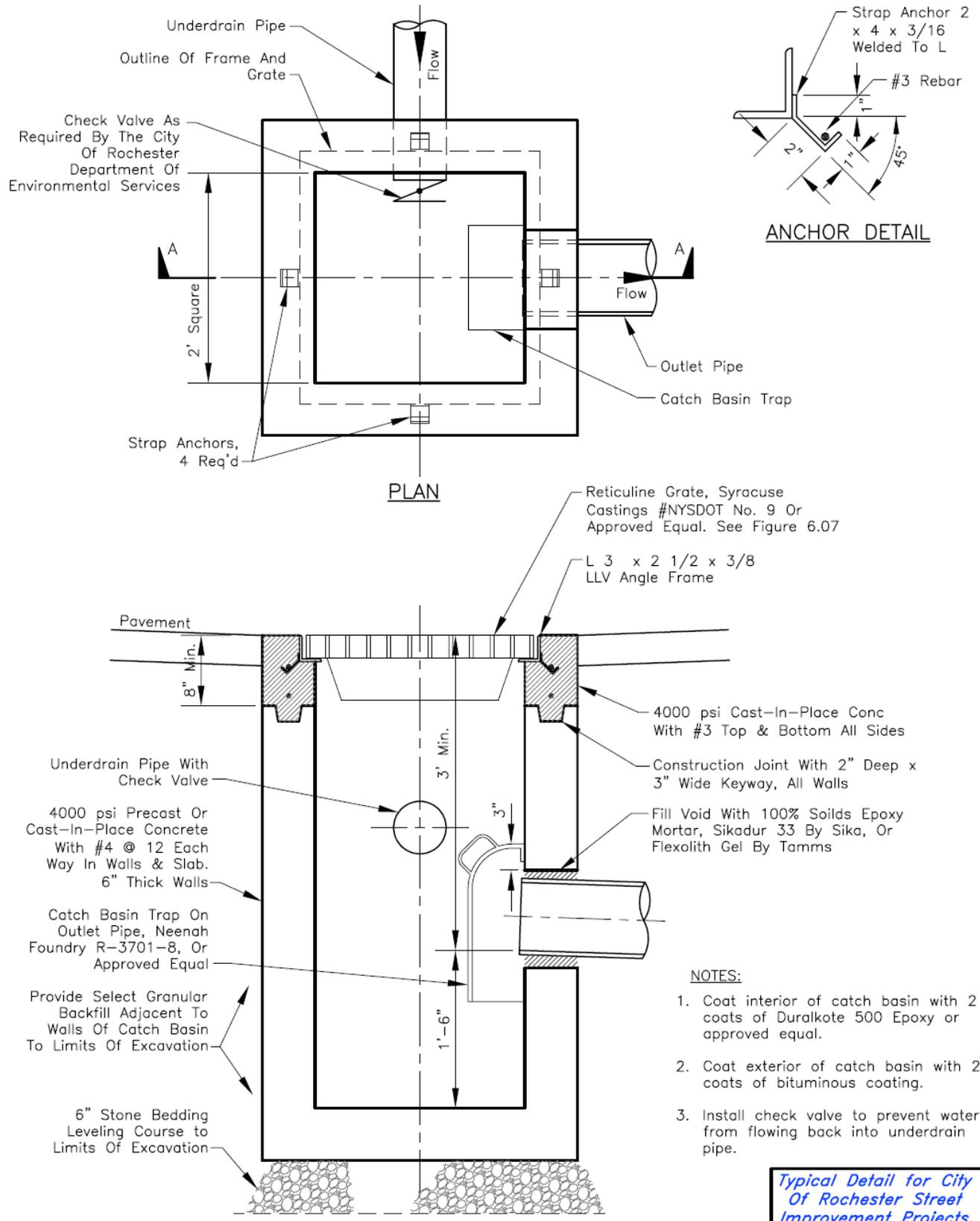
**MONROE COUNTY PURE WATERS**

Feb 2005

**TYPE A & B CATCH BASIN  
FRAME AND GRATE**

**FIGURE 6.05**

File Name: RedBookFinal(2005)\Red-Fig6.06 Rev03-07.dwg  
 Time Printed: Wed Mar 7 12:50 2007

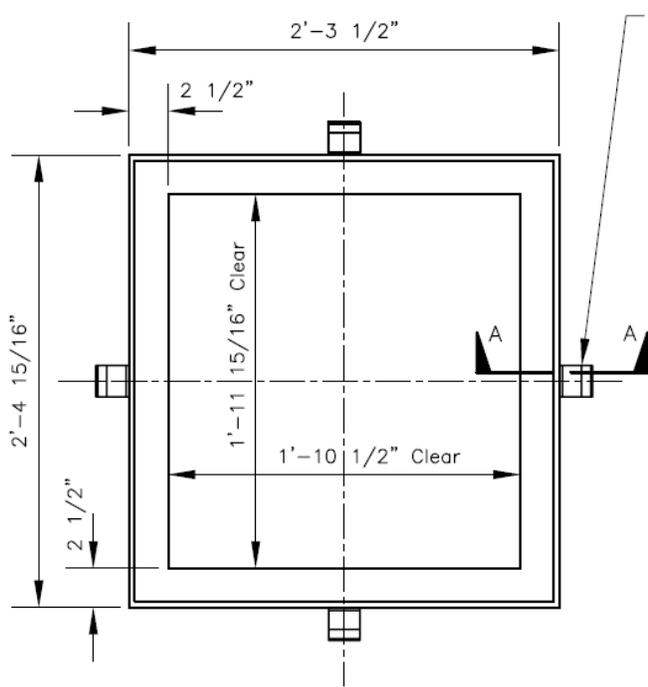


MONROE COUNTY PURE WATERS

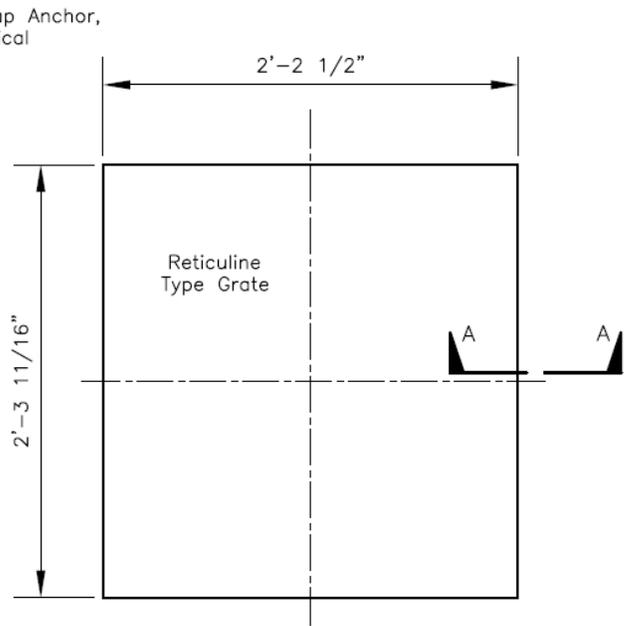
MARCH 2007

TYPE C  
 CATCH BASIN

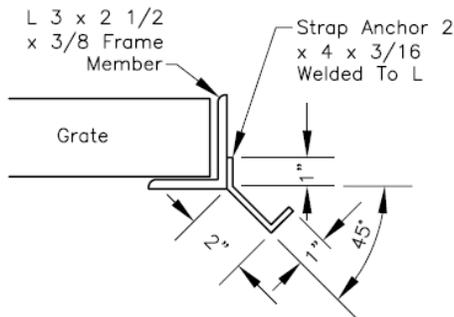
FIGURE 6.06



TYPE C FRAME PLAN



TYPE C GRATE PLAN



SECTION A-A  
ANCHOR DETAIL  
(For Reticuline Grate,  
4 Required)

NOTES:

1. Frame and grate shall be galvanized steel reticuline type, Syracuse Castings Model NYSDOT #9, or approved equal. Unit shall be designed for H-20 loading. Complete unit shall be hot dip galvanized after fabrication, ASTM A123.

*Typical Detail for City  
Of Rochester Street  
Improvement Projects.  
Other Use Requires  
RPWD Approval.*

*Former City of Rochester  
Std. Dwg. No. R655-2*

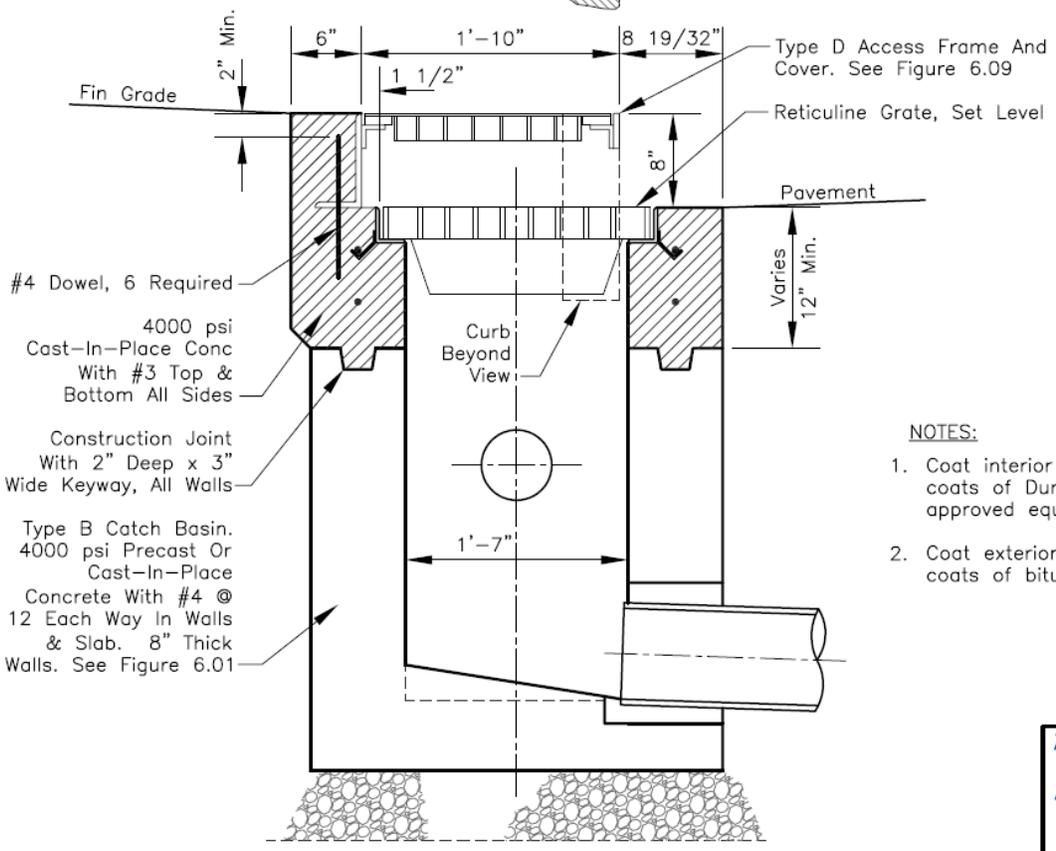
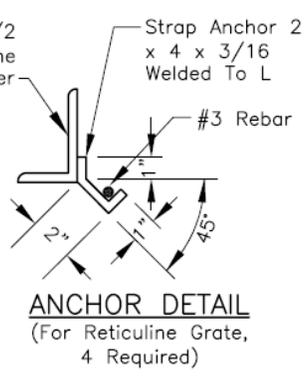
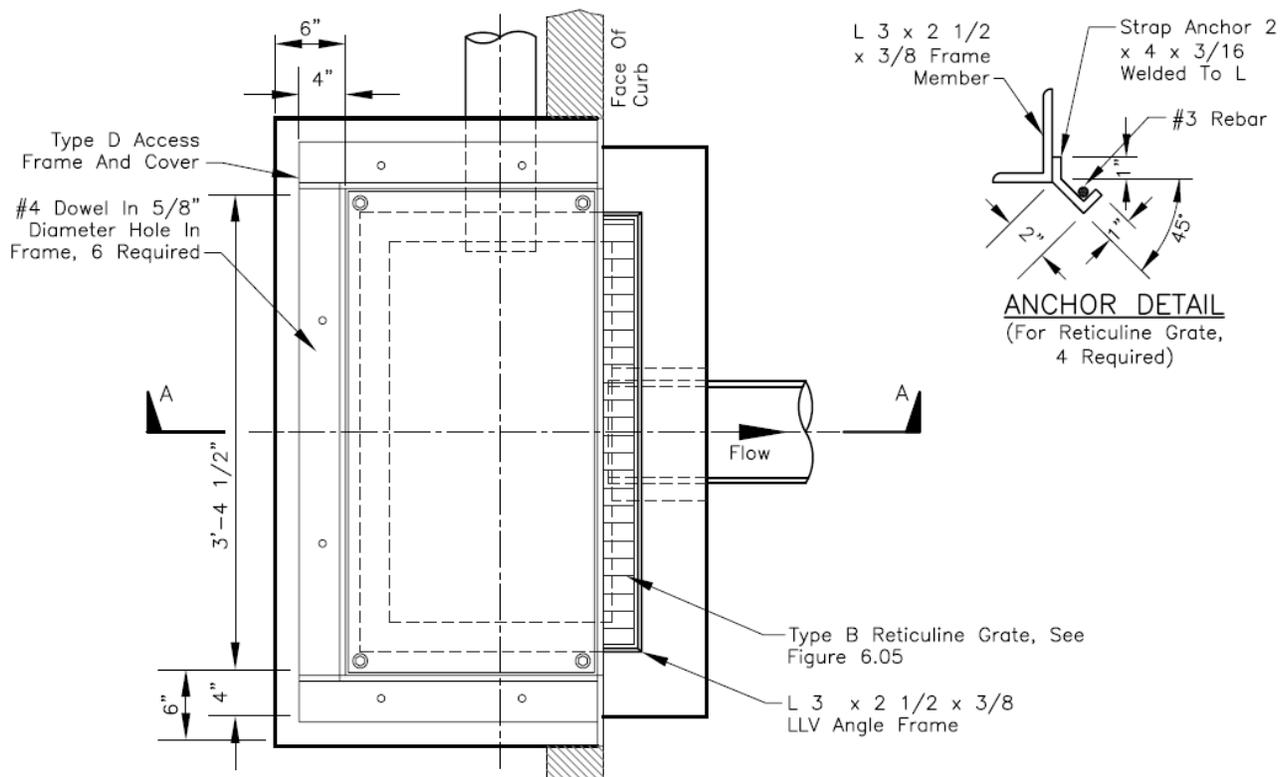
MONROE COUNTY PURE WATERS

Feb 2005

TYPE C CATCH BASIN  
FRAME AND GRATE

FIGURE 6.07

File name: RedBookFinal2005\Red-Fig6.08 Rev03-07.dwg  
 Time Printed: Wed Mar 7 12:50 2007



- NOTES:**
1. Coat interior of catch basin with 2 coats of Duralkote 500 Epoxy or approved equal.
  2. Coat exterior of catch basin with 2 coats of bituminous coating.

*Typical Detail for City  
 Of Rochester Street  
 Improvement Projects.  
 Other Use Requires  
 RPWD Approval.*  
 Former City of Rochester  
 Std. Dwg. No. R604-6

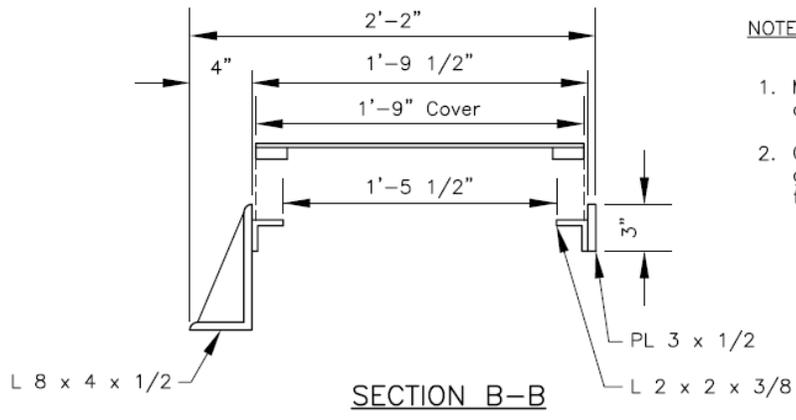
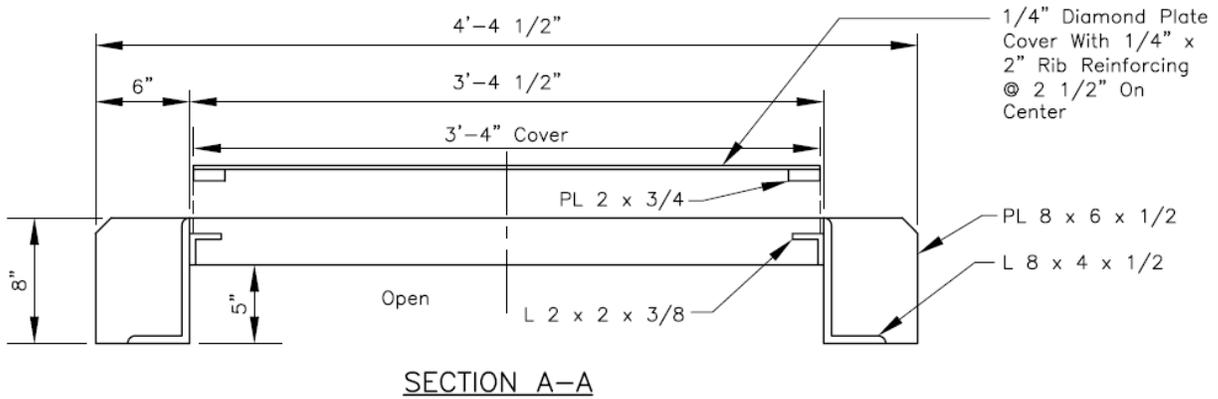
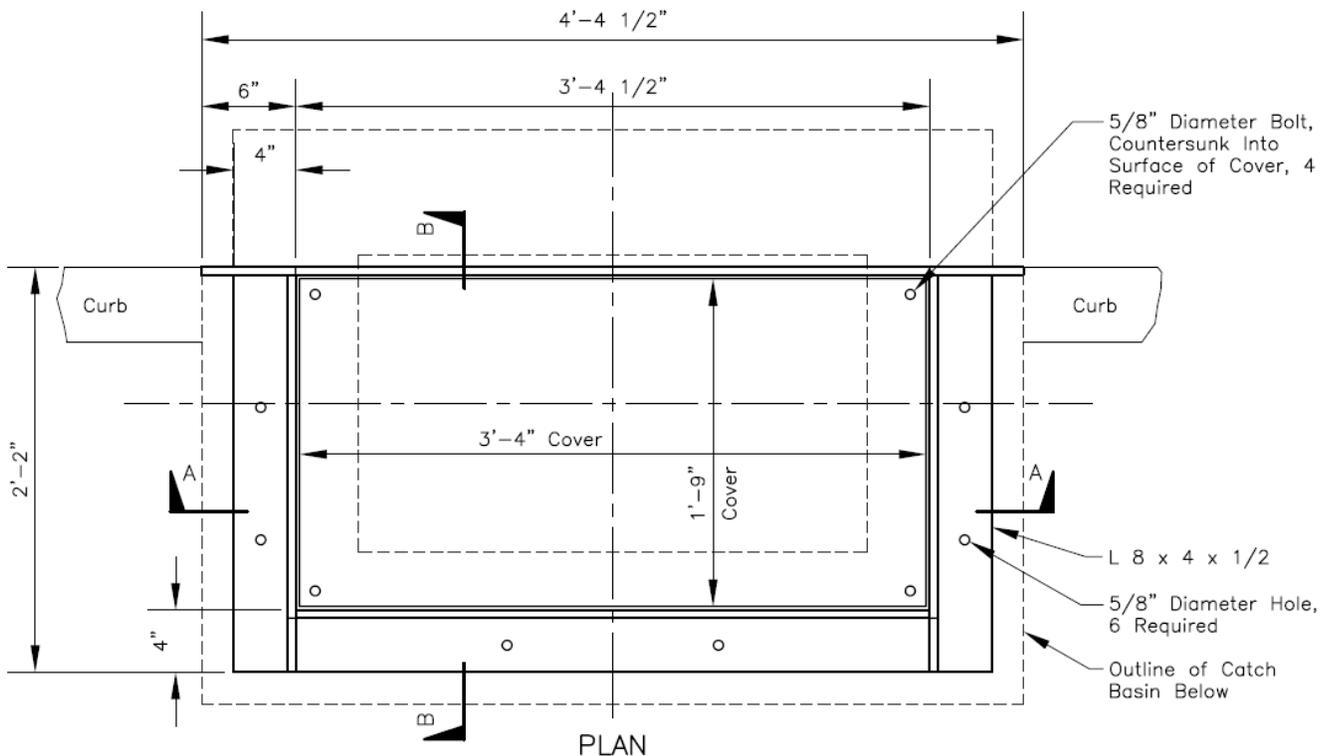
MONROE COUNTY PURE WATERS

MARCH 2007

**TYPE D  
 CATCH BASIN**

FIGURE 6.08

File Name: RedBookFinal2005\Red-Fig6.09.dwg  
 Time Printed: Tues Feb 15 09:45 2005

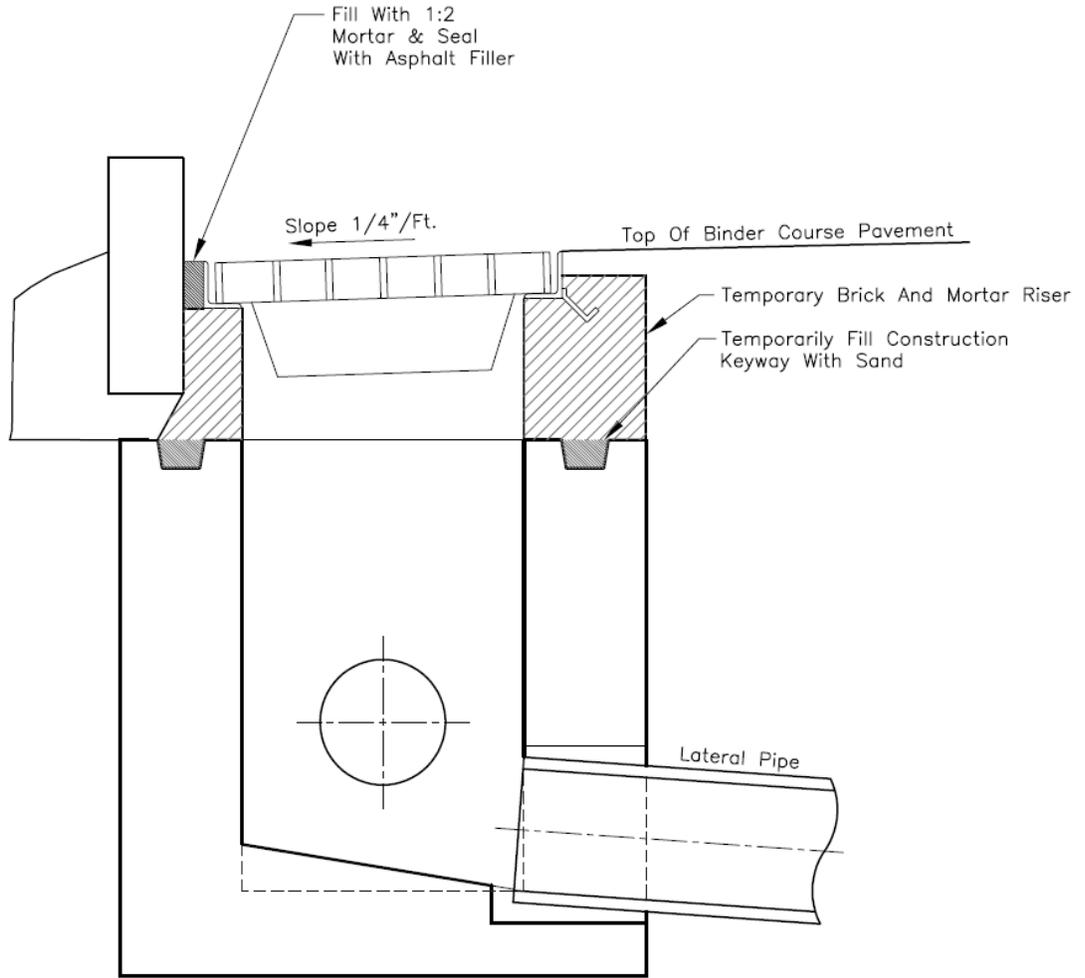


**NOTES:**

1. Material shall be hot rolled steel conforming to ASTM A36.
2. Complete unit shall be hot dip galvanized per ASTM A123 after fabrication.

*Typical Detail for City  
 Of Rochester Street  
 Improvement Projects.  
 Other Use Requires  
 RPWD Approval.*  
 Former City of Rochester  
 Std. Dwg. No. R655-3

MONROE COUNTY PURE WATERS



SECTION VIEW

NOTES:

1. To be used when it is necessary to temporarily set a new catch basin grate during the winter season shut down.

*Typical Detail for City  
Of Rochester Street  
Improvement Projects.  
Other Use Requires  
RPWD Approval.*

*Former City of Rochester  
Std. Dwg. No. R604-9*

MONROE COUNTY PURE WATERS

Feb 2005

TEMPORARY BRICK RISER  
FOR NEW CATCH BASIN

FIGURE 6.12

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