GLOUCESTER TOWNSHIP MUNICIPAL UTILITIES AUTHORITY



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PROCEDURES FOR SUBMITTAL, REVIEW, AND CONSTRUCTION OF WASTEWATER SEWER AND EXTENSION REVISED MARCH 2021

STANDARD CONSTRUCTION DETAILS REVISED MARCH 2021

TABLE OF CONTENTS

GLOUCESTER TOWNSHIP MUNICIPAL UTILITIES AUTHORITY RATES, RULES AND REGULATIONS

Definitions1
Time and Place of Payment2
Delinquent Bills
Continuing Obligation to Pay Service Charge
Local and State Requirements2
Written Application by Owner or Occupier of Property2
Procedure for Approval of Operation of Sewerage System3
Sewer Extensions to Serve Subdivisions, Tracts, Housing Projects, Commercial
Industrial Development
Complaints4
Reasonable Access
No Oral Agreements5
Amendment to Rules and Regulations5
Authority Service Line5
Connection Permits5
Maintenance and Responsibility of Service Lateral by Customer6
Replace of Service Lateral7
Property Serviced by Single Service Lateral
Prohibited Connections
Sewer Availability – Mandatory Connection7
Industrial Waste7
Construction Methods and Materials9
Additional Construction Requirements9
Rates9
Sewer Connection and Rate Fee Schedule
Basic Service Unit14
Additional Charge for Treatment of Industrial Wastes
Public Swimming Pools Backwash

Composiin	g Facility Current Rate Schedule	10
Contribution	ons for Improvements	17
Design Ca	leulations	17
Other Fees	and Charges	17
Reimburse	ment for Clean-Up Cost or Damage	17
Amendme	nt to Rules and Regulations	18
	SANITARY SEWER CONNECTIONS CHAPTER 98	
General Re	eferences	19
Definitions	5	19
Owner to r	nake connection	20
Work and	material specifications conformance with Plumbing code	20
Notificatio	n to make connection	20
Server of r	otice	20
Unpaid cha	arge to become lien upon premises or property	21
Violation a	and penalties	21
When effe	ctive	21
	OUCESTER TOWNSHIP MUNICIPAL UTILITIES AUTHORS FOR SUBMITTAL, REVIEW AND CONSTRUCTION OF SEWER EXTENSION	
1.0 Gene	ral Provisions	22
2.0 Appl	ication-General	22
3.0 Appl	ication for Feasibility	23
3.1	Forms and Supporting Data	23
3.2	Fee	23
3.3	Action by Authority	23
FO	RM A APPLICATION	24-25
4.0 Appl	ication for Preliminary Approval	26
4.1	Purpose of Application	26
4.2	Forms and Supporting Data	26

	4.3	Fee
	4.4	Action by Authority
	4.5	Supporting Data, Bonds, and Fees
		Estimated Construction Costs
	FOF	RM B APPLICATION28-29
5.0	Applie	cation for Construction Approval30
	5.1	Purpose of Application30
	5.2	Forms and Supporting Data30
	5.3	Other Data30
	5.4	Fee
		Plan Review Fee Chart
	5.5	Amendment to GTMUA Policy Posting of Performance
		Guarantee
	5.6	Transfer of Owner
	5.7	Action by the Authority
	FOF	RM C APPLICATION34-36
6.0	Applie	cation for Acceptance
	6.1	Purpose of Application
	6.2	Forms and Supporting Data
	6.3	As-Built Plans
	6.4	Testing of Completed System37
	6.5	Sewer Connections
	6.6	Maintenance Bonds
	FOF	RM D APPLICATION39-40
7.0	Buildi	cation for Review of Plans for Public Sewer for Commercial ings That Discharge Less Than 8,000 GPD of Wastewater and wer Extension is Required
	7.1	Purpose of Application41
	7.2	Forms and Supporting Data41
	7.3	Fee41
	7.4	Supporting Data41
	FOF	RM F APPLICATION42
GTN	MUA S	ΓANDARD CONSTRUCTION DETAILS

GLOUCESTER TOWNSHIP MUNICIPAL UTILITIES AUTHORITY RATES, RULES AND REGULATIONS

GLOUCESTER TOWNSHIP MUNICIPAL UTILITIES AUTHORITY RATES, RULES AND REGULATIONS

DEFINITIONS:

- 1. The word "Authority" shall mean the Gloucester Township Municipal Utilities Authority.
- 2. The word "Customer" shall mean the owner of the real property with regard to which sewer service is or shall be furnished. A tenant is not considered a customer.
- 3. The word "Main" shall mean the Authority owned piping and appurtenances, in or along public rights-of-way or streets, or along privately owned rights-of-way or easements or other areas where such use has been permitted. Mains are further defined as piping and appurtenances used for the collection of Domestic sewage or industrial wastes from its customer.
- 4. The word "Domestic Sewage" shall mean the normal waterborne fluid wastes from residences, commercial establishments, institutions and industrial establishments, limited to the wastes from kitchens, bathrooms, water closets, lavatories and laundries.
- 5. "Industrial Waste" shall mean the liquid wastes from industrial processes other than from domestic sewage.
- 6. "Service lateral" shall mean the customer-owned lateral, piping and fixtures located on the real property owned by the customer which for purposes of this definition shall begin at the curb line or edge of pavement or clean-out or edge of easements in grass areas, whichever is closest to the main.
- 7. "New Jersey Residential Site Improvement Standards" shall mean the standards set forth in N.J.A.C. 5:21-6.1 and 6.2 as applicable to a Municipal Utilities Authority. Where a conflict occurs between these Rates, Rules and Regulations and the New Jersey Residential Site Improvement Standards the NJRSIS shall control unless the Authority can demonstrate that such standard will not be receptive to its sewer system and/or will cause harm to its sewer system.

TIME AND PLACE OF PAYMENT

Pursuant to N.J.S.A. 40:14b-20 the Authority shall assess an annual sewer service charge to all customers. All charges for sewer service shall be paid in. advance to the office of the Authority located at 401 W. Landing Road, Blackwood, New Jersey, on a quarterly basis on January 15, April 15, July 15 and October 15, which shall be the Authority billing dates.

In those circumstances where meter readings are required to determine the annual sewer service charge of a customer, meter readings will be made quarterly on or about January 1, April 1, July 1 and October 1 and bills for metered service will be rendered as soon as practicable after the reading of the respective meters. All bills for metered service shall be due on the date of the bill.

DELINQUENT BILLS

If a sewer service charge shall not be paid on the due date, irrespective of whether or not a bill for such service shall have been received by the customer, interest shall then accrue and be due to the Authority on the unpaid balance at the rate of 18% per annum until such service charge, and the interest thereon, shall be fully paid to the Authority. The real property with regard to which such service charge was incurred shall be subject to a lien imposed as authorized by N.J.S.A. 40:14b-42, to be enforced as therein provided. The Authority shall have and may pursue all other remedies at law for collection of such service charge, and interest thereon.

CONTINUING OBLIGATION TO PAY SERVICE CHARGE

Upon connection of an improved property to the Authority sewer collection system, the obligation to pay the applicable annual sewer service charge shall commence. The annual sewer service charge shall be a continuing obligation despite the failure to occupy the property, or to use the sewer facilities, so long as the building or structure on the property is available for use, habitable, and the Authority sewer facilities remain available.

LOCAL AND STATE REQUIREMENTS

The owner of any property, located along and connected into the sewer line of the Authority shall be required to comply with and satisfy all Ordinance requirements of the Township of Gloucester, requirements of the County of Camden and the Camden County Municipal Utilities Authority and the State of New Jersey now or hereafter in effect, with regard to the disposal of sewage and waste from such property through sanitary sewers.

WRITTEN APPLICATION BY OWNER OR OCCUPIER OF PROPERTY

Applications for connection to the Authority sewer collection system shall be made by the property owner or occupier of the property or designated agent on behalf of the owner or designated agent of owner. All applications are required to be filed at the Authority office. Property is not permitted to be connected into the Authority sewer system without the filing of the appropriate application forms furnished by the Authority. All applications must receive approval of the Authority before the property owner or designated agent of owner shall make connection to the Authority sewer collection system.

The accepted application shall constitute a contract between the Authority and the applicant obligating the applicant to pay to the Authority its duly promulgated sewer connection fee and annual sewer service charge as established from time to time in accordance with applicable law and to comply with Authority rules and regulations.

A new application must also be made and approved by the Authority upon any change in use of the property or in the character of the service to be provided to the property. In such case, an additional connection fee shall be assessed by the Authority as determined by the difference between the property's present use and/or character of service and the new use or character of service created from the construction or alterations undertaken. Any change of use of character of service shall include an increase in the annual sewer service charge as determined by the Schedule of Rates set forth herein based on the change in use or character of service. Failure to make such new application shall not affect the customer's liability to pay for an increased connection fee and increase the annual sewer service charge following the change in use or character of the service provided.

All Industrial establishments making application for connection to the Authority sewage collection system shall also be required to comply with the CCMUA Sewer Use Ordinance for Industrial Pre-treatment.

PROCEDURE FOR APPROVAL OF OPERATION OF SEWERAGE SYSTEM

In order for the Authority to approve and accept for operation a sewer collection system constructed by an applicant, the Authority must submit to the New Jersey Department of Environmental Protection an approval to operate on Form WQM-005. To process this approval a certification from the Authority engineer must be filed which indicates that construction was in conformance with the approved plans and specifications. Without this endorsement, the applicant is unable to operate the constructed sewer collection system and flow into the Authority sewer system.

SEWER EXTENSIONS TO SERVICE SUBDIVISIONS, TRACTS, HOUSING PROJECTS COMMERCIAL INDUSTRIAL DEVELOPMENT

An applicant who wishes to connect into the Authority's conveyance system for service to a proposed residential subdivision or a commercial or industrial complex, shall be required to complete and file various applications for the Authority Engineer's review and recommendation of approval to the Authority Commissioners. Applicants shall refer to "Procedures for Submittal Review and Construction of Wastewater Sewer Extensions" set forth herein for guidance on this application process. All construction of wastewater piping and associated appurtenances approved by the Authority shall be completed under the inspection and surveillance of an Authority inspector to insure the installation has been completed in compliance with plans and current construction standards. No project shall commence construction of the wastewater conveyance system until all parties, including the Authority, have a stamped approved set of plans.

An applicant shall deposit a required escrow with the Authority as set forth in the Section on "Procedures for Submittal, Review and Construction of Wastewater Sewer Extensions." Said escrow shall be used to reimburse the Authority Engineer for review of all plans and specifications, any necessary legal services provided by the Authority legal counsel, and cost incurred by Authority personnel performing construction inspections and surveillance. At such time as the escrow account has been drawn down to a remaining balance of 20% of the original deposit, the applicant shall be notified in

writing and shall be required to submit additional funds to the Authority as determined necessary to continue to compensate the Authority professional staff and employees for services to continue to be rendered to the applicant beyond the original estimated escrow. Should the additional funds not be received by the Authority when the amount in the escrow account has been reduced to 10%, no further work will be undertaken by the Authority professionals or employees and no Certificate of Approval shall be issued until such time as the amount was posted as a Form "C" requirement and a balance of only 10% remains in said account, a Stop Work Order will be issued until additional funds as required by the Authority of the applicant are posted.

No wastewater shall flow into a proposed conveyance system, or its appurtenances, or partial conveyance systems, until authorized and approved by the Authority Consulting Engineer that the associated conveyance system complies with approved plans and specifications and has been tested for compliance with infiltration and vertical and horizontal alignment. Wastewater discharge to a partial conveyance system will remain the responsibility of the applicant for maintenance and/or operation of appurtenances, i.e., lift stations, until the entire system has been approved by the Authority Consulting Engineer and other appropriate Authority personnel. Upon issuance of approval by the Authority Consulting Engineer, the applicant shall furnish a two (2) year Maintenance Surety in the amount of 10% of the Authority Engineer's estimate of the construction cost. As-built plans of system, proof of title of easements and fee simple deeds and title surveys to lift stations, if applicable, shall be required to be furnished by the applicant, at its cost, in order to permit the Commissioners of the Authority to accept final operation and maintenance of the system. The Authority reserves the right to require the applicant to furnish any other documentation as may be required to insure the integrity of the system to the Authority Commissioners and the Consulting Engineer. The Authority shall not accept any system for ownership and operation in a commercial and/or industrial complex unless said system or partial system is placed into a public right-of-way.

Connections to the Sewer Authority collection system shall be made via new sewer lateral piping including new piping saddle. It is prohibited to use an existing lateral for a new connection.

For commercial and residential (with more than one EDU assessed) properties, any abandoned connection with no payment of quarterly fees will be considered vacant after two (2) years and a new connection will be required. Any unused connections will need to be properly abandoned prior to acceptance of new connection. The only exceptions include fire or other circumstance formally approved by Board resolution.

COMPLAINTS

Complaints by customers with respect to the character of the service furnished by the Authority, or pertaining to bills rendered for services shall be made in writing to the Authority's office. A record of such Complaint will be kept by the Authority for one year, noting the name and address of the Complainant, the date of the Complaint, the nature of the Complaint, the investigation of the Complaint, and the decision rendered by the Authority on any response or remedy.

REASONABLE ACCESS

The Authority through its duly authorized employees and/or agents shall have the right of access to buildings at reasonable hours for any purpose which is proper and necessary in the conduct of the Authority's business. An employee or agent of the Authority shall only enter buildings upon permission

of the owner or occupant, or the authorized agent of said owner or occupant, and in the presence of the owner, occupant or agent of the owner/occupant If access to a building is refused, no entry shall be made unless through the office of an appropriate Township official or through the issuance of a Court Order. Where sewer easements and/or sewer lines are located and exist across private property, duly authorized Authority, personnel and/or its agents shall have the right of access onto said property for inspection, maintenance and repair, of said sewer lines.

NO ORAL AGREEMENTS

No employee, agent or personnel of the Authority has a right to enter into any promise, agreement or representation with a customer or any other person unless authorized and approved by a Supervisor of the Authority or the Commissioners of the Authority, so long as much authorization or approval is not in violation of the Authority rules and regulations.

AMENDMENT TO RULES AND REGULATIONS

The Authority reserves the right to revise or amend the Rules, Regulations and the Rates as deemed necessary and appropriate and in accordance with law.

AUTHORITY SERVICE LINE

The Commissioners of the Authority will permit proper connections to its wastewater conveyance system subject to submittal and approval of appropriate applications and payment of all fees incurred by the Authority professional-staff and inspection department as set forth in these rules and regulations. The Authority will maintain laterals from the conveyance mains that are within dedicated public rights-of-way. Said lateral maintenance limits shall be from the main to the clean-out, which shall be set two (2) feet from the rear of the curb or where there is no curb, within two (2) feet of the edge of the roadway. No service shall be constructed within three (3) feet of any other utility service, nor beneath any driveway or apron. A four (4) inch service lateral shall not service more than one (1) dwelling, nor commercial or industrial facility of greater than 5,000 square feet. All service laterals shall comply with ASTM D 2241, PVC Pipe, SDR 26 or 35 and shall include a back check cleanout valve as specified in the standards construction details for below grade service laterals. In addition, the applicant shall also secure and pay for any and all permits issued by an Municipality, County or State related to the opening and restoration of the street, highway or sidewalk where said service laterals are to be located.

CONNECTION PERMITS

Sewer connection permits are required to be obtained by an applicant prior to the physical connection of any structure/building into the Authority sewer collection system. Failure to pay for and obtain connection permits prior to the physical connection shall be cause for termination of the connection and assessment of a penalty of \$250.00 per day per building/structure connected in violation of the Authority rules and regulations.

A connection fee is required to be paid to the Authority for each connection permit issued prior to issuance of permit. This fee is calculated by the Authority pursuant to N.J.S.A. 40:14-22.

The Authority will consider on a case by case basis a payment schedule to satisfy the payment of its connection fee. Such payment schedule will only be applicable to single residential lot owners. In order for an individual residential lot owner to obtain an installment connection fee payment, a written

petition shall be submitted to the Authority setting forth the reasons for said request. The request will be held as confidential and only released to the Authority Commissioners and professional staff for review. The applicant shall then appear at an Authority meeting to discuss the Petition for installment payments and to answer any inquiries or concerns of the Commissioners relating to said request. Approval for installment payments of the connection fee will only be granted upon a demonstrated financial hardship. A decision by the Commissioners to authorize an installment connection fee payment shall be based on a three-year quarterly payment schedule, with payments to be made in equal amounts per quarter. Failure to make the payments as required will be cause for rescission of the connection fee payment schedule and the entire amount of the connection fee shall immediately become due and owing to the Authority. All other terms and conditions for an installment connection fee payment shall be set forth in a Connection Fee Payment Agreement to be signed by the applicant and the Authority. A form of the Connection Fee Payment Agreement is on file at the Authority office.

All connection permits issued by the Authority shall expire two (2) years from the date of issuance. Renewal of said permits not utilized within the two (2) year time limit shall be required and if any increase in the sewer connection fee has occurred, the difference shall be assessed to the permit holder. In addition, an administrative handling fee shall be charged in the amount of \$100.00.

In the event a property owner does not obtain a sewer connection permit as required by the Authority rules and regulations and further occupies a building which has connected or should have connected into the Authority sewer collection system, said property owner shall then be assessed sewer service charges from the date a temporary or permanent certificate of occupancy was issued for the building.

MAINTENANCE AND RESPONSIBILITY OF SERVICE LATERAL BY CUSTOMER

All connections, service laterals and fixtures (such as riser, pipes, sewer vents, clean-outs/back flow device, frames and covers, and trap or tee); installed by the customer shall be maintained by him in good order, and all piping and connections furnished and owned by the Authority and on the property of the customer, shall be protected appropriately and cared for by the customer. All leaks in the service lateral or any other type of fixture in or upon the premises served, must be repaired immediately by the owner or occupant of the premises. The customer shall be responsible for notifying the Authority of the person engaged by said customer to do any maintenance work in the customer service lateral prior to the work being performed. All work not acceptable to the Authority shall be immediately removed and replaced by work which is acceptable.

The customer owns all service laterals, lines, fixtures and appurtenances located on the customer's property from curb line to inside home. The Authority is not liable or responsible for maintaining or repairing any portion of the service lateral on the customer's property including cleanout/riser or for any damage caused by said service lateral, lines, fixtures or appurtenances. The customer shall at all times, comply with all applicable Municipal regulations with respect to the maintenance and repair to service laterals, lines, fixtures and appurtenances on the customer's property and make any changes or improvements thereto required by reason of changes of grade, relocation of mains or otherwise. See AUTHORITY SERVICE LINE for MUA limit of responsibility.

REPLACEMENT OF SERVICE LATERAL

Where the replacement of the service lateral from the main to the curb or cleanout is found to be necessary, the Authority will renew the service in the location as previously used. If the property owner, for their own convenience, desires a new service lateral at some other location, that property owner shall agree to pay all expenses of such relocation to the main.

PROPERTY SERVICED BY SINGLE SERVICE LATERAL

A service lateral from the main to a property shall not serve more than one property, but any such property upon proper application of the owner may be served by two or more service laterals, which will require an additional permit to be issued by the Authority. Properties with multiple connections shall require Hold Harmless agreements with the Authority.

PROHIBITED CONNECTIONS

Under no circumstances shall any of the following appurtenances be permitted to discharge directly or indirectly, into the Authority sewer collection system:

- a. Rain conductors and/or downspouts
- b. Grease pits from auto repair facilities
- c. Stormwater inlets, catch basins, groundwater underdrains, sump pumps, floor drains, pool pump backwash/drains and/or yard drains

SEWER AVAILABILITY - MANDATORY CONNECTION

All existing structures adjacent to and within 200 feet of an Authority sewer collection line and which have sanitary facilities are considered to have sewer service available and are required to connect into the Authority sewer collection system pursuant to the Township of Gloucester mandatory sewer connection Ordinance. The determination if a structure is within 200 feet is made by measuring from the curb line adjacent to the Authority sewer collection line to the closest point of the existing structure.

If the location of a structure adjacent to an existing sewer collection line is less than 200 feet, but the elevation of the Authority's line prevents the customer from using a gravity flow, the customer shall install a lift pump or other means' approved by the Township Plumbing Inspection Department to make the connection into the Authority's sewer line. Maintenance of the lift station and force main shall be the responsibility of the customer and a Hold Harmless Agreement will be provided to the Authority.

Units which are constructed adjacent to an existing Authority sewer collection line but are located beyond 200 feet by measuring from the curb line to the closest point of the proposed structure, shall not be considered to be within the parameters of the Township mandatory sewer connection Ordinance.

INDUSTRIAL WASTE

Agreement Required - The Authority will accept industrial waste into its sanitary sewer collection system upon an appropriate application being filed with the Authority by the proposed, industrial user, which application shall meet the Authority's requirements for receiving such waste. Furthermore, any

such applicant shall also be required to file an application with the CCMUA and obtain an industrial waste permit from that entity.

Prohibited Waste - Industrial wastes prohibited from entering into the Authority sewer collection system are set forth on the attached Sewer Use Ordinance.

Preliminary Treatment - The Authority reserves the right to require preliminary treatment of any industrial waste to insure the protection of the integrity of its sewer collection system. This requirement is in addition to any limitations established by the CCMUA for receipt and treatment of industrial waste. A determination as to whether or not preliminary treatment is required shall be made by the Authority Consulting Engineer and Superintendent based on the chemical characteristics of the applicant's industrial waste to be disposed into the Authority sewer collection line. An equalization facility may be required for any discharge in excess of two (2%) percent of the rated capacity at any point of the conveyance system from the industrial site to the Chews Landing Authority complex. Plans and specifications of the proposed preliminary treatment system shall be submitted to the Authority Consulting Engineer and Executive Director for review and recommendation of approval to the Authority Commissioners. All preliminary treatment or flow equalization facility shall be owned and maintained by the applicant. Any cost of sampling and analysis to insure compliance with the terms of an approval granted by the Authority shall be the responsibility of the industrial user, however, the Authority shall be the party to conduct the physical sampling and testing through a certified independent laboratory. Furthermore, any approved industrial user must furnish a monitoring manhole accessible to Authority personnel and which has been constructed in accordance with Authority requirements.

Upon approval of an industrial user connecting into the Authority sewer collection system, the Authority shall issue a Industrial Discharge Permit to said user establishing any and all effluent limitations, monitoring requirements and other special conditions. In the event the Authority determines that any of the conditions of approval set forth in the permit have, been violated, the Authority has the immediate right to inspect the permitted party facilities to investigate the cause of such violation. The permitted party shall be given 30 days to correct said violation. In the event said violation is not corrected within the 30 day time period, or such additional time as may be provided by the Authority, then the Authority has the right to terminate the connection of the permitted party into the Authority sanitary sewer collection system or take corrective action to cure the violation and assess the cost of any corrective action to the permitted party. Furthermore, in the event said violation is not corrected within such additional time as provided by the Authority, the permitted party shall be assessed a minimum penalty of \$100 per day of continued violation.

The Authority is also required to meet all standards and conditions established by the CCMUA for discharge of industrial effluent at the CCMUA wastewater treatment facility in Camden. In the event the Authority receives notice of violation and/or penalty assessment from the CCMUA relating to its industrial discharge into the CCMUA wastewater treatment system, the Authority shall have the right to inspect permitted party facilities to investigate the cause of such violation and penalty assessment. In the event such inspection and investigation indicates that the violation of the CCMUA industrial pretreatment standards has been caused by the permitted party, then the permitted party shall immediately correct and remedy the problem within the time period set forth in the Notice of Violation from the CCMUA. The permitted party shall be responsible for any penalty assessed to the Authority for such violation. Upon receipt of notice from the Authority of the amount of the penalty assessed to the Authority for such violation. Upon receipt of notice from the Authority of the amount of the penalty assessment, the permitted party shall have 30 days to make said payment to the Authority. In the event

corrective action is not undertaken by the permitted party and/or the payment is not made as required, the Authority shall have the right to terminate the connection of the permitted party into its sanitary sewer collection system, and to seek payment of any costs incurred by the Authority to correct the violation and monies paid for the penalty assessment through an action filed in the Superior Court.

The permitted party shall be responsible for payment of all costs related to any action undertaken by the Authority to obtain payment, including all reasonable attorney's fees. Furthermore, separate civil penalties may be imposed up to \$50,000 per day for violations of N.J.S.A. 58:10a-l et seq. (the New Jersey Pollution Control Act), if applicable, and criminal penalties may be imposed of up to \$250,000 per day of violation in a criminal matter for such violation as established by law.

CONSTRUCTION METHODS AND MATERIALS

All construction methods and materials shall be in complete compliance with the contents of the Authority's "Standard Construction Details" or as deemed appropriate by the Authority Consulting Engineer or Executive Director. A copy has been attached to these rates, Rules and Regulations. Copies of this package can be obtained from the Authority's website (www.gtmua.com).

ADDITIONAL CONSTRUCTION REQUIREMENTS

Any underdrains, which shall be installed, shall not be closer than five feet laterally from sanitary sewer lines and shall not be connected to the sanitary sewer line.

When the Authority installs new sewer lines to extend, the sewer collection system, the Authority at such time will provide the existing residential dwellings and commercial buildings along such sewer lines with a lateral into which a connection shall be made, which shall be at no cost to the property owner. The lateral shall extend from the sewerage main to the curb line. Notification will be given to the properly owner to provide a mark-out at the curb line where the proposed sewer lateral is to be located to service said property. If a mark-out is not provided by the property owner, the Authority shall locate the sewer lateral at its discretion. If the sewer line is installed in the sidewalks area, the Authority will provide an appropriate connection for the property owner's convenience.

The maximum distance, that the Authority will allow between any sanitary sewer manholes is 400 feet regardless of the size of the sewer line or the depth of the manholes.

All construction activities within the Township must notify New Jersey One Call prior to commencing any work.

RATES

1. Charges for sewer service - The Authority shall assess an annual sewer service charge which shall be calculated pursuant to N.J.S.A. 40:4b-22. The charge shall be assessed for each Equivalent Domestic Unit (300 GPD per EDU) connected into the Authority sewer collection system. The sewer service charge shall be payable in quarterly installments in advance due January 15, April 15, July 15 and October 15. Payments shall be mailed to the Gloucester Township MUA, P.O. Box 216, Glendora, New Jersey 08029, or by delivery in person to the Authority Administration Building between 9:00 a.m. and 4:00 p.m. Monday through Friday. The number of Basic Service Units assigned to a particular type of building and/or use is set forth on the "Sewer Service Rate Schedule" schedule attached hereto.

- 2. Connection Fees The Authority shall assess a connection fee to all properties which shall connect, directly or indirectly, into the Authority sewer collection system. The connection fee shall be calculated on an annual basis in accordance with N.J.S.A. 40:14b-22. The connection fee for each Equivalent Domestic Unit (300 GPD per EDU) shall be per current resolution. The total number of Equivalent Domestic Units assigned and/or assessed shall be in accordance with NJAC 7: 14A-23.3 Project Flow Criteria set forth on the "Sewer Connection Fee Schedule" schedule attached hereto. The total number of Equivalent Domestic Units assigned and/or assessed shall be rounded up to the nearest whole number.
 - 3. The Authority's current Connection Fee is: \$1,600 per EDU
- 4. Authority charges can only be removed upon request by Owner and inspection and approval of the Authority. Charges will be assessed and are payable up to the date of inspection.

SEWER CONNECTION AND RATE FEE SCHEDULE (Page 1 of 3)

TYPE OF USE	MEASUREMENT <u>UNIT</u>	SERVICE FLOW GALLONS PER DAY/ MEASUREMENT UNIT
Dwellings (single family home, duplex units, townhouses, condominiums, apartments)	Per unit	300
Transit dwelling units		
Hotels	Bedroom	75
Lodging houses and tourist homes	Bedroom	60
Motels and tourist cabins	Bedroom	60
Boarding houses (max. permitted occupancy	y) Boarder	60
Camps		
Campground/mobile rec. vehicle/tent	Site	100
Parked mobile trailer site	Site	200
Children's camps	Bed	50
Labor camps	Bed	40
Day camps - no meals	Person	15
Restaurants (including washrooms and turnover)	
Average restaurant	Seat	35
Bar/cocktail lounges	Seat	20
Fast food restaurant (no dishwasher)	Seat	15
24 hour service restaurant	Seat	50
Curb service/drive - in restaurant	Car space	50
Dinner Theater	Seat	20
Catering/Banquet Hall	Person	20
Clubs		
Society or Service Building	Site	300
Residential	Occupancy Load	15
Nonresidential	Occupancy Load	15
Racquet club	(per court per hour)	80
Fitness with shower	Occupancy Load	25
Fitness without shower	Occupancy Load	10
Institutions (includes staff)		
Hospitals and Assisted Living Facilities	Bed	175
Other institutions (i.e. surgical centers, etc.)	Bed	173
Schools (includes staff)	Bed	123
No shower or cafeteria	Student	10
With cafeteria	Student	15
With cafeteria and showers	Student	20
With cafeteria, showers and laboratories	Student	25
Boarding	Student	75
Gymnasium	Per	600
Automobile service stations P	er filling position/Per bay	125

SEWER CONNECTION AND RATE FEE SCHEDULE (Page 2 of 3)

TYPE OF USE	MEASUREMENT <u>UNIT</u>	SERVICE FLOW GALLONS PER DAY/ MEASUREMENT UNIT
Service bays	Per bay	50
Minimarket	Sq. Ft.	0.100
Carwash		Demonstrated Usage
Miscellaneous Office buildings and Warehouses (gross area	a) Sq. Ft.	0.100
Stores and shopping centers (gross area)	Sq. Ft.	0.100
Factories/Industrial Facilities (add process wastewater) With showers, (add process wastewater)	Employee Employee	25 35
Laundromats	Per machine	580
Bowling alleys	Alley	200
Picnic Parks (restrooms only)	Occupancy Load	10
Picnic Parks with showers	Occupancy Load	15
Fairgrounds (based upon average attendance	e) Person	5
Assembly halls	Seat	3
Airports (based on passenger use)	Passenger	3
Churches (worship area only)	Seat	3
Theatre (indoor)	Seat	3
Sports stadium	Seat	3
Visitor Center	Visitor	5
Floor Drain/Floor Sink/Hub Drain	Floor Drain/Floor Sink Or Any Part Thereof	150
Grease Trap	Grease Trap Or Any Part Thereof	300

SEWER CONNECTION AND RATE FEE SCHEDULE (Page 3 of 3)

TYPE OF USE	MEASUREMENT UNIT	SERVICE FLOW GALLONS PER DAY/ MEASUREMENT UNIT
Beauty Parlor/Barber Shop/Nail Salon	2 Chairs or Any Part Thereof	300
Facilities contained in multiple dwelling unit structures wherein separate laundry rooms are provided to residents thereof and said laundry equipment is coin operated		
For each 2 washers of not more than 12 lb. capacity For each washer over 12 lbs. capacity	1 unit 1 unit	300 300
Bakery (with baking facilities)	2 units	600
Club House	Sq. Ft.	0.100

Note:

The Authority reserves the right to modify measurement units and/or service flow based on information provided by the Applicant/Owner or as recommended by the Authority Consulting Engineer.

Interior Plumbing Plans may be required for any application. Additional EDUs may be required as a result of the proposed plumbing improvements.

Basic Service Unit:

When in the discretion of the Authority a contract payment method for sewer is equitable, the following schedule of rates shall govern. This does not apply to residential uses.

Minimum rate of any contract payment shall be \$46.00 per quarter or \$184.00 per year. Rates are subject to change.

Rates will be assessed starting with issuance of Certificate of Approval (CA).

The annual sewer service charge for apartment units shall be billed as of the first occupant in the apartment building.

Schedule of Rates for Commercial and Industrial Sanitary Sewerage Service:

- a. Rates will be assessed starting with issuance of Certificate of Approval (CA).
- b. Each Commercial and Industrial user of the sewer system shall pay a quarterly rental according to schedule 1 or on a contract basis in accordance with the following paragraphs of Schedule 2 or Schedule 3 & 4.
- c. In cases where users using the sewer system have sources of water supply other than, or in combination with water supplied through an approved meter source, such dwellings and establishments shall provide a meter on the other sources of supply. The total amount of water consumed, as shown by the sum of all meter readings, shall be used as the basis for computation of the sewer rent pursuant to Schedule 3.
- d. In cases where industrial users using the Sewer System use water supplied from any source, and the water so supplied is not entirely discharged into the Sewer System, the amount of water consumed, to be used as a basis for the computation of the sewer rent pursuant to Schedule 2(a) and applicable use of Schedule 1 shall be determined by any of the following methods:
 - 1. The industrial user, at his own expense, shall install a meter or measuring device approved by the Authority on his sewer connection with the Sewer System and the readings from his meter or measuring device shall be used in computing the sewer rent.
 - 2. The industrial user, at his own expense, shall install a meter or measuring device approved by the Authority on the effluent not discharging into the sewer system and the readings from this meter or measuring device shall be deducted from the readings of all water meters and the remainder shall be used in the sewer rent.
 - 3. If the Authority shall decide it is not practicable to install a meter or measuring device to determine the quantity of water not discharged into the sewer system, the Authority will determine in such manner and by such method as it may be prescribed the percentage of metered water discharged into the sewer system, and the quantity of water used to compute the sewer rent shall be that percentage so determined of the total quantity measured by the water meter or meters.

ADDITIONAL CHARGE FOR TREATMENT OF INDUSTRIAL WASTES

The sewer rent for collection and treatment of industrial wastes discharged into the Sewer System shall be based upon a premium charge for extra strength waste applied as a factor against the charges for Sanitary Sewerage. The premium charge to be based on the strength factor determined according to the following formula:

Factor
$$\% = 44 + 23 (BOD in PPM) + 31 300$$

- * Where these figures are less than 300 PPM in B.O.D. or 350 PPM in suspended solids or 15 PPM in Chlorine demand, the value in the parenthesis shall be equal to "1".
- ** In cases where the suspended solids, in the opinion of the Authority do not represent the true characteristics of the solids loading, the Authority reserves the right to use total solids instead of suspended solids.

PUBLIC SWIMMING POOLS BACKWASH

Discharge of water from swimming pools backwash will not be allowed unless Authorization is issued by the Authority. Written request for Authorization should be made to the Authority including sufficient data for review by the Authority Engineer. A review escrow may be required on a case by case basis. A rate schedule may be established by the Authority based on Authorization requirements. Failure to comply will result in fines or penalties.

No swimming pools shall be emptied into the Authority collection system.

COMPOSTING FACILITY CURRENT RATE SCHEDULE Rates subject to change

GRASS TIPPING FEES	LEAVES TIPPING FEES
\$8.00/Yard for Townships & Boroughs	\$3.00/Yard for Camden County Townships & Boroughs
	\$3.50/Yard for Other Townships & Boroughs
\$10.00/Yard Landscaper - *Min. 1 Yard	(October–April)
	\$4.00/Yard for Other Townships & Boroughs
	(May-September)
	\$5.00/Yard Landscaper - *Min. 2 Yards

COMPOST & TOPSOIL DELIVERY CHARGES TOWNSHIP RESIDENTS & BUSINESSES

DELIVERY PRICES		
3 – 4 Yards = \$30.00/Delivery		
5 - 8 Yards = \$35.00/Delivery		
*15 - 30 Yards = \$50.00/Delivery (*15, 20, 25, & 30 Yards)		

COMPOST & TOPSOIL DELIVERY CHARGES OUT OF TOWN

DELIVERY PRICES	DELIVERY PRICES
(<u>UP TO 15 MILES</u>)	(<u>BETWEEN 16 - 30 MILES</u>)
3 Yards = \$50.00/Delivery	3 Yards = \$70.00/Delivery
5 - 7 Yards = \$60.00/Delivery	5 – 7 Yards = \$80.00/Delivery
*15 - 30 Yards = \$100.00/Delivery	*15 - 30 Yards = \$140.00/Delivery
(*15, 20, 25, & 30 Yards)	(*15, 20, 25, & 30 Yards)

All sales are final.

CONTRIBUTIONS FOR IMPROVEMENTS

In appropriate situations, as part of the approval process, the Authority shall require an applicant to pay a proportionate share of the cost to upgrade or improve the Authority sewer collection system. Such a contribution shall be required where the system upgrade or improvement is required in order to accommodate, wholly or in part, an allocation of sewer capacity by the Authority to the applicant. As a condition of approval, the applicant shall be required to execute a Contribution Agreement with the Authority which will set forth the terms and conditions of the payment to be made. The amount of the prorata share contribution shall be determined by the Authority Consulting Engineer based on the actual and/or estimated cost of the system upgrade or improvement and the benefit the applicant will receive from the system upgrade or improvement. The cost shall then be assessed on a gallons/per day calculation or as determined by the Authority Consulting Engineer.

In such an event that an applicant shall enter into an Agreement with the Authority to pay the cost of a system upgrade or improvement higher than its pro-rata share, said Agreement shall provide for reimbursement to the applicant for a Term (as formally agreed upon by the Authority for a period of no less than five (5) years, not to exceed twenty (20) years) as other properties similarly benefited from the upgrade or improvement apply for connection into the Authority sewer collection system. The reimbursement formula shall be set forth in the Agreement with the applicant.

DESIGN CALCULATIONS

For design, the current design criteria set forth in NJAC 7: 14A-23.3 - Project Flow Criteria shall be used. Substitute criteria may be used at the discretion of the Authority Consulting Engineer.

OTHER FEES AND CHARGES

- 1. The charge for the TV equipment shall be \$125.00 per hour on regular working days. A rate of \$175.00 per hour will be charged after 4:30 p.m. and on weekends.
- 2. The charge for the jet machine will be at a rate of \$175.00 per hour for work in the Township, no minimum. An overtime rate of \$250.00 per hour with a four (4) hour minimum shall be charged after 4:30 p.m. and on weekends.
- 3. The charge for the jet machine to be used outside of the Township will be at a rate of \$250.00 per hour, with a minimum of four (4) hours. An overtime rate of \$325.00 per hour with a minimum of four (4) hours shall be charged after 4:30 p.m. and on weekends or holidays.
- 4. The charge for a Service Call on weekdays will be at a rate of \$85.00 per hour. The charge for rodding a service lateral on weekdays will be at a rate of \$85.00 per hour. From 4:30 p.m. on Friday, Saturday, Sunday and all legal holidays, the charge for service calls and rodding of service laterals will be at double time, plus a minimum of four (4) hours.
- 5. The Authority shall assess a charge of \$32.00 for the issuance of a dishonored check.

REIMBURSEMENT FOR CLEAN-UP COST OR DAMAGE

Repair or Clean-Up and Removal Costs - All cost associated with damage to the Authority sewer system and/or property or all cost associated with a discharge caused from the Authority sewer system, which shall include labor and material for the repair and/or clean-up and removal of the discharge as well as taking reasonable measures to prevent or mitigate damages to the public health, safety or welfare of the Township of Gloucester, including the lands, private and public, therein.

<u>Person</u> - Any individual, public or private corporation, companies, associations, societies, firms, partnerships or joint stock companies or limited-liability companies.

Assignment of Liability - Any person who shall cause damage to the Authority sewer system and/or property or cause a discharge from the Authority sewer system shall be liable for all repair costs or clean-up and removal costs incurred by the Authority or its agents and employees.

Assessment of Costs - The Authority shall assess to any person causing damage to the Authority sewer system or property and/or causing a discharge from the Authority sewer system the total cost for the repair and/or clean-up and removal. Said assessment shall be made to the person causing same within ten (10) days of completion of the repairs and/or clean-up and removal costs. The person so assessed shall have 30 days to make payment to the Authority. A failure to make payment within said 30 day time period shall be cause for the Authority to seek payment from said person through all legal means available to it, including the filing of suit for collection of the costs due and owing. In the even a suit is filed to recover the assessment of the cost, the person shall also be responsible for all attorneys fees and Court costs incurred in the collection of the assessed amount due and owing.

AMENDMENT TO RULES AND REGULATIONS

The Authority reserves the right to revise or amend the Rules, Regulations and the Rates as deemed necessary and appropriate and in accordance with law.

SANITARY SEWER CONNECTIONS CHAPTER 98

SANITARY SEWER CONNECTIONS CHAPTER 98

ξ 98-1.	Definitions
ξ 98-2.	Owner to make connection
ξ 98-3.	Work and material specifications; conformance with Plumbing Code
ξ 98-4.	Notification to make connections
ξ 98-5.	Service of notice
ξ 98-5a.	Unpaid change to become lien upon premises or property
ξ 98-6.	Violations and penalties
ξ 98-7.	When effective

[HISTORY: Adopted by the Board of Health of the Township of Gloucester 1-9-63. noted where applicable]

General References

Municipal Utilities Authority - See Ch. 21

Uniform Construction Codes - See Basic Uniform Building Code (BOCA) Swimming Pools - See Ch. 75

Cesspools and privies - See Ch. 85

Nuisance Code - See Ch. 92

Be it ordained by the Township Council of the Township of Gloucester, in the County of Camden, State of New Jersey, as follows:

ξ 98-1. <u>Definitions</u>

As used in this Ordinance of the Township of Gloucester, in the County of Camden, New Jersey unless a different meaning clearly appears form the context, the following words shall have the following meanings:

<u>BUILDING</u> - Any building or structure heretofore or hereafter constructed and designed or used for dwelling purposes, either temporary or permanent or other use or occupancy by persons.

<u>CONNECTION DATE</u> - When used with respect to a building constructed prior to the date of initial operation as a part of any sanitary sewage treatment and disposal system in the Township owned or operated by the Township or the Gloucester Township Municipal Utilities Authority, of a sewer in the public street upon which said building is located, the 730th day next ensuing after said date of initial operation, and when used with respect to a building constructed after the date of initial operation, as a part of any sanitary sewage treatment and disposal system owned or operated by the Township or said Authority, of a sewer in the public street upon which said building is located, means the 60th day after the date of completion of construction or the date of initial occupancy of said building, whichever of said dates shall be earlier in point of time. [Amended 9-8-80 by Ord. No. 0-08-29.]

<u>SEWER</u> - Any sewer or main designed or used for collection or disposal of sanitary or sewerage disposal of sanitary sewage within the township.

ξ 98-2. Owner to make connection

The owner of each property along the line of any sewer now or hereinafter constructed in the Township shall connect each building on such property with a sewer prior to the connection date with respect to said building.

ξ 98-3. Work and material specifications conformance with Plumbing code²

Every connection required by this ordinance shall be made with soil pipe of cast iron, caulked and leaded, extending from inside the building foundation to a sewer or to a point which is not less than five (5) feet outside of said foundation and connection therefrom to a sewer with soil pipe of asbestos cement or other approved fiber or synthetic material with slip joints or rubber gaskets. All soil pipes shall not be less than four (4) inches in diameter, and every connection required by this ordinance shall be made in a manner to discharge into said sewer all sanitary sewage originating the building, and in all other respects as required by any Plumbing Code adopted by the Township.

ξ 98-4. Notification to make connection

Upon receipt by the Township of notification from the said Gloucester Township Sewerage Authority or from the Township that any sewer is available to serve buildings on any properties in the Township, the Gloucester Township Municipal Utilities Authority shall order each owner of property along the line of said sewer to connect each building on such property within the terms of this ordinance.

ξ 98-5. Server of notice

The Gloucester Township Municipal Utilities Authority shall designate one (1) of its proper offices to give notice to the owner of property with respect to which an order is issued pursuant to ξ 98-4 of this ordinance. Such notice shall be addressed to the owner of said property as the name of said owner appears in the last tax duplicate of the Township of Gloucester.

The notice shall describe the property by lot and block designation as the same appears on the Tax Map of the Township of Gloucester and by the street address if a street address exists and shall state that by order of the Township of Gloucester the owner is required to connect each building on said property with a sewer in accordance with the terms of the ordinance[on or before the connection date with respect to such building, or if such connection date shall have passed, within thirty (30) days after service of such notice as hereinafter provided, and said notice shall also describe the penalty which may be imposed hereunder for failure to comply with said notice and order in accordance with the terms of this ordinance. Said notice may be served on the owner personally or by leaving it as his usual place of abode with a member of his family above the age of eighteen (18) years. Said notice may also be served within or without the limits of the Township of Gloucester by mailing the same by registered mail to the last known post office address of said owner as the same appears on the last tax duplicate of the Township of Gloucester.

ξ 98-5a. Unpaid charge to become lien upon premises or property

Said rentals service charges and readiness-to-serve charges shall be payable to the Collector as specified herein and shall be and remain until paid[a lien upon the premises where such sewer is connected or made available[the same as taxes upon real estate and the said township shall have the same remedy for the collection of said rentals, service charges and readiness-to-serve charges with interest costs and penalties as fixed by the Township Council as the said Township has under the law for the collection of taxes upon real estate.

ξ 98-6. <u>Violation and penalties</u>ⁿ

Any person or corporation who shall not comply with any order issued in accordance with the provisions hereof within thirty (30) days after notice by the proper officer of the Gloucester Township Municipal Utilities Authority as hereinabove provided shall upon complaint by the secretary of the Gloucester Township Sewerage Authority or any other person and upon conviction[forfeit and pay a fine of not more than five hundred dollars (\$500.00) or imprisonment for a term of not exceeding ninety (90) days, or both, in the discretion of a court of competent jurisdiction.

S 98-7. When effective

This ordinance shall take effect as provided by law after its final passage and publication according to law.

ⁿEditor's Note: This section amended upon adoption of the Code. See Chp.l, General Provisions, Article 1, Adoption Code.

Editor's Note: On 12-4-63 it was resolved by the Board of Health of the Township of Gloucester that all fees for the inspection of connections made between the sewer mains and the residences or other structures intended to be served which fee amounts to the sum of four dollars (\$4.00) for each inspection should thereafter be paid to the Tax Collection of the township.

²Editor's Note: See Ord. No. Q-83-26A.

GLOUCESTER TOWNSHIP MUNICIPAL UTILITIES AUTHORITY PROCEDURES FOR SUBMITTAL, REVIEW AND CONSTRUCITON OF WASTEWATER SEWER EXTENSION

GLOUCESTER TOWNSHIP MUNICIPAL UTIUTIES AUTHORITY PROCEDURES FOR SUBMITTAL, REVIEW AND CONSTRUCITON OF WASTEWATER SEWER EXTENSION

1.0 GENERAL PROVISIONS

Persons proposing major subdivisions or residential, commercial or industrial developments requiring a sewer extension shall prepare applications described in these procedures with necessary supporting documents. The policy of the Authority is to permit extensions only when paid for and installed by the requester. No facilities of collection, or disposal of sewage within the boundaries of Gloucester Township shall be constructed unless the Authority Engineer shall approve plans and specifications therefore.

It is the policy of the Authority to charge fees for connection to its sewer system utilizing the rates, established by the Authority at the time.

Any main extension and related facilities installed under the provision of this section shall be transferred to the Authority as hereinafter described.

During construction but before final acceptance, the Authority shall have the right to use any completed portion of the system without waiving its right to further inspection or testing or to order correction of any defects.

Use of the sanitary sewer system for the discharge of sump pumps, or drainage from cellar drains, leaders, downspouts, drainage title, and developers sump pits shall be prohibited.

These general provisions are and shall be subject to the existing contractual obligations outstanding.

2.0 APPLICATION-GENERAL

Sequential applications for sewer extensions are required, for the Authority's determination of needs, availability of service, effect or proposed extension, and inspection of installed extension. Application forms are available from the Authority. No application will be considered unless' a Professional Engineer that is registered in the State of New Jersey is in charge of the planning and design of the proposed sewerage facilities and affixed his seal and signature thereto. Each application shall be submitted in duplicate with the designated fee to the Authority not less than 30 days prior to the Authority meeting at which action on the application is desired.

All fees accompany applications shall be certified check or other draft at the option of the Authority.

3.0 APPLICATION FOR FEASIBILITY

An application describing the proposed major subdivision or development shall be submitted to the Authority with supporting detail to determine the economic and technical feasibility of connecting to the Authority's sewerage system. The Authority may defer or waive certain parts of this supporting data at its discretion where the cost of data preparation is not commensurate with the development planning and approvals.

3.1 FORMS AND SUPPORTING DATA

FORM A: "APPLICATION FOR REPORT ON FEASIBILITY OF PUBLIC SEWER"

In addition to preparation and submission of the application, the applicant shall furnish a general location plan showing streams, streets, blocks, lots, and tax maps numbers, location of any existing sanitary system in the area, proposed system outline and route of construction, and a projected volume of flow in accordance with NJDEP standards and current revisions.

Note to Applicant: The applicant, without approval of the Authority can not change the submitted name of the proposed major subdivision or development review.

3.2 FEE

Application will be accompanied by a fee of \$1,500.00. The Authority reserves the right to require an escrow for extraordinary review costs starting at \$2,000.00.

3.3 ACTION BY AUTHORITY

The Authority shall analyze the submitted application and supporting data and report to the applicant the Authority's recommendations and conditions for future approvals.



Gloucester Township Municipal Utilities Authority Landing Road, Chews Landing P. O. Box 216 Glendora, New Jersey 08029 856-227-8666

FORM A: APPLICATION FOR REPORT ON FEASIBILITY OF PUBLIC SEWER

Purpose: To determine the economic and technical feasibility of extending Public sewer service to the Municipal System.

This Is Not A Commitment For Sewage Availability.

FEE: \$1,500.00 (Check should be made payable to GTMUA)

In the event that the cost of review shall be more than the fee, the applicant shall pay the additional cost prior to final approval by the Authority. The Applicant shall establish an escrow of \$2,000.00 if deemed necessary by the Authority. Check shall be made payable to the GTMUA but shall be separate from filing fee. Any excess escrow fees will be returned to applicant.

1. Applicant:	Name		
	Address		
	Phone		
2. Project to be s	ervices:		
Name			
	Tract		
No. of Lots	Tax Map Plate	Block	Lot
Type: (Chec	k One) Single Family	Townhouses	_ Other
	Commercial	Apartments	
3. Professional E	Ingineer Designing Sewe	r System	
Name			
Telenhone			



Gloucester Township Municipal Utilities Authority Landing Road, Chews Landing P. O. Box 216 Glendora, New Jersey 08029 856-227-8666

4. Description of Proposed System							
5. Supporting Data							
A.	General Location plan showing streams, streets, Blocks, Lots & Tax Map Numbers. (Two Copies)						
В.	Proposed system outlines and route of construction						
C.	Proposed volume of flow in accordance with NJDEP standards and current revisions						
	Signature of Applicant Date						
D.	Flow study may be required by Authority Consulting Engineer or Executive Director						
<u>1</u>	DO NOT WRITE BELOW THIS LINE: GTMUA USE ONLY						
Date Applic	ation Received Amt. Of Check						
	Signature of GTMUA						
Action by A	authority						
Feasibility:	Feasible Not Feasible Letter Issued - Date						

4.0 APPLICATION OF PRELIMINARY APPROVAL

4.1 PURPOSE OF APPLICATION

An application and supporting data specifying the engineering details of the proposed project will be analyzed for compliance with Authority engineering standards including provisions for orderly growth.

4.2 FORMS AND SUPPORTING DATA

FORM B: "APPLICATION FOR PRELIMINARY REVIEW OF PLANS FOR PUBLIC SEWER"

The application shall be accompanied by two (2) copies of the plans, specifications, a detailed cost estimate in accordance with current GTMUA unit costs, and an Engineer's Report (including all applicable Treatment Works Approval Applications). Plans and specifications shall not be utilized or forwarded to other agencies.

In addition to the above mentioned application requirements, applicants must provide a Public Offering Statement for proposed private sanitary sewer systems that details where the proposed sanitary system will connect to the existing GTMUA sanitary sewer system.

4.3 FEE

The application shall be determined as follows:

(a) Filing Fee: \$500.00

(b) Review Fee: \$3,000.00 (to be placed in escrow)

4.4 ACTION BY THE AUTHORITY

The application and supporting data will be reviewed by the Authority to determine compliance with the Authority's comprehensive sewer collection plan, the Authority's rules and regulations, applicable statutes, and projected growth patterns.

4.5 SUPPORTING DATA, BONDS, AND FEES

When the Authority has approved the plans, the Authority will then adopt a resolution authorizing the Administrative Clerk to release the documents for the Applicant to submit them to CCMUA and NJDEP for their approval. The applicant shall then file the appropriate fully executed documents or forms with the MUA office for Authority endorsement prior to the Applicant's submission to CCMUA and New Jersey Department of Environmental Protection for a sewer construction permit.



Attachment 2 GLOUCESTER TOWNSHIP MUNICIPAL UTILITIES AUTHORITY ESTIMATED CONSTRUCTION COSTS (ADOPTED JANUARY 2021)

MEASURE	ITEM/DESCRIPTION	DEPTH	4"	6"	8"	10"	12"	16"
LF	PVC Sanitary Sewer	0-6' Deep			\$36.00	\$39.00	\$44.00	\$57.00
LF	PVC Sanitary Sewer	6-8' Deep			\$39.00	\$41.00	\$47.00	\$61.00
LF	PVC Sanitary Sewer	8-10' Deep			\$42.00	\$45.00	\$51.00	\$64.00
LF	PVC Sanitary Sewer	10-12' Deep			\$47.00	\$51.00	\$57.00	\$71.00
LF	PVC Sanitary Sewer	12-14' Deep			\$54.00	\$63.00	\$64.00	\$77.00
LF	PVC Sanitary Sewer	14-16' Deep			\$61.00	\$64.00	\$71.00	\$83.00
LF	PVC Sanitary Sewer	16-18' Deep			\$66.00	\$72.00	\$81.00	\$94.00
LF	CLDIP Sanitary Sewer	0-6' Deep			\$87.00	\$62.00	\$66.00	\$77.00
LF	CLDIP Sanitary Sewer	6-8' Deep			\$60.00			·
LF	CLDIP Sanitary Sewer	8-10' Deep			\$62.00			
LF	CLDIP Sanitary Sewer	10-12' Deep			\$67.00			
LF	CLDIP Sanitary Sewer	12-14' Deep			\$75.00			
LF	CLDIP Sanitary Sewer	14-16' Deep			\$82.00			
LF	CLDIP Sanitary Sewer	16-18' Deep			\$94.00			
LF	Sanitary Laterals		\$31.00	\$35.00				
LF	D.I. Pipe Force Main, 4' Cl. 51,		\$33.00	\$38.00	\$42.00	\$55.00	\$66.00	\$83.00
	over 4' up to 17' cover use Cl. 50			·				
V.L.F.	Deep Cut Connection		\$64.00	\$72.00				
Each	Sewerage Pump Station (min.)		\$199,000.00	\$243,000.00	\$403,000.00			
	w/Auxiliary Generator		\$270,000.00	\$315,000.00	\$480,000.00			
			Drop Manhole	Manhole				
Each	Sanitary Manhole	0-6' Deep	\$3,300.00	\$2.500.00				
Each	Sanitary Manhole	6-8' Deep	\$3,800.00	\$2,900.00				
Each	Sanitary Manhole	8-10' Deep	\$4,200.00	\$3.300.00				
Each	Sanitary Manhole	10-12' Deep	\$4,600.00	\$3,900.00				
Each	Sanitary Manhole	12-14' Deep	\$5,000.00	\$4,300.00				
Each	Sanitary Manhole	14-16' Deep	\$5,900.00	\$4,900.00				
Each	Sanitary Manhole	16-18' Deep	\$6,600.00	\$5,500.00				
Each	Sanitary Manhole	18-20' Deep	\$7,400.00	\$6,400.00				

NOTE: 1) 20% Contingencies to be added to final amount.



PURPOSE:

Gloucester Township Municipal Utilities Authority Landing Road, Chews Landing P. O. Box 216 Glendora, New Jersey 08029 856-227-8666

This application and supporting data specifying the engineering details of the proposed project will

FORM B: APPLICATION FOR PRELIMINARY REVIEW OF PLANS FOR PUBLIC SEWER

be analyzed for compliance with Authority engineering standards including provisions for orderly growth. The final condition of approval will be a mutual agreement between the applicant and the Authority regarding the terms and conditions for providing sewer service. FILING FEE: \$500.00 (Check made payable to GTMUA) **REVIEW FEE:** \$3,000 (to be placed in escrow). All fees not expended one (1) year after expiration of Maintenance Bond or one (1) year after applicant has abandoned project prior to Form "B" or "C" approval shall be returned to applicant at time of abandonment 1. APPLICANT 2. PROJECT: Location GTMUA Form "A" approved Planning Board Classification Approved 3. SUPPORTING DATA REQUIRED: As required by Section 4 of Procedures for Submittal, Review & Construction of Sanitary Sewer Extensions. 4. Applicant Engineer's Report and Estimated total Itemized sewer construction cost. Report Total 5. Estimated Construction time required to finish project once authorization to construct is given

6. Applicant must provide a Public Offering Statement for proposed PRIVATE sanitary sewer system

connecting into existing GTMUA's existing sanitary sewer system.



Gloucester Township Municipal Utilities Authority Landing Road, Chews Landing P. O. Box 216 Glendora, New Jersey 08029 856-227-8666

When preliminary approval is given by GTMUA, the applicant shall at that time prepare the necessary data for the GTMUA Submittal to the Camden County Municipal Utilities Authority, once approved by the CCMUA and a copy of the resolution is submitted to the GTMUA, the applicant will submit plans to the NJDEP for review and approval for issuance of NJDEP Construction Permit. Upon request, a list of the required data for the submittal will be sent to the applicant's Engineer.

GTMUA Use Only						
Date of Application Received	Amount of Check					
	Signature of GTMUA	-				

5.0 APPLICATION FOR CONSTRUCTION APPROVAL

5.1 PURPOSE OF APPLICATION

Following approval and receipt of a NJDEP TWA permit and for a period not to exceed two years the applicant may apply for construction approval. This application may be submitted as a sequence of applications as each segment of the total approved project is scheduled for construction. This application provides a control on the extent and schedule of planned sewer facilities installed and established a schedule for Authority Inspection of completed installations.

5.2 FORMS AND SUPPORTING DATA

FORM C: "APPLICATION FOR CONSTRUCTION OF PUBLIC SEWER SYSTEM"

The application shall be accompanied by two sets of final data as approved on the Form B per Paragraph 4.2. This data will be the basis on Construction Approval, Inspection, and testing. Requested revisions will be treated as re-submissions of Form B requiring review and approval. Such revisions are subject to the requirements of Paragraph 4.0 in its entirety.

The Submitted "Form C" Plans shall indicate sewer laterals.

"Form C" approval shall not be granted until the NJDEP permit is attained.

5.3 OTHER DATA

The applicant shall obtain permits for all stream crossing or encroachments from the New Jersey Department of Environmental Protection. Permits to construct sewer, and/or other structures within the right-of way limits of State, County, Municipal roads and all railroads, and all other required permits must be secured by and paid for by the applicant.

The applicant must inform and secure any necessary clearance and/or approval from any public utilities involved.

5.4 FEE

Filing Fee: \$250.00

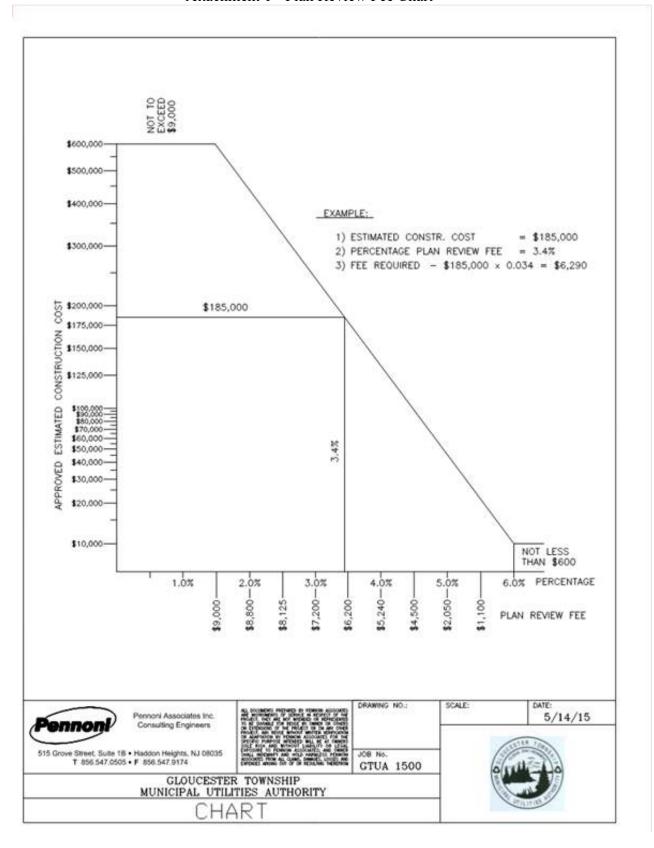
Review Fee: Use Attachment No. 1 Fee Chart.

Inspection Fee: Five (5%) of the approved construction cost. The approved construction cost

shall be determined in accordance with the standard unit prices presented in attachment No. 2 and as approved by the Authority's Consulting Engineer. These costs will be periodically updated by the Authority's Consulting

Engineer.

Attachment 1 - Plan Review Fee Chart



The applicant shall file with the Authority a Performance Bond or a letter of Credit in the amount of 120% of the approved construction cost. Cost of construction shall be determined using the rates established by the Authority and altered from time to time in accordance with the ENR Construction Cost Index. The Performance Bond or Letter of Credit must be submitted after the Form "C" applications approved and before any sewer permits are issued.

5.5 AMENDMENT TO GTMUA POLICY POSTING OF PERFORMANCE GUARANTEE

As an alternative to the posting of a Performance Guarantee, the Authority will permit the construction of sewer improvements without a Performance Guarantee prior to the issuance of sewer connection permits and building permits. The sewer improvements to be constructed must be for an entire section of the proposed development as finally approved by the Gloucester Township Planning board. The Authority will make the determination as to what sewer improvement construction is to be included within development section or, where necessary, beyond the development section. Upon completion of installation of the sewer improvements, the Authority shall inspect same to determine if the sewer improvements have been constructed in accordance with the approved plans and specifications. Upon completion of such an inspection and a determination that the sewer improvements have been constructed in accordance with the plans and specifications, the Authority's Consulting Engineer will then issue a letter to the Developer requiring the posting of a Performance Guarantee in the amount of 20% of the total cost of the constructed sewer improvements. This interim approval shall not be construed to be final acceptance of the sewerage installation. This Performance Guarantee shall be in form acceptable to the Authority Solicitor. Upon posting of the required Performance Guarantee sewer connection permits will then become available for issuance by the Authority for the project. When the Authority approves the construction of sewer improvements without posting of Performance Guarantees, the Authority will notify the Township in writing of such action and advise that no building permits shall be issued by the Township until such time as the Authority indicates that the Developer has complied with Authority requirements for issuance of connection permits to the project. If for any reason, the Developer fails to complete, or only partially completes, the sewer improvements where a Performance Guarantee has not been posted, the Developer shall then be required to post a Performance Guarantee in the amount of 120% of the total cost of the sewer improvements for the section in question even though the partially installation was properly constructed and inspected by Authority personnel. Failure to post such a Performance Guarantee will be cause for the Authority to deny issuance of connection permits for the project and to issue a cease work order, or request the Township to issue a cease work order.

5.6 TRANSFER OF OWNER

In the event there is to be transfer of ownership of property on which a NJDEP construction permit has been issued and sewer allocation provided by the Authority, the perspective new owner shall be required to properly complete a transfer of ownership form and file same with the Authority prior to such transfer of ownership. Both the existing owner and the future owner shall sign this transfer of ownership form. Failure to complete the Transfer of Ownership form and address all issue contained thereon shall be cause for the Authority to deny the issuance of any further connection permits to the project and stop all construction activity on said development until all outstanding issues are resolved relating to said transfer. These issues will include, but not limited to, posting of revised Performance Guarantees, payment of engineering and Inspection escrow, review of any changes, completion of necessary Authority

forms and verification of connection permits remaining for project. As part of this regulation, the Authority shall required the owner to sign a form agreement indicating that said owner will comply with this requirement. A copy of said form Agreement is attached to these regulations and incorporated by reference herein. The form Agreement must be signed and completed and returned to the Authority together with the Form "C" issued by the Authority.

In addition, applicants submitting plans with below grade sanitary sewer connections, must included the installation of a backflow preventer or provided a signed waiver releasing GTMUA from any legal responsibilities.

5.7 ACTION BY THE AUTHORITY

Upon approval of the application, the Authority shall grant approval of construction for the project to the extent requested.

The Authority's Inspector's workweek is Monday to Friday, 7:45 A.M. to 3:45 P.M. (except holidays). The applicant must receive permission from the Authority for construction other than the normal workweek and/or holidays and reimburse the Authority for all hours spent for on-site inspection beyond the above stated normal working hours at a rate of \$100.00 per hour (four (4) hour minimum).



FORM C: APPLICATION FOR CONSTRUCTION OF PUBLIC SEWER SYSTEM PURPOSE: To control the extent and schedule of planned sewer facilities installation and to establish a schedule for Authority Inspection of completed installations. FILING FEE: \$250.00 (Check made payable to GTMUA) REVIEW FEE: Use Attachment No. 1 Fee Chart INSPECTION FEE: Five (5%) percent of approved construction cost, but not to exceed \$25,000.00. All fees not expended one (1) year after expiration of Maintenance Bond or one (1) year after applicant has abandoned project prior to Form "B" or "C" approval shall be returned to applicant at time of abandonment. 1. APPLICANT 2. PROJECT: Name Location Section No. Lots Date of GTMUA Form "B" Approval Date of Planning Board Preliminary Approval 3. PROFESSIONAL ENGINEER DESIGNING SEWER SYSTEM Name: _____ Address Phone 4. SUPPORTING DATA REQUIRED: 1. Applicant Engineer's Report on Total itemized sewer construction cost Report Total \$ 2. Detailed plans and specifications of sewage pump stations, sewer mains and appurtenances

When the Authority Engineer has verified the total estimated sewer construction costs, reviewed the plans and recommends them for approval by the Board, the applicant will be notified to submit the following:

(Plans shall indicate individual tax lots and blocks (2 sets))



3.	Specified	performance	bond	or I	rrevocat	ole [letter	of	credit	

- 4. Typed list coordinating individual tax lot and block with street added.
- 5. No sewer permits will be issue until bond is posted.
- 6. A signed waiver if a backflow preventer is not installed for below grade sanitary sewer connections into the GTMUA existing sanitary sewer system.

Date .	Application Received	An	ount of Ch	neck
				Signature
	REQUEST	FOR TRANSF	ER OF O	WNERSHIP
PROJ	ECT			
	appears on NJDEP Permit			
1. N	ame of Owner		_ New Bu	ıyer
2. N	JDEPE Permit #			
	onding Responsibility			
4. B	ond in Place			
	Vritten Agreement Form (To be Attach			
5. E	scrow Review Amount			_ Remaining (Form B)
6. Ir	nspection Fee Amount			Remaining (Form C)
7. F	orms Completed: AB	C	D	
8. P	roperty Being Transferred:			
A	Amount of Lots			
В	. Individual Block No.'s			
	. Individual Lot No.'s			
	Section			



Buyer	S	Seller	
	Date		Date
part for all applications, pe	ip of the above referenced proper rformance and maintenance gua Municipal Utilities Authority po	rantees, permits, fees, costs, and	d all other requirements
10. MUA Permits Remain	ing to be purchased and issued		
9. MUA Permits Purchas	ed and Issued		
E. Phase			

6.0 APPLICATION FOR ACCEPTANCE

6.1 PURPOSE OF APPLICATION

Upon satisfactory completion of construction, inspection and testing, and a detailed inspection report by GTMUA, the applicant shall request the Authority to accept the installed system.

Ownership, maintenance and operation of the system shall be the responsibility of the Authority only after specific written acceptance by the Authority of the system, whether it be in whole or in part as issued by the Authority. Until this written acceptance is issued by the Authority, the ownership, maintenance and operation shall remain the responsibility of the applicant.

6.2 FORMS AND SUPPORTING DATA

FORM D: "APPLICATION FOR TITLE TRANSFER, PUBLIC SYSTEMS"

The application shall be accompanied by:

- a. Application Fee \$500.00
- b. As-built plans of the project must be prepared by a licensed' NJ Professional Land Surveyor and certified as described herein. Plans shall be 24"x 36" in size with a minimum horizontal scale of 1"= 50'.
- c. All necessary documents approved by the Authority that will permit the dedication of all necessary property and easements that are an inherent and necessary part of the completed project.
- d. Review costs will be taken from residual escrows.

6.3 AS-BUILTS PLANS

The "As-built" plans shall contain all pertinent information such as, but not limited to, manhole to manhole distances and slopes, inverts and rim elevations of the manholes, and distances of all easements and properties required, lot and block numbers, sizes and type of pipe material, location of all laterals and cleanouts, and also certifications as detailed herein.

<u>CERTIFICATION MUST BE SIGNED AND SEALED BY THE APPLICANT'S NEW</u> <u>JERSEY LICENSED PROFESSIONAL ENGINEER.</u>

6.4 TESTING OF THE COMPLETED SYSTEM

All sewer extension shall successfully pass all tests required by the MUA staff or Engineer.

6.5 SEWER CONNECTIONS

Approved sewer connection shall be made to a street main only under the supervision and inspection of the Authority's representative. Connections to the sewer shall be made through an approved saddle or manhole. Connection shall be made in accordance with the direction of the Authority and/or its Engineer, or any other designee.

House connections are under the jurisdiction of the Board of Health and Board approval will be required before the Authority will accept discharge of sewage into its mains.

6.6 MAINTENANCE BONDS

A Maintenance Bond shall be posted to cover all construction and improvements under the jurisdiction of review and approval of the Authority. The Maintenance Bond shall be furnished to cover any defects in materials and workmanship installed in the amount of 10% of the approved construction cost. The bond shall be in full force for a period of two years after final acceptance of the improvement by the Authority. Work performed under the terms of the Maintenance Bond shall be approved by the Authority or the Authority Consulting Engineer.



FORM D: APPLICATION FOR TITLE TRANSFER, PUBLIC SEWER SYSTEM

PURPOSE: To request the GTMUA to accept the installed system.

4. Certification by the Applicant's Engineer as to the following:

b. That the as-built plans are as herein, described (see attached)

a. The quality and content of the installed system

FE	EE: \$500.00. Rev	iew costs will be taken from resid	ual escrows.
1.	APPLICANT		
2.	PROJECT:	Name	Section
		Location	
		NJDEP Permit No	Issued
		Total Lots in Section	No. Lots Competed
3.	Have the Streets B	Been Accepted by the Township?	YesNo
4.	How Long has the	e System Been Completed	
5.	Does The As-Buil	t Plan Follow Exactly the Plan Su	bmitted with Form "C" in Regard to Details and
	Area Covered:	If not, indicate the Sign	ificant
	Changes		
6.	SUPPORTING D	OATA REQUIRED.	
	1. Two sets of A	s-Built Plans (24"X36")	
		Bond (10% of the Performance B f two (2) years from date of accep	ond) guaranteeing satisfactory performance of the system cance.
	•	11	uthority that will permit the dedication of all necessary necessary part of the complete system.



SCHEDULE: Within 45 days after this form has been received at the MUA office, the MUA Engineer will conduct a final inspection. The applicant will be notified that the MUA accepts the Maintenance Bond and agrees to take the responsibility for the system.

GTMUA Use Only

Date Application Received:	Cash Escrowed \$
	Surety Bond \$
	(Presented at Submittal of Form C)
	Gloucester Township MUA
ACTION BY AUTHORITY:	
Final Inspection by MUA Engineer	
Result:	
Recommended for Acceptance of System	
Legal Documents executed	
Vouchers Paid	All Escrow's Paid

7.0 APPLICATION FOR REVIEW OF PLANS FOR PUBLIC SEWER FOR COMMERCIAL BUILDINGS THAT DISCHARGE LESS THAN 8,000 GPD OF WASTEWATER AND NO SEWER EXTENSION IS REQUIRED.

7.1 PURPOSE OF APPLICATION

This application and supporting data specify the engineering details of the proposed project will be analyzed for compliance with Authority engineering standards.

7.2 FORMS AND SUPPORTING DATA

FORM F: "APPLICATION FOR REVIEW OF PLANS FOR PUBLIC SEWER FOR COMMERCIAL BUILDINGS"

7.3 FEE

Review fee of \$2,500.

7.4 SUPPORTING DATA

Two sets of drawings, reports and other pertinent data describing details of the sanitary sewer system and interior plumbing plan must be submitted. If additional data is required after the initial review, the applicant will be contacted to submit same.



FORM F: APPLICATION FOR REVIEW OF PLANS FOR PUBLIC SEWER FOR COMMERCIAL OR PUBLIC BUILDINGS THAT DISCHARGE LESS THAN 8,000 GPD OF WASTEWATER AND NO SEWER EXTENSION PERMIT IS REQUIRED. **PURPOSE:** This application and supporting data specifying the engineering details of the proposed project will be analyzed for compliance with Authority Engineering standards. **REVIEW FEE:** A review fee of \$2,500.00 shall be required. In the event that the cost of review shall be more than deposited, the applicant shall pay the additional cost prior to final approval by the Authority. Check shall be made payable to the GTMUA but shall be separate from filing fee. Any excess review fees will be returned to applicant. APPLICANT: Address: Telephone _____ PROJECT: Location: Tax Map: Plate: _____Block: ____ Lot ____ Total Square Footage _____ REQUIRED SUPPORTING DATA; Two sets of drawings reports and other pertinent data describing details of the sanitary sewer system and interior plumbing plan must be submitted. If additional data is required after the initial review, the applicant will be contacted to submit same. Signature of Applicant Date: _____ Address of Applicant

DO NOT WRITE BELOW THIS LINE: GTMUA USE ONLY

Date Application Received: _____ Amount of Check _____

GTMUA STANDARD CONSTRUCTION DETAILS

TABLE OF CONTENTS

DESCRIPTION	PAGE NUMBER
ABBREVIATIONS	I
UTILITY CONTACTS	II
GENERAL NOTES	III
CONSTRUCTION NOTES	IV
INDEX OF CONSTRUCTION DETAILS	V, VI
STANDARD CONSTRUCTION DETAILS	1 - 40



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CONTENTS

JOB No.

GTUA 1500

DATE:

5/14/15

SCALE:

GLOUCESTER TOWNSHIP MUNICIPAL UTILITIES AUTHORITY

CONTENTS

ABBREVIATIONS

A.C.P. ASBESTOS CEMENT PIPE

ASTM AMERICAN SOCIETY OF TESTING & MATERIALS

C.L.D.I.P. CEMENT LINED DUCTILE IRON PIPE

C.M.P. CORRUGATED METAL PIPE

C.O. CLEAN OUT

CONC. CONCRETE

D.C. DEEP CUT SERVICE LATERAL

D.I.P. DUCTILE IRON PIPE

EL. **ELEVATION**

EACH WAY E.W.

EXIST. **EXISTING**

F.H. FIRE HYDRANT

G.V. GAS VALVE

I.P.S. INTERNAL PIPE THREAD

MAILBOX M.B.

М.Н. MANHOLE

MECHANICAL JOINT M.J.

MUA MUNICIPAL UTILITIES AUTHORITY

N.J.D.O.T. NEW JERSEY DEPARTMENT OF TRANSPORTATION

O.C. ON CENTER =

PROP. PROPOSED

POLYVINYL CHLORIDE PIPE P.V.C. =

R.C.P. REINFORCED CONCRETE PIPE

RIGHT OF WAY R.O.W.

SAN. SANITARY

T & B TOP AND BOTTOM

T.V.B. TELEVISION CABLE BOX

V.C.P. VITRIFIED CLAY PIPE

WATER METER W.M.

WATER VALVE W.V.



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ABBREVIATIONS

UTILITY CONTACTS

AT&T 12 North 7th Street Camden, N.J. 08102 (856) 756-7000

Connectiv Power Post Office Box 4875 Trenton, N.J. 08650 (800) 642-3780

Verizon Post Office Box 4833 Trenton, N.J. 08650 (800)-892-5200

Camden County Engineer Egg Harbor Road Charles Di Palma Complex Lindenwold, N.J. 08021 (856) 566-2970 Attn: Robert Kelly

Camden County MUA 1645 Ferry Avenue Post Office Box 1432 Camden, N.J. 08101 (856) 541-3700 Attn: Andrew Kricun

Aqua New Jersey Water 2875 Erial Road Sicklerville, N.J. 08081—1242 (856) 784—3322 Attn: David Degerolamo District Manager Dept. of Public Safety Gloucester Twsp. Police Dept. 1261 Chews Landing Road Chews Landing, N.J. 08012 (856) 228-4500 Attn: Shift Watch Commander

Dept. of Public Works Gloucester Twsp. Municipal Bldg. P.O. Box 8 Blackwood, N.J. 08012 (856) 228-4000 Attn: Mr. Gabe Busa

Comcast Cable 3370 Rt. 42 Turnersville, N.J. 08012 (856) 728-0918

New Jersey American Water Co. 515 Grove Street Haddon Heights, N.J. 08035 (856) 547-1700

Public Service Electric & Gas Electric Distribution Dept. 300 New Albany Road Moorestown, N.J. 08057 (856) 778-6781 Attn: Ted Lubach

South Jersey Gas Company 142 South Main Street Glassboro, N.J. 08028 (856) 881-7000 Attn: Timothy Cianciulli



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GLOUCESTER TOWNSHIP MUNICIPAL UTILITIES AUTHORITY

UTILITY CONTACTS

GENERAL NOTES

- ANY PROPOSED DEVIATIONS FROM STANDARD CONSTRUCTION DETAILS, SHALL BE SUBJECT TO THE APPROVAL BY THE AUTHORITY ENGINEER.
- 2. ANY REFERENCE TO "ENGINEER" AND/OR "APPROVAL" SHALL BE INTERPRETED TO MEAN THE AUTHORITY ENGINEER OR APPROVAL BY THE AUTHORITY ENGINEER.
- 3. A. ALL CONSTRUCTION, MATERIALS, RESTORATION AND METHODS OF INSTALLATION IN TOWNSHIP ROADS SHALL BE SUBJECT TO THE REQUIREMENTS AND APPROVAL OF THE TOWNSHIP OF GLOUCESTER.
 - B. ALL CONSTRUCTION, MATERIALS, RESTORATION AND METHODS OF INSTALLATION IN COUNTY ROADS SHALL BE SUBJECT TO THE REQUIREMENTS AND APPROVAL OF CAMDEN COUNTY.
- 4. SANITARY SEWER CONSTRUCTION, MATERIALS AND TESTING SHALL BE SUBJECT TO THE APPROVAL OF AND INSPECTION BY THE GLOUCESTER TOWNSHIP MUA.
- 5. SANITARY GRAVITY SEWER SHALL BE POLYVINYL CHLORIDE (PVC) PIPE MEETING ASTM D3034, SDR 35 SPECIFICATION FOR MAINS & 4"x 8" TEE'S AND ASTM D2241, SDR 26/35 SPECIFICATION FOR 4" LATERALS. INSTALL LATERAL @ 1\4" PER FT. MINIMUM SLOPE TO LIMITS SHOWN ON DETAIL. SANITARY FORCE MAIN SHALL BE POLYVINYL CHLORIDE (PVC) PIPE MEETING AWWA C900 89, DR-25, CLASS 100.
- 6. LOCATION OF 4" PVC SANITARY SEWER LATERALS SHALL BE ESTABLISHED BY THE RESPECTIVE PROPERTY OWNER IN FIELD. NO LATERAL MAY BE DIRECTLY CONNECTED TO A MANHOLE.
- 7. WATER MAINS AND SANITARY SEWER SHALL BE SEPARATED BY 10 FEET HORIZONTALLY WHEREVER POSSIBLE. OTHERWISE, THE SEWER AND WATER SHALL BE IN SEPARATE TRENCHES WITH THE SEWER 18" BELOW THE BOTTOM OF THE WATER MAIN. AT WATER AND SEWER CROSSINGS, THE SEWER SHALL BE 18" MINIMUM BELOW THE WATER OR SEWER MAIN SHALL BE C.L.D.I.P. WITH SLIP-ON JOINTS AND ENCASED IN CONCRETE FOR 10 FEET MINIMUM ON EACH SIDE OF THE CROSSING. WHERE SANITARY SEWER CROSS OVER OR WITHIN 18" UNDER A STORM PIPE THE SANITARY SEWER SHALL BE C.L.D.I.P. WITH SLIP-ON JOINTS AND ENCASED IN CONCRETE FOR 10 FEET EACH SIDE OF THE CROSSING.
- 8. ALL SEWERS SHALL BE CONSTRUCTED WITH BEDDING AS DETAILED.
- 9. THE CONTRACTOR SHALL PAY ALL FEES INCLUDING INSPECTION FEES, AND GIVE NOTICES NECESSARY FOR, AND INCIDENTAL TO THE EXECUTION OF THE PROJECT.
- 10. NO MATERIALS SHALL BE PLACED OR ANY DISTURBANCE BE PERMITTED BEYOND THE PROJECTS PROPERTY LINES OR RIGHT-OF-WAY WITHOUT THE WRITTEN PERMISSION OF THE PROPERTY OWNER DIRECTLY INVOLVED.
- 11. INSPECTION OF, OR FAILURE TO INSPECT ANY MATERIALS OR WORKMANSHIP BY STATE, COUNTY OR TOWNSHIP OFFICIALS SHALL IN NO WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES TO PERFORM THE WORK IN ACCORDANCE WITH APPLICABLE PLANS, SPECIFICATIONS AND LAWS.
- 12. THE CONTRACTOR SHALL NOTIFY UNDERGROUND LOCATION SERVICE AT 1-800-272-1000 OR 811 AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF EXCAVATION WORK.



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JOB No. **GTUA 1500**

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GENERAL NOTES



CONSTRUCTION NOTES

- 1. THE CONTRACTOR SHALL NOTIFY THE GLOUCESTER TOWNSHIP MUA, GLOUCESTER TOWNSHIP DEPARTMENT OF PUBLIC WORKS, AND THE CAMDEN COUNTY ENGINEERING DEPARTMENT (IF WORK IS WITHIN COUNTY R.O.W.) A MINIMUM OF 48 HOURS PRIOR TO THE SCHEDULED START OF WORK.
- 2. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES OPERATING WITHIN THE PROJECT LIMITS, 72 HOURS PRIOR TO ANY EXCAVATING. ALL UTILITIES SHALL BE PROTECTED DURING CONSTRUCTION WITHOUT INTERRUPTION OF SERVICE.
- 3. PROVISIONS TO BYPASS WASTEWATER DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND APPROVED BY THE AUTHORITY.
- 4. THE CONTRACTOR SHALL PROVIDE SOIL EROSION AND SEDIMENT CONTROL MEASURES TO PROTECT NEARBY WATER FEATURES AND STORM INLETS.
- 5. BACKFILL SHALL BE COMPACTED TO A MINIMUM PROCTOR DENSITY OF 95 PERCENT OF AVERAGE IN SITU DRY DENSITY.
- 6. AT THE END OF EACH WORKING DAY, THE CONTRACTOR SHALL BACKFILL HIS TRENCH AND PROTECT THE PUBLIC FROM THE WORK AREA.
- 7. ROADWAYS SHALL BE SWEPT CLEAN AT THE END OF EACH WORKING DAY.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TOPSOILING, FERTILIZING AND SEEDING ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES.
- 9. UPON COMPLETION, ALL SEWER MAINS SHALL BE LAMPED AND TESTED FOR LOW PRESSURE EXFILTRATION.
- 10. A T.V. INSPECTION OF THE SANITARY SEWER SYSTEM SHALL BE COMPLETED TO THE SATISFACTION OF THE ENGINEER PRIOR TO FINAL APPROVAL AND ACCEPTANCE BY THE GLOUCESTER TOWNSHIP MUA.
- 11. MANHOLE CASTINGS THAT MUST BE RAISED SHALL BE DONE SO USING (A MAXIMUM OF 3) PRECAST CONCRETE GRADE RINGS THAT COMPLY WITH ASTM SPECIFICATION C-478-90b. THE CASTING SHALL BE REMOVED, THE GRADE RING(S) FIRMLY MORTARED IN PLACE, AND THE CASTING RESET IN A BED OF MORTAR TO THE PROPOSED GRADE. DUCTILE IRON MANHOLE EXTENSION RINGS SHALL NOT BE ACCEPTABLE FOR RAISING MANHOLE COVERS.
- 12. CASTINGS IN ROADWAYS TO BE RAISED WITH PRECAST GRADE RINGS TO FINISHED GRADE SHALL NOT BE RAISED SOONER THAN 24 HOURS PRIOR TO PAVING.
- 13. IN ORDER TO MAINTAIN A MINIMUM CLEANSING VELOCITY OF ONE FOOT PER SECOND WITH PEAK DISCHARGE RATES (SURGE FACTOR OF 2) AT TERMINAL LINES OF EIGHT (8) INCH P.V.C. PIPE, THE (FOLLOWING MINIMUM SLOPES SHALL BE REQUIRED:

# OF DWELLINGS CONNECTED TO	TERMINAL LINE
8 TO 10	0.006 1/1
4 TO 7	0.008 1/1
1 TO 3	0.010 1/1

14. ALL PIPE TRENCHES (INCLUDING LATERALS TO CLEANOUTS) SHALL HAVE A THREE (3) INCH WIDE DETECTABLE UNDERGROUND UTILITY MARKING TAPE CONSISTING OF A SOLID ALUMINUM FOIL CORE SANDWICHED BETWEEN A 2 MIL. FILM. THE TAPE SHALL BE PLACED TWO (2) FEET BELOW THE FINISHED SURFACE AND DIRECTLY OVER THE PIPE. THE TAPE SHALL BE DETECTABLE AT THE SURFACE BY USE OF A METAL DETECTOR AND SHALL BE GREEN IN COLOR WITH THE WORDS "SANITARY SEWER LINE" PERMANENTLY PRINTED ON THE FACE.



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ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER
PROJECT, ANY REUSE WITHOUT WRITTEN VERIFICATION
OR ADAPTATION BY PENNONI ASSOCIATES FOR THE
SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SEXPOSIVET ON PENNONI ASSOCIATES: AND OWNER
SHALL INDEMNIFY AND HOLD HARMLESS PENNONI
ASSOCIATES FROM ALL CLAMB, DAMAGES, LOSSES AND
EXPENSES ARISING OUT OF OR RESULTING THEREFROM

DRAWING NO.:

IV

SCALE:

DATE: 5/14/15

JOB No.

GTUA 1500

GLOUCESTER TOWNSHIP MUNICIPAL UTILITIES AUTHORITY

CONSTRUCTION NOTES



	INDEX		
DESCRIPTION		ISSUE DATE	LATEST REVISION DATE
TABLE OF CONTENTS	(CONTENTS)	07/18/05	
ABBREVIATIONS	I	07/18/05	
UTILITY CONTACTS	II	07/05/06	
GENERAL NOTES	III	07/18/05	
CONSTRUCTION NOTES	IV	07/18/05	

	CONSTRUCTION DETAILS					
DETAIL NO.	DESCRIPTION	ISSUE DATE	LATEST REVISION DATE			
1	DROP CONNECTION TO EXISTING MANHOLE	06/30/05	08/10/2020			
2	PIPE CONNECTION TO EXISTING MANHOLE DETAIL	05/11/05	08/10/2020			
3	SHALLOW MANHOLE DETAIL	06/16/05	08/10/2020			
4	PRECAST MANHOLE DETAIL	06/29/05	08/10/2020			
5	DROP MANHOLE DETAIL	07/06/05	08/10/2020			
6	DROP MANHOLE AT F.M. DISCHARGE DETAIL	07/05/05	08/10/2020			
7	DOGHOUSE MANHOLE DETAIL	06/16/05	08/10/2020			
8	DOGHOUSE - DROP MANHOLE DETAIL	07/06/05	08/10/2020			
9	CONNECTION TO EXISTING MANHOLE	05/11/05	08/10/2020			
10	SERVICE LATERAL DETAIL	06/21/06	08/10/2020			
11	DEEP CUT SERVICE LATERAL DETAIL	06/21/06	08/10/2020			
12	STANDARD MANHOLE FRAME & COVER DETAIL	08/10/05	08/10/2020			
13	ALTERNATE MANHOLE FRAME & COVER DETAIL	08/10/05	08/10/2020			
14	LOCKING MANHOLE FRAME & COVER DETAIL	07/06/05	08/10/2020			
15	SERVICE LATERAL TRENCH DETAIL	03/30/05	08/10/2020			
16	BEDDING DETAIL	07/06/05	08/10/2020			
17	TRENCH DETAIL	07/06/05	08/10/2020			
18	CONCRETE ENCASEMENT DETAIL	08/10/05	08/10/2020			
19	CLEAN-OUT PROTECTION BOX DETAIL	08/10/05	08/10/2020			
20	SANITARY SEWER CLEANOUT DETAIL	08/04/05	08/10/2020			



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> GLOUCESTER TOWNSHIP MUNICIPAL UTILITIES AUTHORITY

INDEX



	CONSTRUCTION DETAILS				
DETAIL NO.	DESCRIPTION	ISSUE DATE	LATEST REVISION DATE		
21	FORCE MAIN-INSIDE DROP CONNECTION DETAIL	03/30/05	08/10/2020		
22	PUMPING STATION SECTION	08/10/05	08/10/2020		
23	PUMPING STATION PLAN & NOTES	08/10/05	08/10/2020		
24	PUMPING STATION TYPICAL SITE PLAN	08/10/05	08/10/2020		
25	VALVE CHAMBER PLAN	08/02/05	08/10/2020		
26	VALVE CHAMBER SECTION	08/02/05	08/10/2020		
27	SINGLE LINE DIAGRAM	08/10/05	08/10/2020		
28	INLET PROTECTION DETAIL	07/06/05	08/10/2020		
29	MANHOLE VENT DETAIL	07/06/05	08/10/2020		
30	BACKFLOW PREVENTER DETAIL	07/06/05	08/10/2020		
31	YARD HYDRANT DETAIL	07/08/05	08/10/2020		
32	AIR RELEASE MANHOLE DETAIL - SECTION	07/12/06	08/10/2020		
33	AIR RELEASE MANHOLE DETAIL — PLAN	07/12/06	8/10/2020		
34	BLOWOFF MANHOLE DETAIL - SECTION	07/12/05	8/10/2020		
35	BLOWOFF MANHOLE DETAIL — PLAN	07/12/05	8/10/2020		
36	SADDLE CONNECTION DETAIL	07/12/06	8/10/2020		
37	SAFETY PLATFORM DETAIL FOR DEEP MANHOLES	08/10/05	08/10/2020		
38	SERVICE LATERAL — RELOCATION DETAIL	06/30/06	08/10/2020		
39	SERVICE LATERAL — CLEANOUT REPAIR	08/02/05	08/10/2020		
40	CONCRETE THRUST BLOCK DETAIL	06/23/09	08/10/2020		



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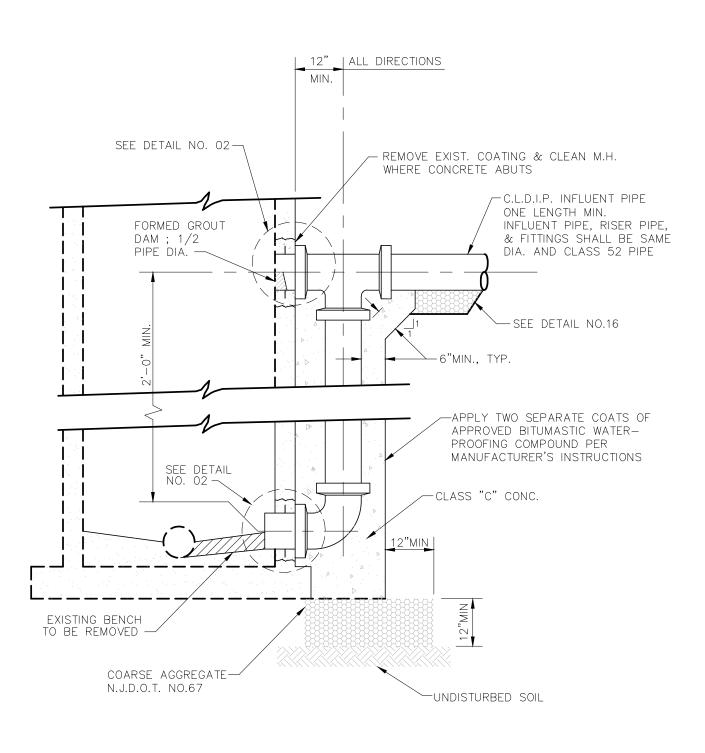
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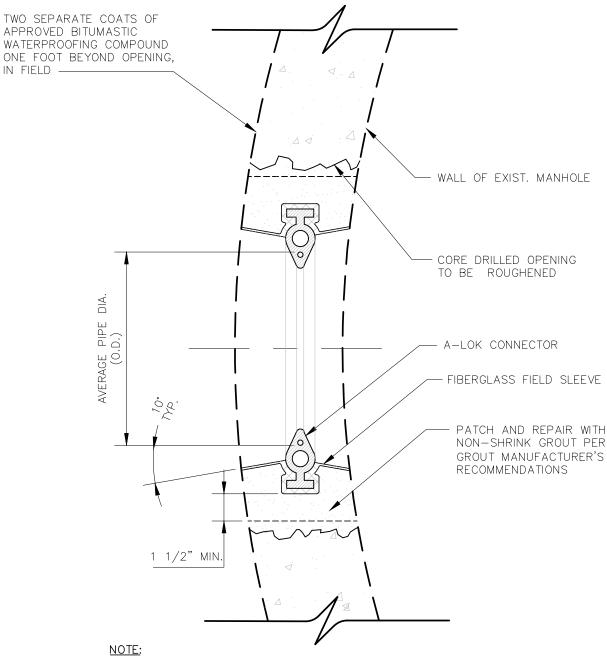
GTUA 1500

DATE:

8/10/2020

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DROP CONNECTION TO EXISTING MANHOLE



FOLLOW THE MANUFACTURER'S SLEEVE AND PIPE INSTALLATION INSTRUCTIONS.



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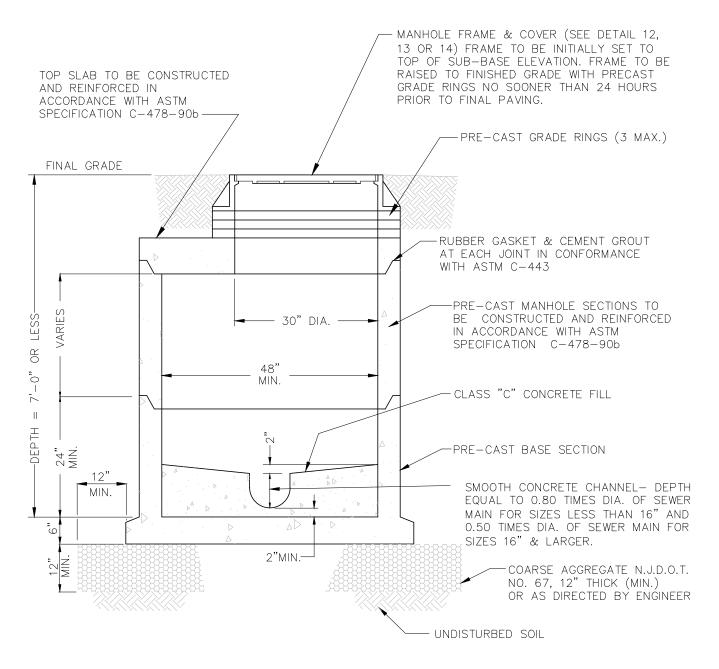
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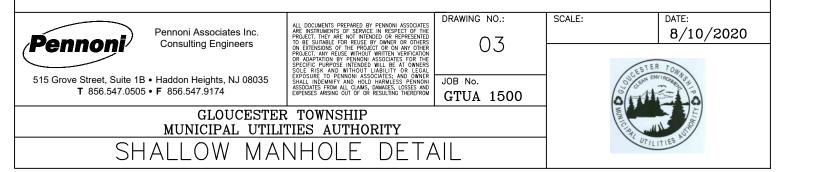
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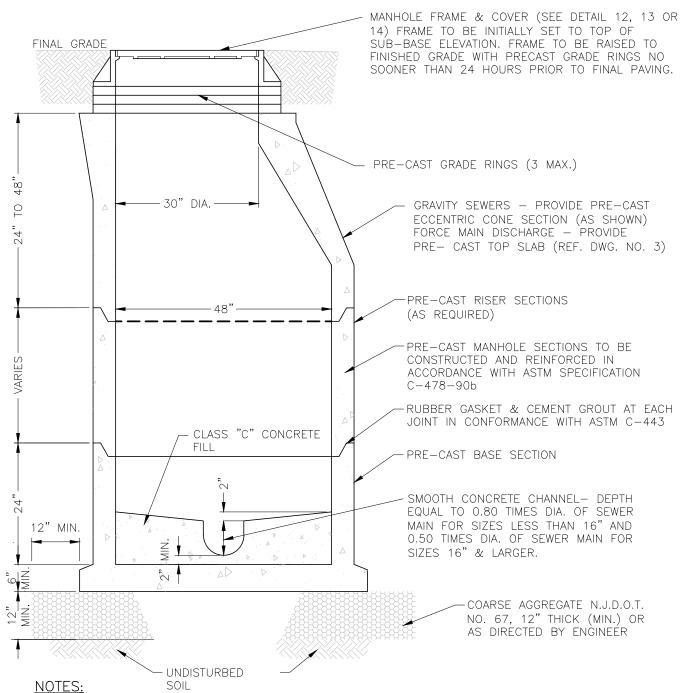
PIPE CONNECTION TO EXISTING MANHOLE DETAIL



NOTES: 1) TWO SEPARATE COATS OF APPROVED BITUMASTIC WATERPROOFING COMPOUND SHALL BE APPLIED PER MANUFACTURERS INSTRUCTIONS TO THE ENTIRE EXTERIOR OF STRUCTURE.

- AT GRAVITY SEWERS, TWO SEPARATE COATS OF APPROVED TWO—PART EPOXY COATING SHALL BE APPLIED PER MANUFACTURER'S INSTRUCTIONS TO THE ENTIRE INTERIOR OF STRUCTURE.
- 3) AT FORCE MAIN DISCHARGES, THE ENTIRE INTERIOR OF THE STRUCTURE SHALL BE LINED WITH P.V.C. "DURA PLATE 100 BY A-LOK", OR APPROVED EQUAL, DURING THE PRECASTING PROCESS.

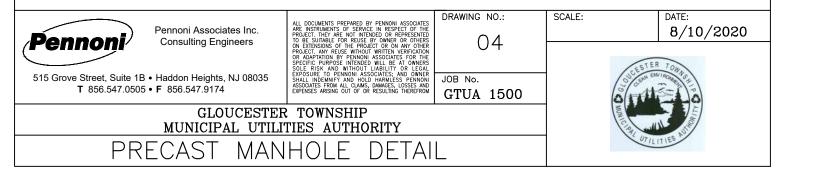


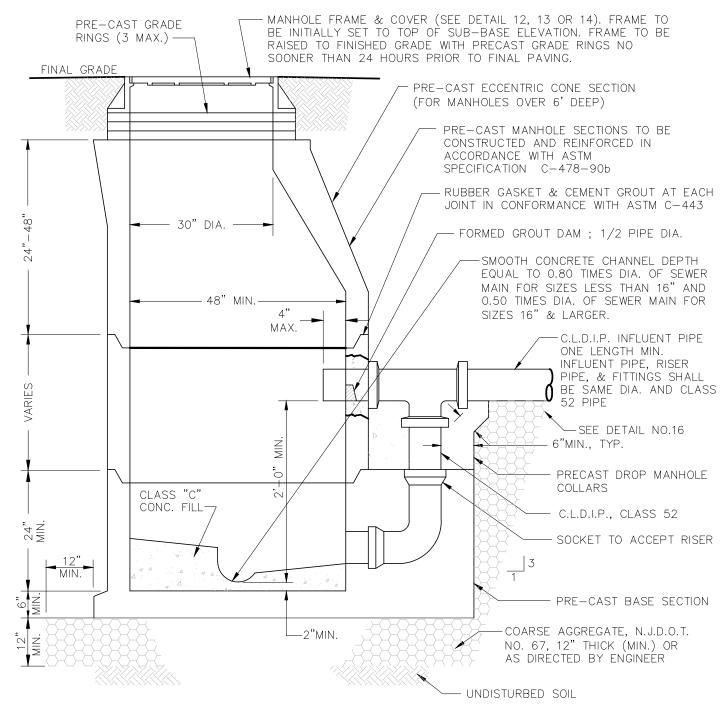


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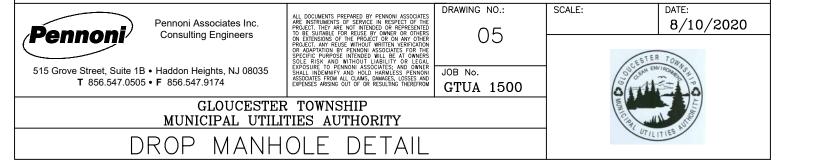
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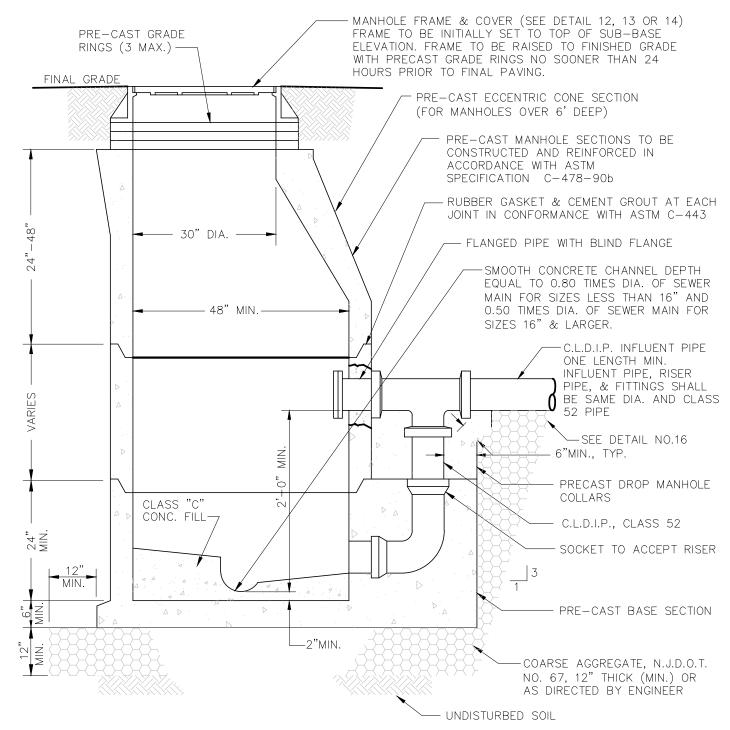




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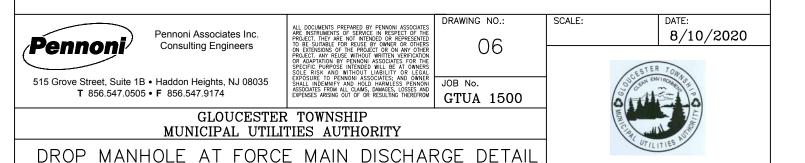
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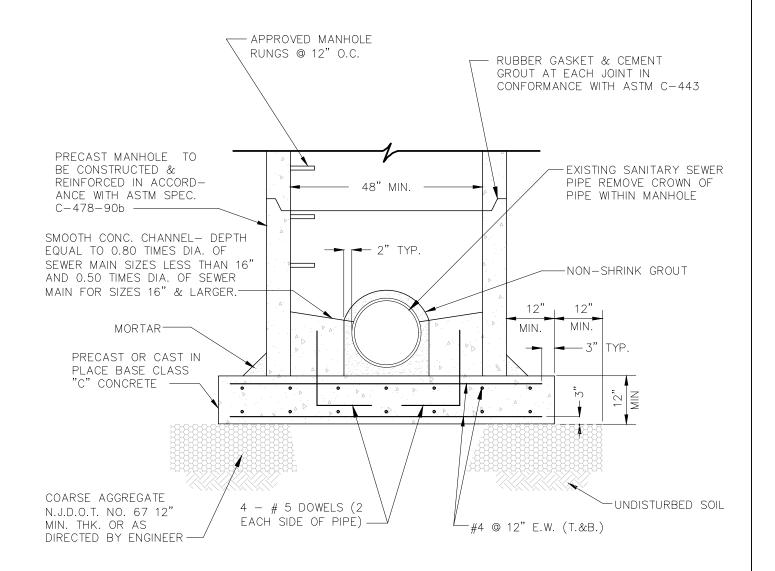




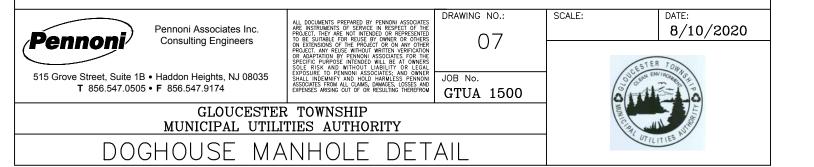
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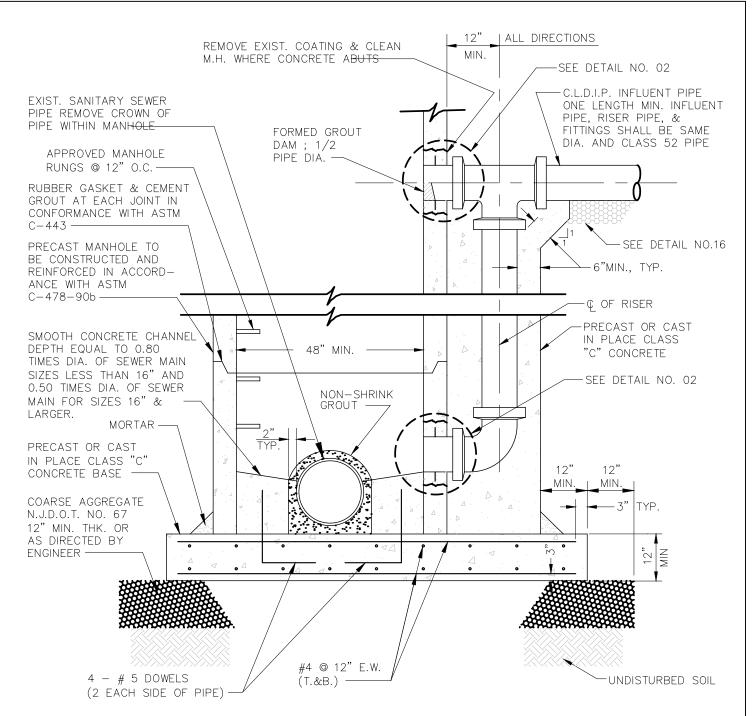
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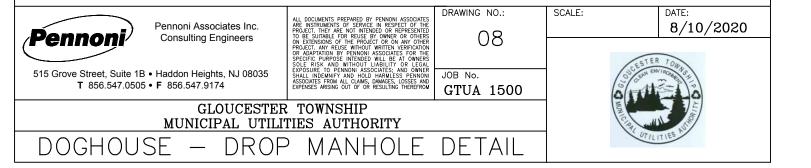
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 - 3) FOR UPPER MANHOLE SECTIONS, SEE DETAILS 3 OR 4.

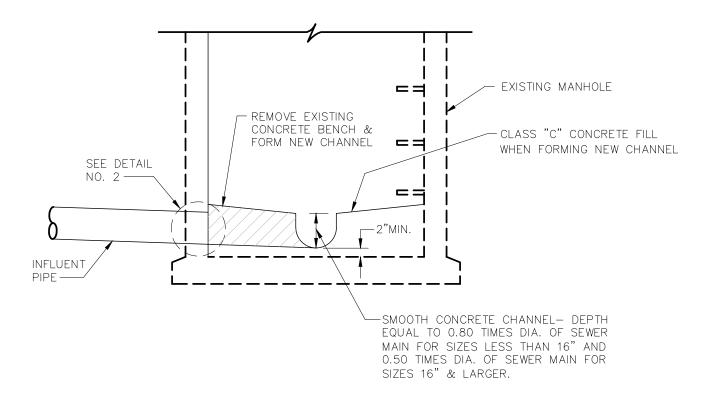




NOTES: 1) TWO SEPARATE COATS OF APPROVED BITUMASTIC WATERPROOFING COMPOUND SHALL BE APPLIED PER MANUFACTURERS INSTRUCTIONS TO THE ENTIRE EXTERIOR OF STRUCTURE. EXCEPT WITHIN LIMITS OF CAST IN PLACE CONCRETE.

- 2) TWO SEPARATE COATS OF APPROVED TWO-PART EPOXY COATING SHALL BE APPLIED PER MANUFACTURERS INSTRUCTIONS TO THE ENTIRE INTERIOR OF STRUCTURE.
- 3) FOR UPPER MANHOLE SECTIONS, SEE DETAILS 3 OR 4.



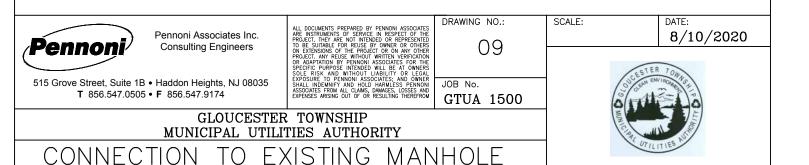


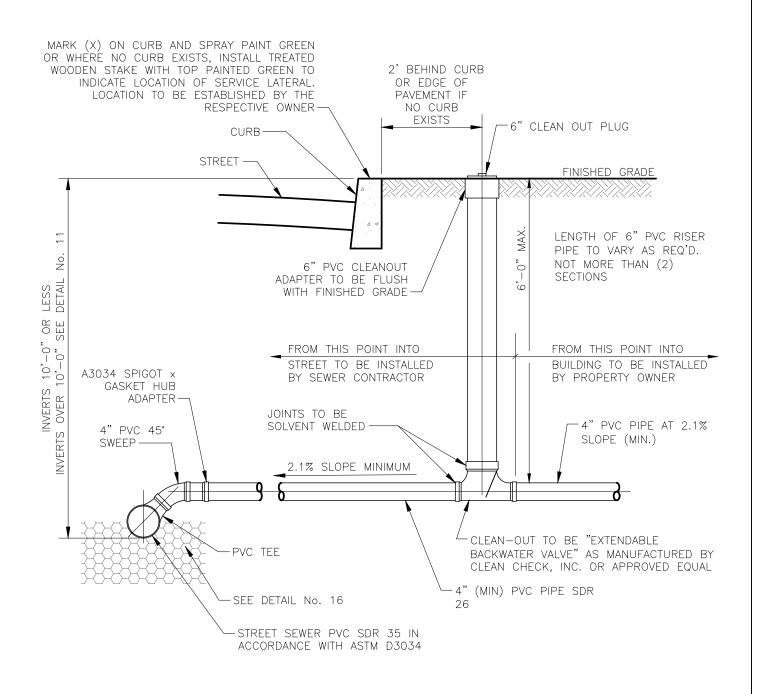
NOTE:

IF THE PROPOSED PIPE COINCIDES WITH THE EXISTING MANHOLE RUNGS:

- 1) THE EXISTING MANHOLE OPENING AND CONE SECTION SHALL BE REALIGNED WITH THE PROPOSED ACCESS LADDER. THE EXISTING MANHOLE RUNGS WITHIN THE CONE SECTION MAY REMAIN AND ALL OTHERS SHALL BE REMOVED.
- 2) A NEW STAINLESS STEEL ACCESS LADDER WITH 1" DIAMETER RUNGS (MIN.) X 12" WIDE (MIN.)

 @ 12" ON CENTER SHALL BE INSTALLED 7" FROM THE MANHOLE WALL TO THE CENTERLINE OF THE RUNGS AND ATTACHED TO THE MANHOLE WALL WITH STAINLESS STEEL HARDWARE.







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10

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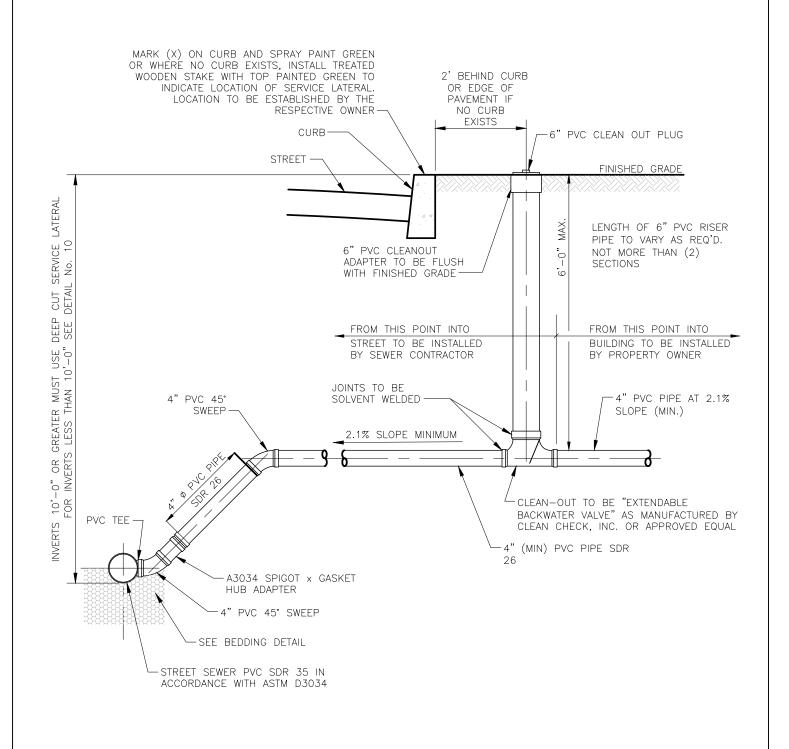
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SERVICE LATERAL DETAIL







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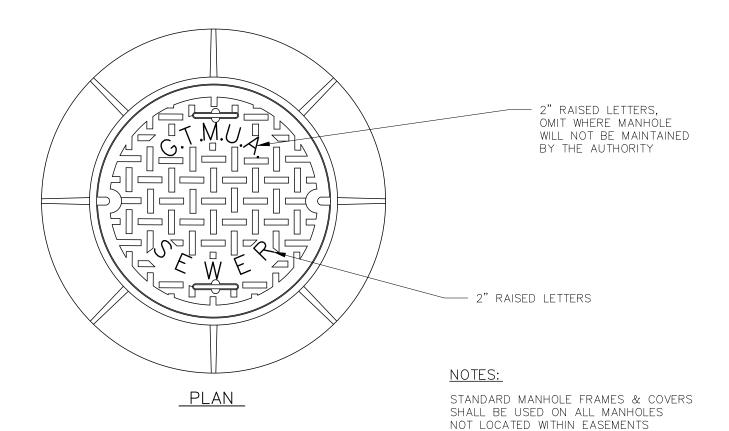
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8/10/2020

GLOUCESTER TOWNSHIP MUNICIPAL UTILITIES AUTHORITY

ATERAL DEEP **SERVICE** DETAIL



1/2" Ø GALVANIZED STEEL LIFT HANDLES 31 3/4" 3/8" 8" 30 32" - 43"-SECTION

STANDARD MANHOLE FRAME & COVER SHALL BE BRIDGESTATE PATTERN #1012B, OR APPROVED EQUAL, WITH NON- PENETRATING PICK HOLES AND DROP LIFT HANDLES.

UNLESS DIRECTED OTHERWISE BY THE

"FLOW-SEAL" MANHOLE COVERS SHALL BE USED ON MANHOLES LOCATED WITHIN EASEMENTS, IN UNPAVED AREAS, AND OUTSIDE OF THE CENTERLINE OF PAVED ROADS.

ALL MANHOLE FRAME AND COVERS SHALL BE MADE IN THE USA.

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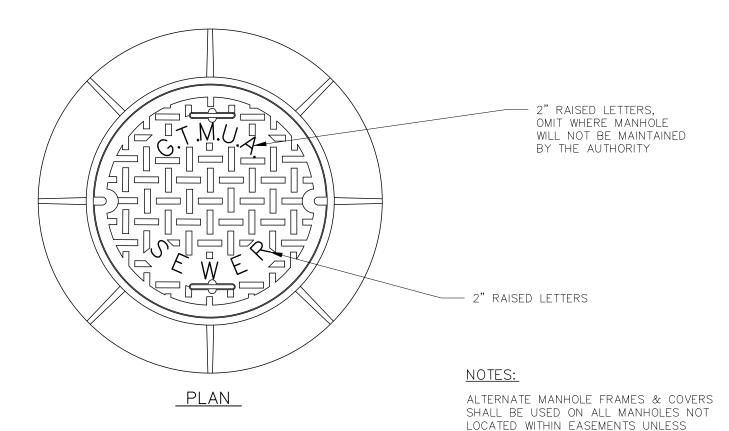
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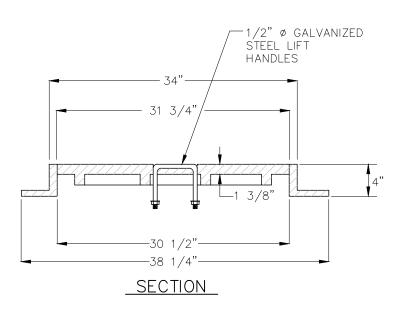
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MUNICIPAL UTILITIES AUTHORITY STANDARD MANHOLE FRAME & COVER DETAIL





ALTERNATE MANHOLE FRAME & COVER SHALL BE BRIDGESTATE PATTERN #1012D, OR APPROVED EQUAL, WITH NON-PENETRATING PICK HOLES & DROP LIFT HANDLES.

DIRECTED OTHERWISE BY THE ENGINEER.

"FLOW—SEAL" MANHOLE COVERS SHALL BE USED ON MANHOLES LOCATED WITHIN EASEMENTS, IN UNPAVED AREAS, AND OUTSIDE OF THE CENTERLINE OF PAVED ROADS.

ALL MANHOLE FRAME AND COVERS SHALL BE MADE IN THE USA.

SCALE:



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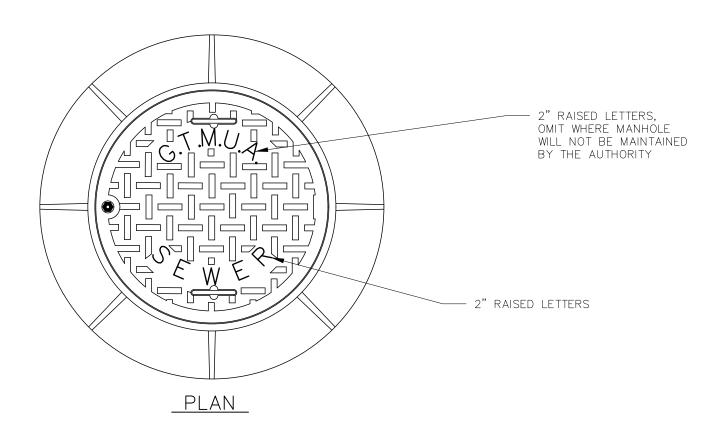
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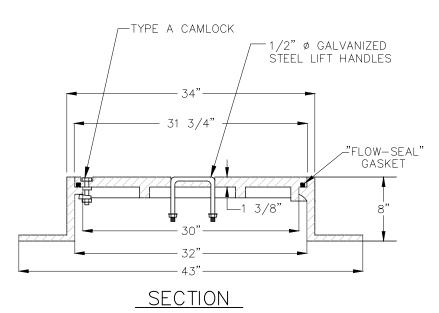
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8/10/2020

GLOUCESTER TOWNSHIP MUNICIPAL UTILITIES AUTHORITY

ALTERNATE MANHOLE FRAME AND COVER DETAIL





NOTES:

LOCKING MANHOLE COVERS SHALL BE USED ON ALL MANHOLES LOCATED WITHIN EASE- MENTS.

LOCKING MANHOLE FRAME & COVER SHALL BE BRIDGESTATE PATTERN #1460B, OR APPROVED EQUAL, WITH NON PENETRATING PICK HOLES AND DROP LIFT HANDLES.

"FLOW-SEAL" MANHOLE COVERS SHALL BE USED ON MANHOLES LOCATED WITHIN EASEMENTS, IN UNPAVED AREAS, AND OUTSIDE OF THE CENTERLINE OF PAVED ROADS.

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ALL MANHOLE FRAME AND COVERS SHALL BE MADE IN THE USA.

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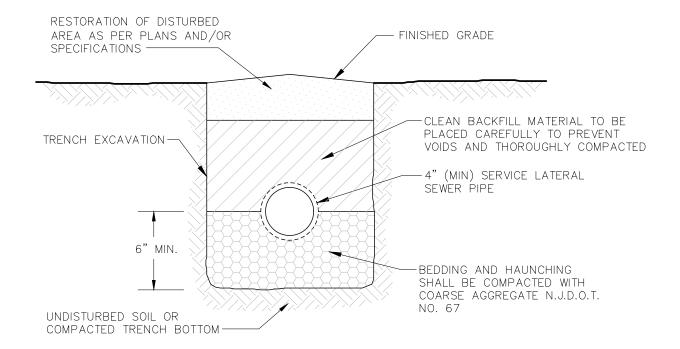
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14

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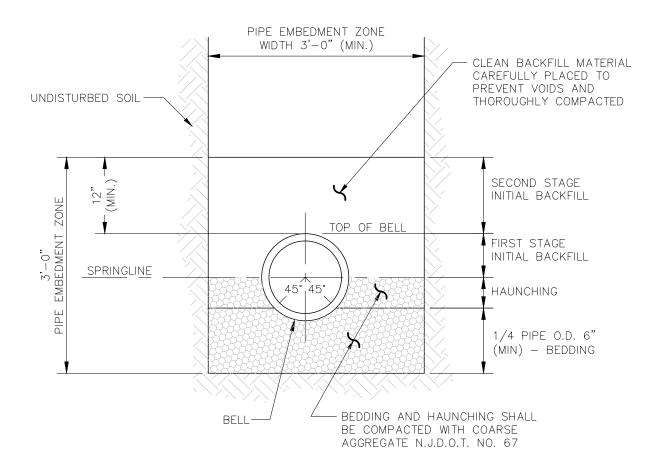
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SERVICE LATERAL TRENCH DETAIL







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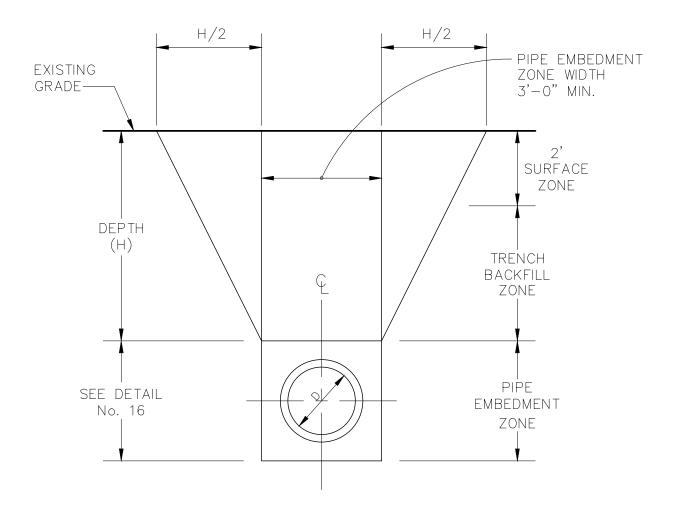
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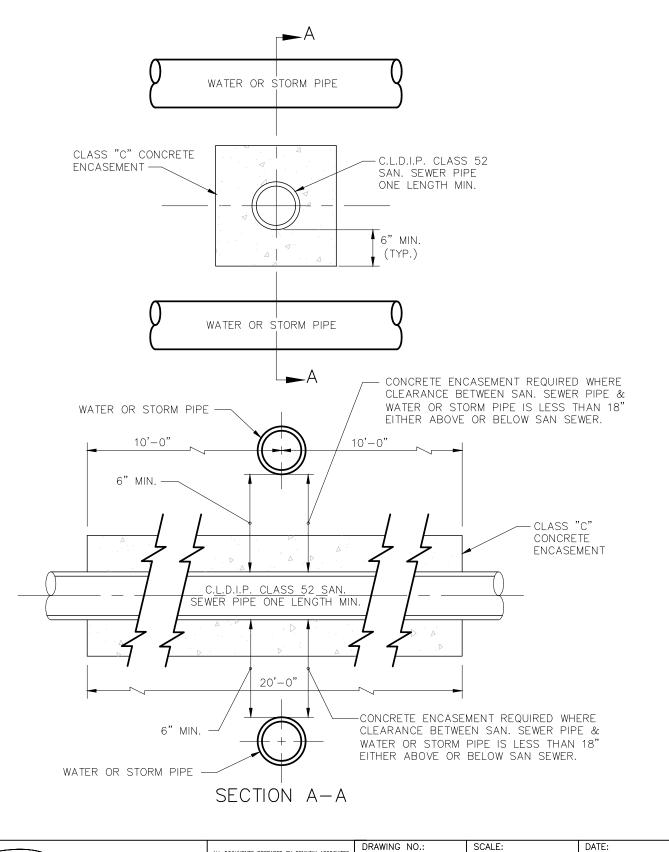
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TRENCH DETAIL





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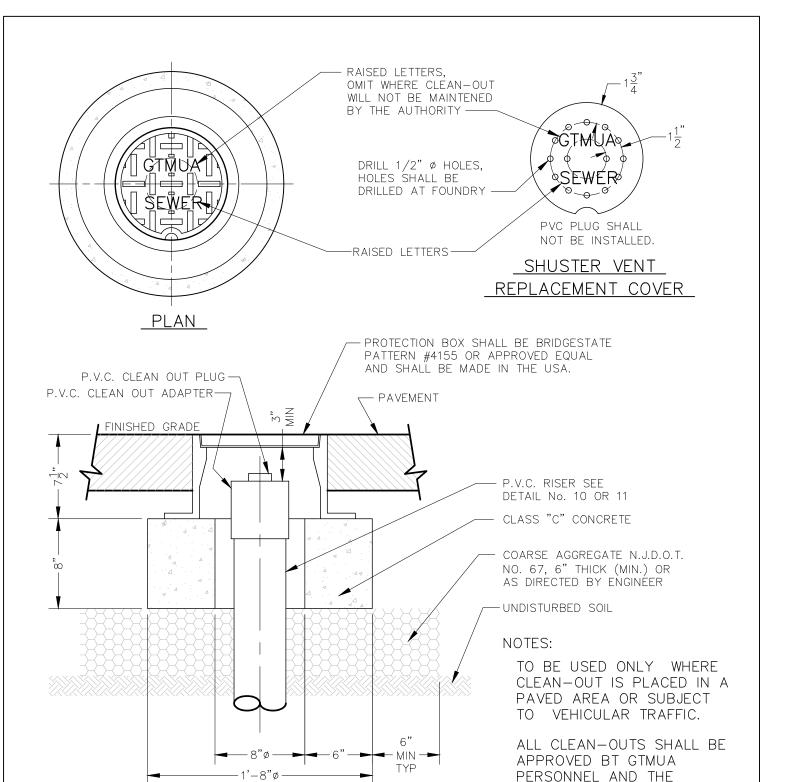
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CONCRETE ENCASEMENT DETAIL





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DRAWING NO.:

19

JOB No.

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8/10/2020

TOWNSHIP ENGINEER.

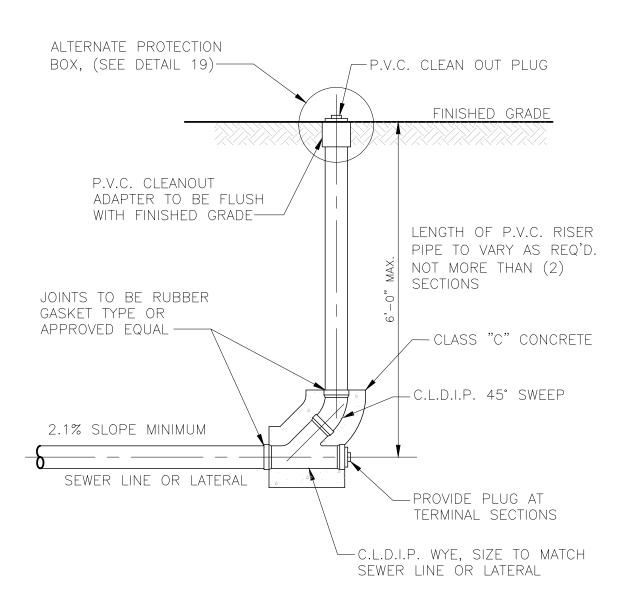
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SECTION

CLEAN OUT PROTECTION BOX DETAIL





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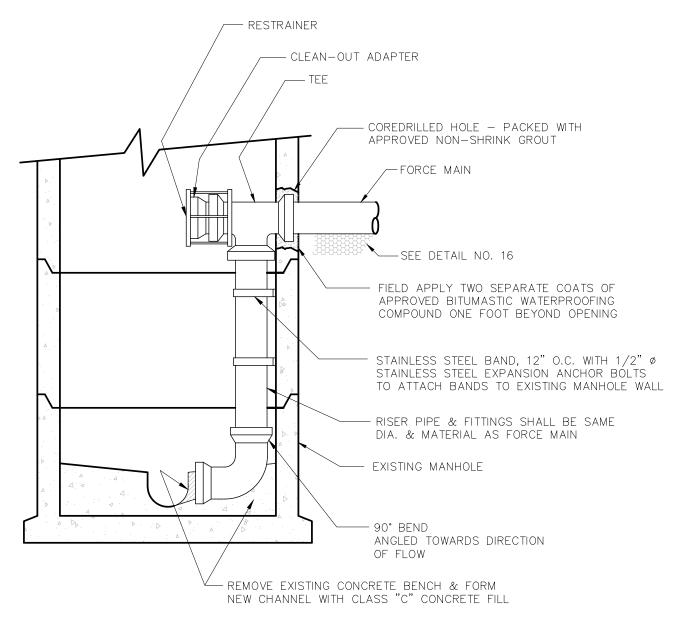
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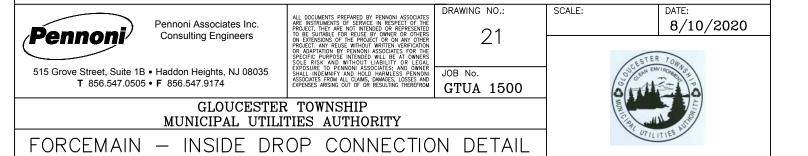
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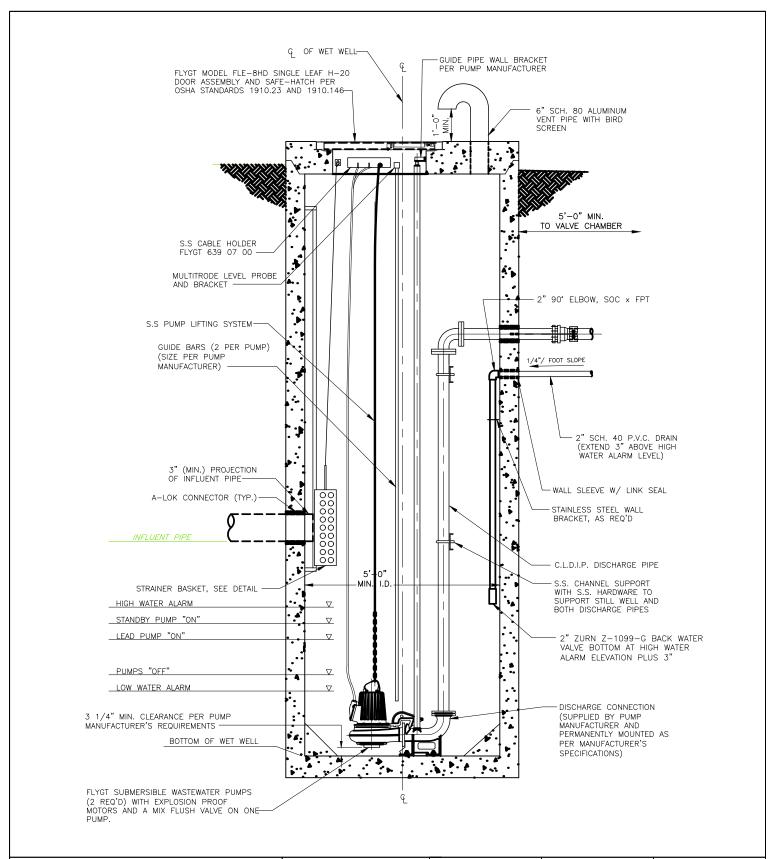
SANITARY SEWER CLEANOUT DETAIL



NOTE:

- PROVIDE A PIPE JOINT WITHIN FOUR (4) FEET OF EXISTING MANHOLE TO ALLOW FOR SETTLEMENT.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO THE EXISTING MANHOLE AND ADJACENT PROPERTIES.
 - 3. THE ENTIRE INTERIOR OF THE EXISTING MANHOLE SHALL BE REHABILITATED AND LINED AS DIRECTED BY THE ENGINEER.







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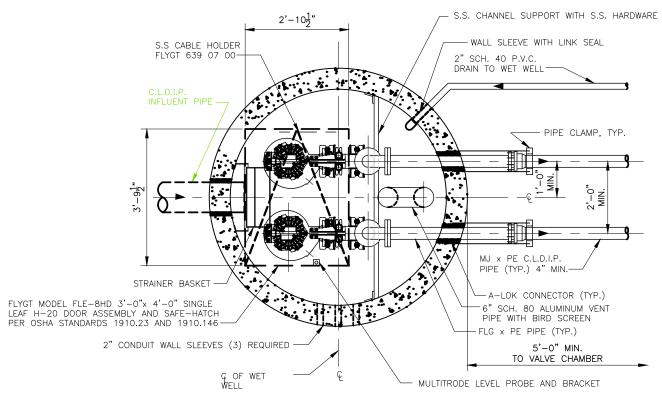
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PUMPING STATION SECTION

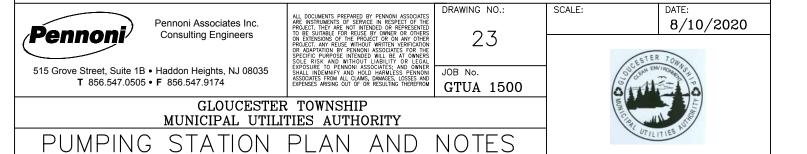


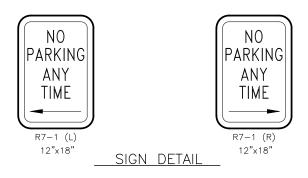


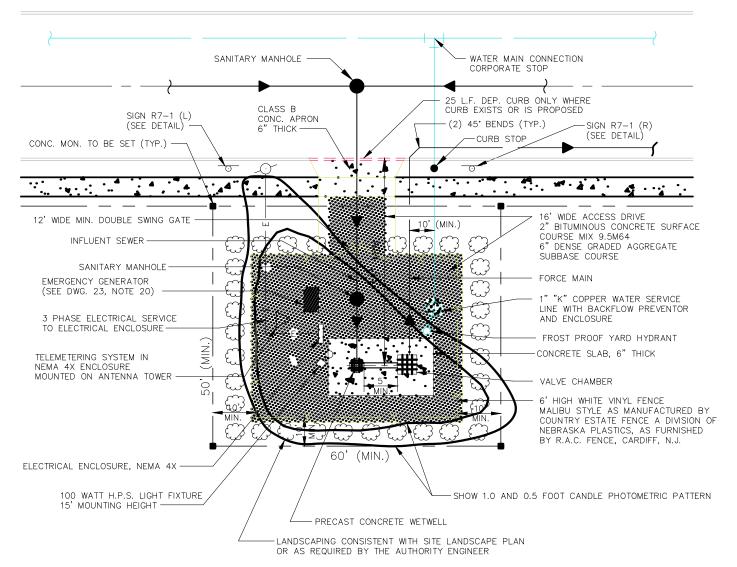
NOTES:

- SUBMERSIBLE PUMPS AND MOTORS SHALL BE EXPLOSION PROOF, THREE (3) PHASE, AND COMPLETELY SUBMERGED AT ALL TIMES. THE LEAD PUMP SELECTION SHALL ALTERNATE WITH EACH PUMPING CYCLE SO AS TO ENSURE EVEN PUMP WEAR.
- PUMP CONTROL SYSTEM SHALL BE A FLYGT MULTITRODE LEVEL PROBE AND PUMP CONTROLLER AND A SEALED FLOAT SWITCH FOR THE HIGH LEVEL BACKUP ALARM & THE REDUNDANT PUMPS OFF CONTROL.
- EACH PUMP SHALL BE FURNISHED WITH ONE COMPLETE PUMP LIFT SYSTEM BY FLYGT. THE SYSTEM SHALL BE SIZED FOR THE WEIGHT OF THE PUMP TO BE LIFTED. A STAINLESS STEEL CABLE SHALL BE ATTACHED TO EACH PUMP CHAIN. ALL COMPONENTS (EXCEPT FOR THE GRIP EYE) SHALL BE OF STAINLESS STEEL.
- ONE PUMP SHALL BE SUPPLIED WITH A MIX FLUSH VALVE AND INSTALLED AS PER THE MANUFACTURER'S SPECIFICATIONS.
 THE INFLUENT PIPE SHALL BE CEMENT LINED DUCTILE IRON PIPE FROM THE NEAREST STRUCTURE TO THE WET WELL TO AVOID DEFLECTION IN THE AREA OF THE WET WELL EXCAVATION.
- 7. THE ACCESS DOORS FOR THE WET WELL AND VALVE PIT SHALL BE DESIGNED FOR H-20 BRIDGE LOADING. ALL DOORS SHALL INCLUDE SAFE-HATCH BY FLYGT. THE ACCESS DOOR/S FOR THE WET WELL SHALL BE POSITIONED TO PROVIDE ACCESS AND PROPER REMOVAL OF THE SUBMERSIBLE PUMPS AND STRAINER BASKET.
- 8. THE WASTEWATER PUMPING STATION SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF N.J.A.C. 7:14A-23.10 ET. SEQ. AND N.J.A.C. 5:21-62B.
- 9. THE TELEMETERING SYSTEM SHALL GIVE WARNING OF HIGH WATER, POWER FAILURE, MECHANICAL FAILURE, LOW WATER LEVEL, AND ALL OTHER ALARM POINTS REQUIRED BY THE AUTHORITY. THE ANTENNA SHALL BE ORIENTED PER THE SYSTEM REQUIREMENTS.
- 10. ALL BACKFILL UNDER STRUCTURES SHALL BE STRUCTURAL FILL, NJDOT COARSE AGGREGATE No. 2 FOR BELOW GROUND WATER AND No. 67 FOR ABOVE GROUND WATER.
- 11. ALL METAL AND HARDWARE WITHIN THE WET WELL SHALL BE STAINLESS STEEL.
 12. ALL PIPE CONNECTIONS WITHIN THE WET WELL SHALL UTILIZE FLANGED FITTINGS.
 13. ALL BALL VALVES SHALL BE AS MANUFACTURED BY AMERICAN VALVE, INC.
- 14. ALL SWING CHECK VALVES SHALL BE AS MANUFACTURED BY GOLDEN ANDERSON, INC. AND SHALL BE FIG. NO. 250-D WITH BALANCED OUTSIDE LEVER, BRONZE AIR CUSHION CHAMBER, & LINKAGE FOR AIR CONTROLLED CLOSING SERVICE.
- 15. ALL CONCRETE SHALL BE 4,000 PSI, AIR ENTRAINED CLASS 'B' CONCRETE, UNLESS OTHERWISE NOTED.

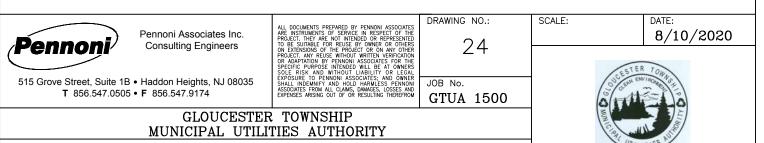
 16. TWO SEPARATE COATS OF APPROVED BITUMASTIC WATERPROOFING COMPOUND SHALL BE APPLIED PER THE PRECAST CONCRETE MANUFACTURER'S INSTRUCTIONS TO THE ENTIRE EXTERIOR OF THE WET WELL AND VALVE CHAMBER.
- 17. A TWO PART-EPOXY COATING SHALL BE APPLIED PER MANUFACTURER'S INSTRUCTIONS TO THE ENTIRE INTERIOR OF THE VALVE CHAMBER.
- 18. THE WET WELL'S ENTIRE INTERIOR SHALL HAVE AN INTEGRAL P.V.C. LINER PLACED DURING THE CASTING PROCESS. THE LINER SHALL BE DURA PLATE 100 BY A-LOK.
- BUOYANCY CALCULATIONS SHALL BE SUBMITTED TO ENSURE AGAINST WET WELL FLOTATION.
 AN EMERGENCY GENERATOR SHALL BE REQUIRED TO ALLOW CONTINUOUS FLOW OF WASTEWATER DURING TEMPORARY POWER OUTAGES.
 CONTACT THE AUTHORITY ENGINEER FOR REQUIREMENTS AND DETAILS.



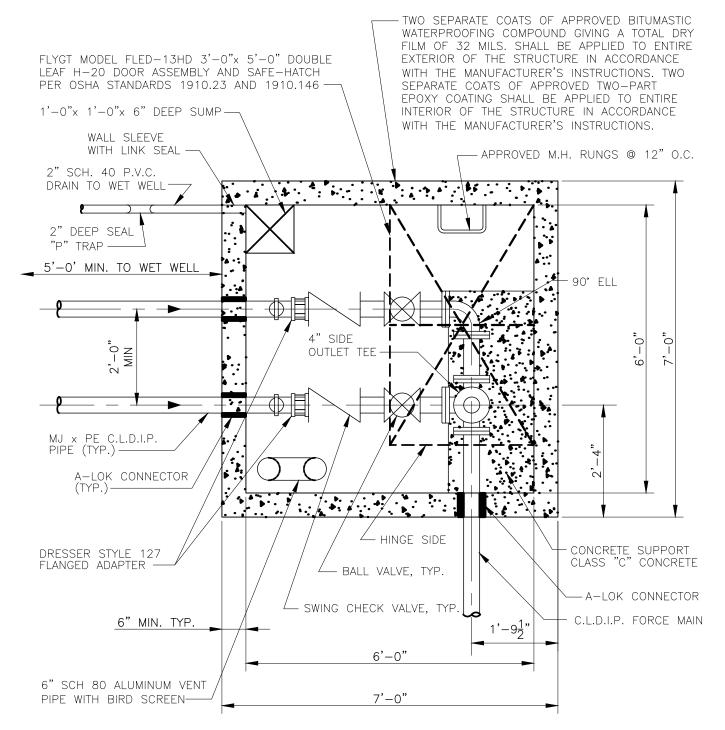




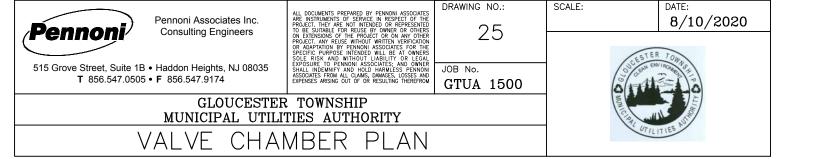
NOTE: ALL BENDS SHALL BE RESTRAINED WITH CONCRETE THRUST BLOCKS

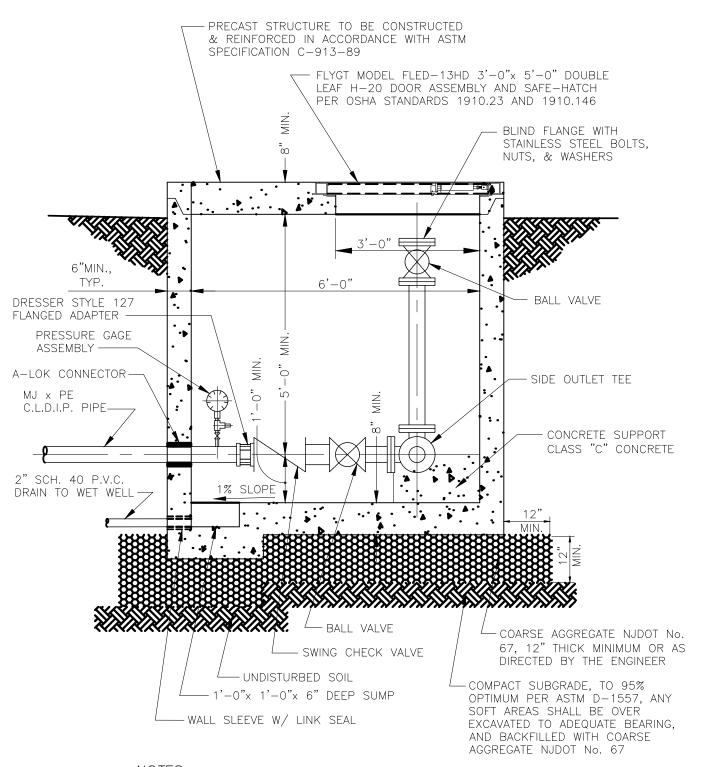


PUMPING STATION TYPICAL SITE PLAN

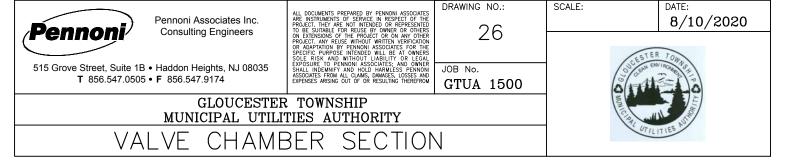


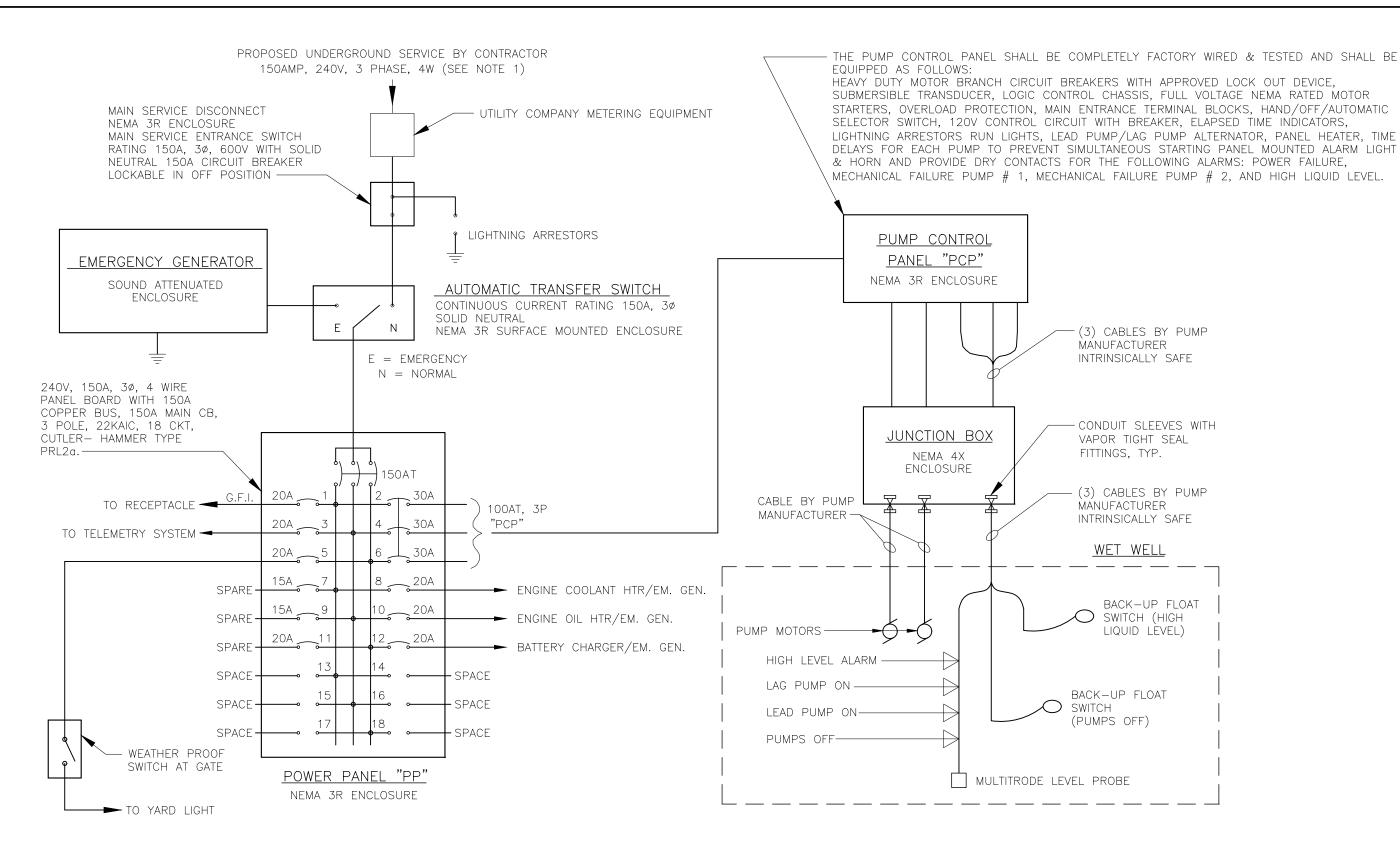
NOTES: 1. SEE DRAWING NO. 26 FOR SECTIONAL VIEW.





NOTES: 1. SEE DRAWING NO. 25 FOR PLAN VIEW.





NOTES:

- 1. ELECTRICAL SERVICE AND SIZING SHOWN FOR REFERENCE ONLY, ALL EQUIPMENT TO BE SIZED FOR PUMP MOTORS AND EQUIPMENT SHOWN.
- 2. THE MAIN SERVICE DISCONNECT, AUTOMATIC TRANSFER SWITCH, POWER PANEL, AND PUMP CONTROL PANEL SHALL BE MOUNTED IN A NEMA 4X ELECTRICAL ENCLOSURE.
- 3. THE WET WELL AND VALVE CHAMBER ARE CLASS 1 DIV. 1, GROUP D HAZARDOUS AREAS.





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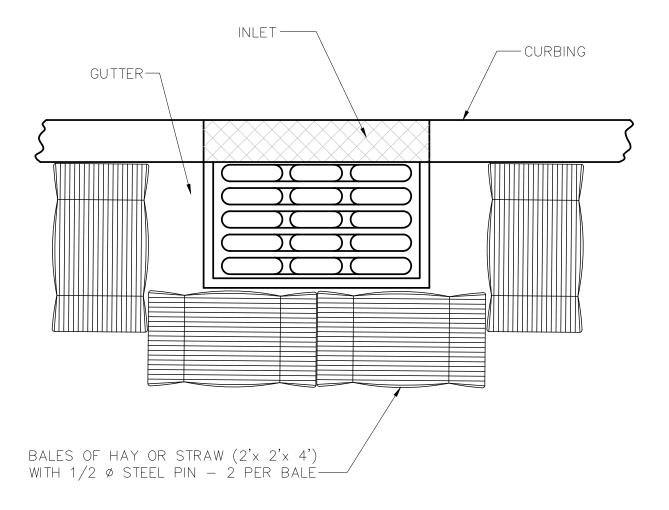
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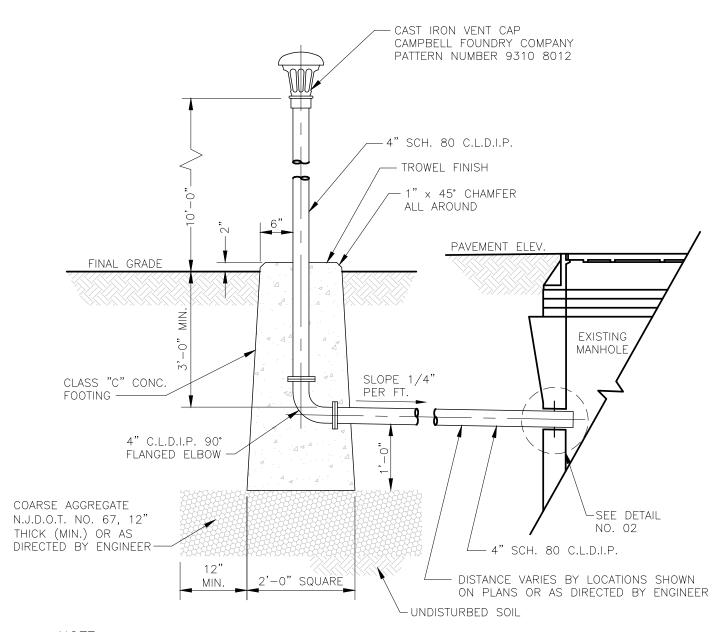
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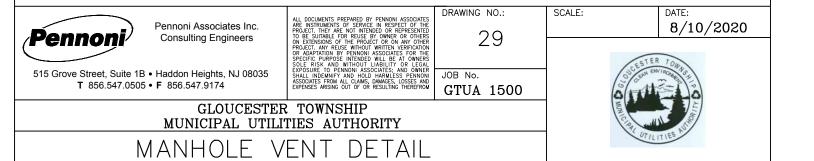
GLOUCESTER TOWNSHIP MUNICIPAL UTILITIES AUTHORITY

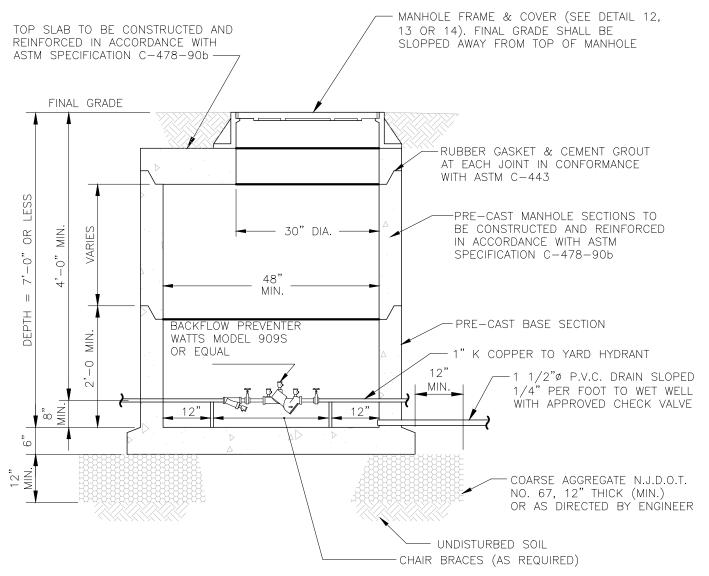
PROTECTION DETAIL



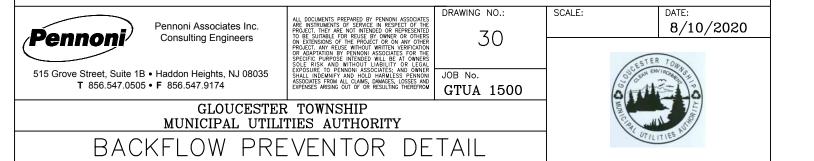
NOTE:

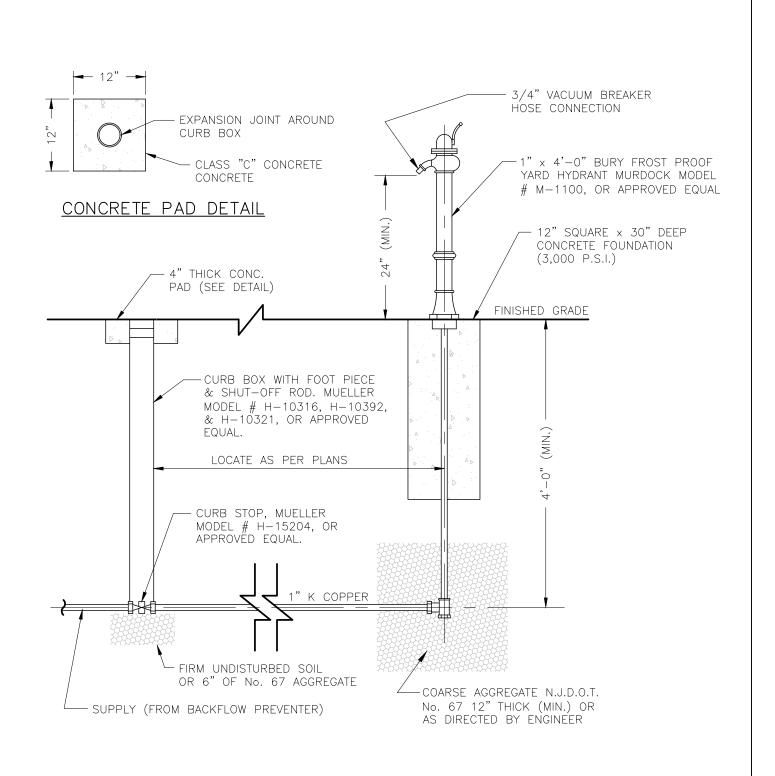
- 1. ALL EXPOSED METAL SURFACES SHALL RECEIVE TWO (2) SEPARATE COATS OF PAINT "FOLIAGE GREEN"; COLOR # 74-679, RUST O LASTIC PAINT, BY M.A.BRUDER OR APPROVED EQUAL. SURFACES TO BE PAINTED SHALL BE PREPARED AND PRIMED IN ACCORDANCE WITH THE PAINT MANUFACTURER'S INSTRUCTIONS.
- 2. TO BE USED AT MANHOLES RECEIVING DISCHARGE FROM FORCE MAINS OVER 2500 FEET LONG AND WHERE SEWAGE TRAVEL TIME EXCEEDS 50 MINUTES FROM POINT OF ENTRY INTO THE CONVEYANCE SYSTEM.





NOTES: 1) TWO SEPARATE COATS OF APPROVED BITUMASTIC WATERPROOFING COMPOUND SHALL BE APPLIED PER MANUFACTURERS INSTRUCTIONS TO THE ENTIRE EXTERIOR OF STRUCTURE.







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DRAWING NO.:

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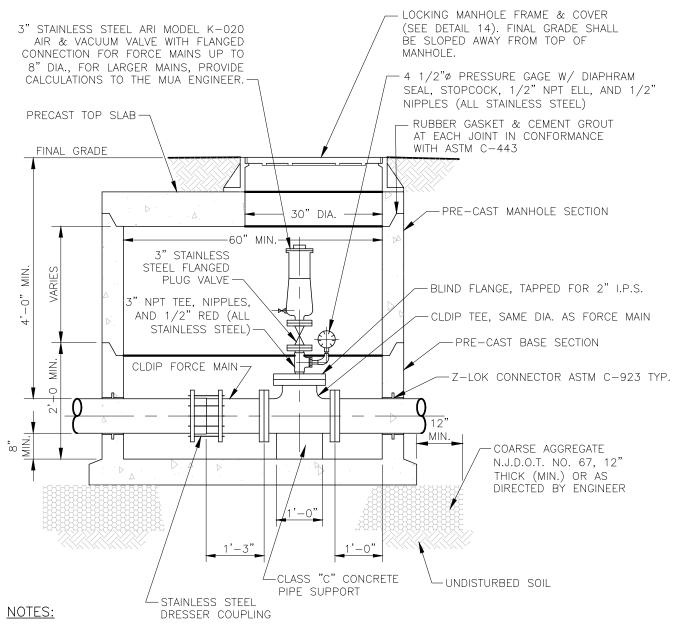
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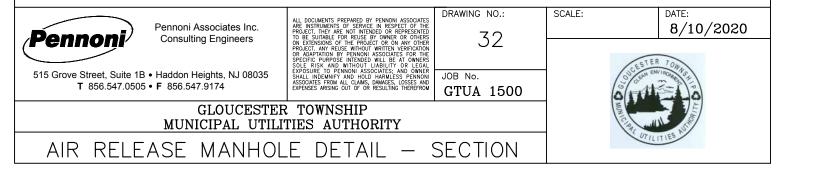
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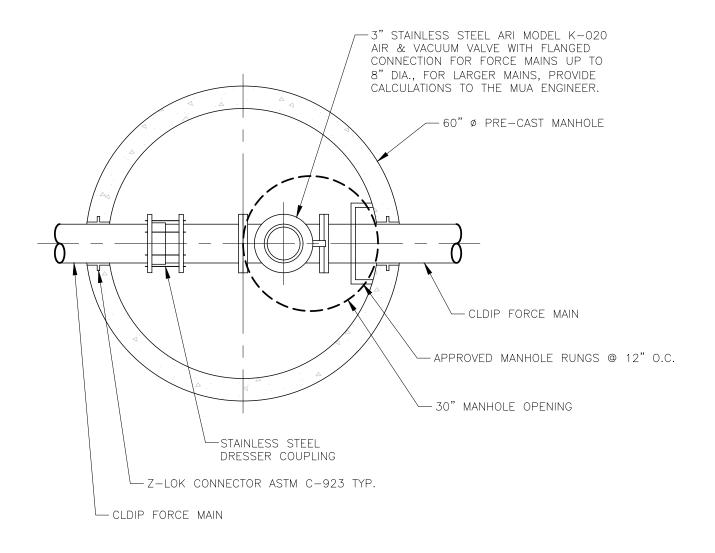
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YARD HYDRANT DETAIL



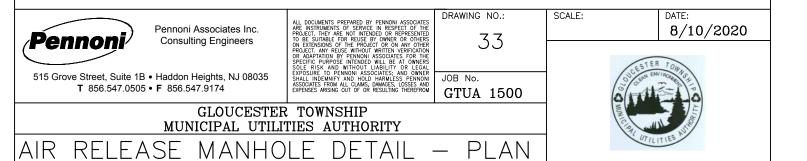
- 1. SEE DRAWING NO. 33 FOR PLAN VIEW.
- 2. PRE-CAST MANHOLE TO BE CONSTRUCTED AND REINFORCED IN ACCORDANCE WITH ASTM SPECIFICATION C-478-90b.
- 3. TWO SEPARATE COATS OF APPROVED BITUMASTIC WATERPROOFING COMPOUND SHALL BE APPLIED PER MANUFACTURER'S INSTRUCTIONS TO THE ENTIRE EXTERIOR OF STRUCTURE.
- 4. TWO SEPARATE COATS OF APPROVED TWO-PART EPOXY COATING SHALL BE APPLIED PER MANUFACTURER'S INSTRUCTIONS TO THE ENTIRE INTERIOR OF STRUCTURE.
- 5. INSTALL NEW AIR/VACUUM VALVE AND GAGE WITH ALL STAINLESS STEEL HARDWARE AND FITTINGS.

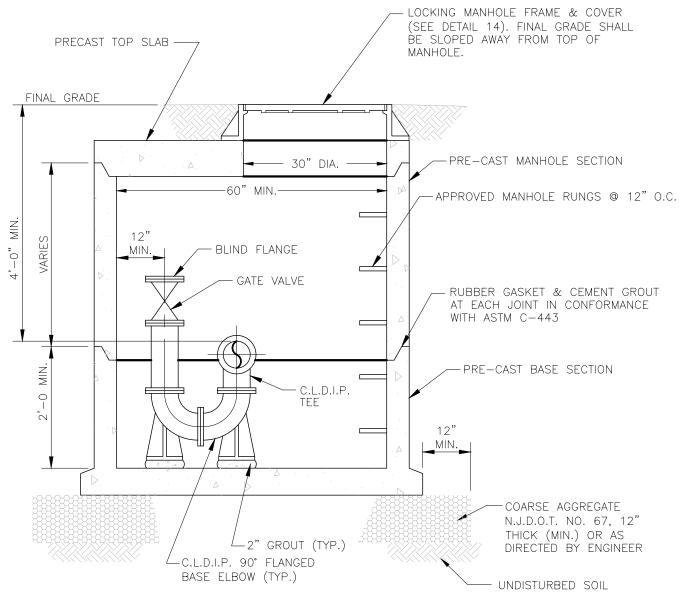




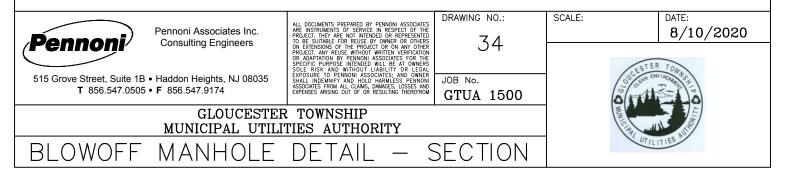
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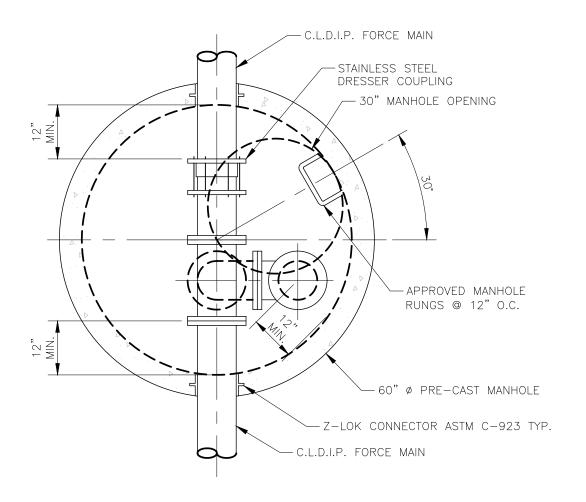
- 1. SEE DRAWING NO. 32 FOR SECTIONAL VIEW.
- 2. REQUIRED ALONG FORCE MAINS AT HIGH POINTS BETWEEN PUMP STATION AND THE POINT OF DISCHARGE.
- 3. INSTALL NEW AIR/VACUUM VALVE AND GAGE WITH ALL STAINLESS STEEL HARDWARE AND FITTINGS.





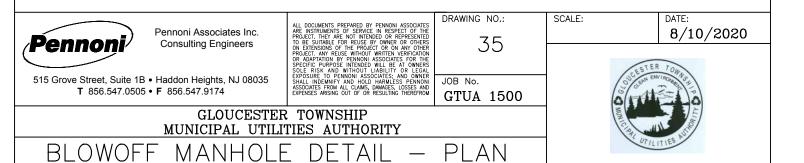
- NOTES: 1. SEE DRAWING NO. 35 FOR PLAN VIEW.
 - 2. PRE-CAST MANHOLE TO BE CONSTRUCTED AND REINFORCED IN ACCORDANCE WITH ASTM SPECIFICATION C-478-90b.
 - 3. TWO SEPARATE COATS OF APPROVED BITUMASTIC WATERPROOFING COMPOUND SHALL BE APPLIED PER MANUFACTURER'S INSTRUCTIONS TO THE ENTIRE EXTERIOR OF STRUCTURE.
 - 4. TWO SEPARATE COATS OF APPROVED TWO-PART EPOXY COATING SHALL BE APPLIED PER MANUFACTURER'S INSTRUCTIONS TO THE ENTIRE INTERIOR OF STRUCTURE.

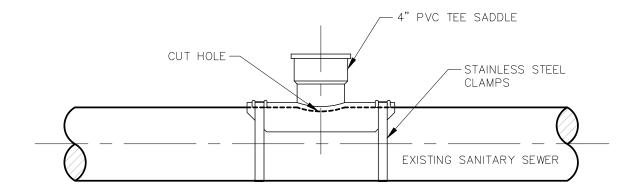




NOTES:

- 1. SEE DRAWING NO. 34 FOR SECTIONAL VIEW.
- 2. REQUIRED ALONG FORCE MAINS AT LOW POINTS BETWEEN PUMP STATION AND THE POINT OF DISCHARGE.
- 3. SEWAGE SHALL NOT BE DISCHARGED INTO THE MANHOLE.





NOTE:

- 1. THE PVC SADDLE CONNECTION MAY BE MADE BY EITHER OF THE TWO METHODS DESCRIBED BELOW FOR PVC GRAVITY SEWER. GASKET INSTALLATION ONLY FOR DUCTILE IRON PIPE.
- 2. FOR LATERAL CONNECTION INTO EXISTING SANITARY SEWER.

SOLVENT WELD:

- 1. CUT HOLE IN EXISTING SANITARY SEWER 1/2" LARGER THAN THE O.D. OF SADDLE STEM.
- 2. CLEAN BOTH SURFACES.
- 3. APPLY PRIMER TO BOTH SURFACES.
- 4. APPLY CEMENT AND IMMEDIATELY POSITION SADDLE.
- 5. TIGHTEN STAINLESS STEEL SADDLE CLAMPS.

GASKET:

- 1. CUT HOLE IN EXISTING SANITARY SEWER 1/4" LARGER THAN THE O.D. OF SADDLE STEM; DOWNSTREAM SIDE TO BE CUT AT 45° TO ALLOW SADDLE STEM FIT.
- 2. MAKE SURE BOTH SURFACES ARE CLEAN.
- 3. APPLY GASKET.
- 4. POSITION SADDLE OVER HOLE.
- 5. TIGHTEN STAINLESS STEEL SADDLE CLAMPS.



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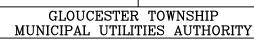
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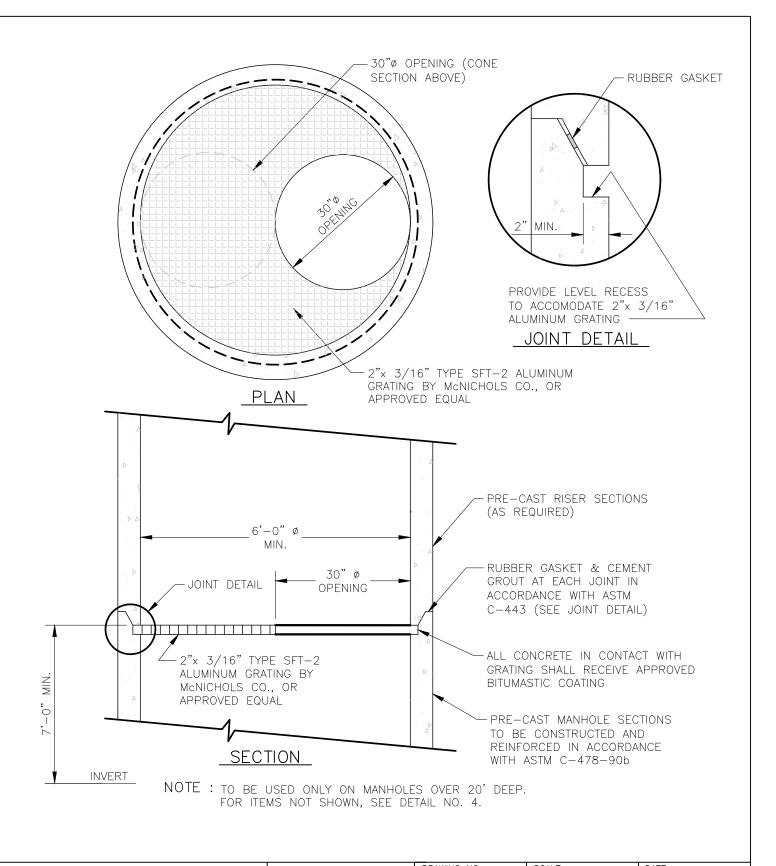
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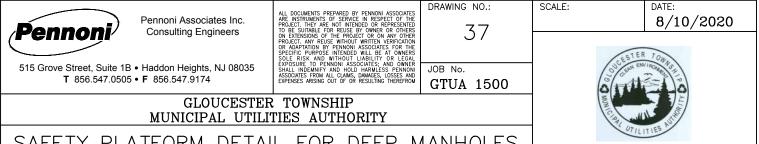
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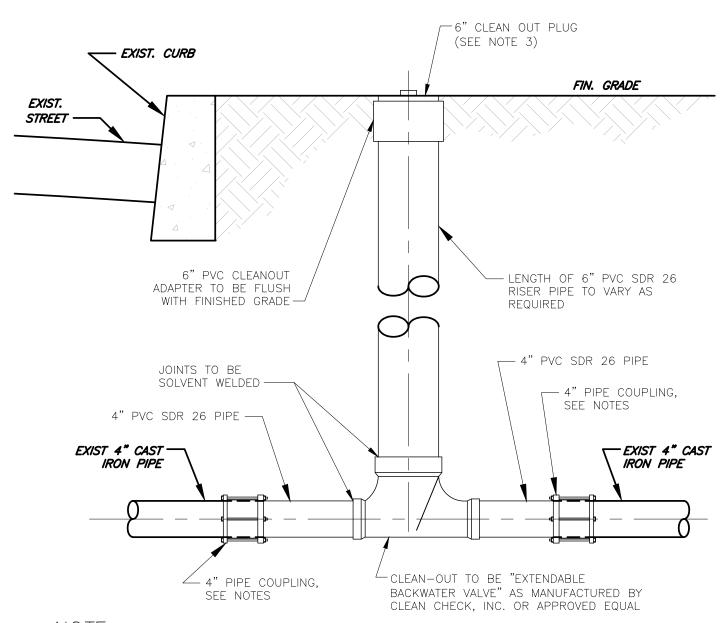
SADDLE CONNECTION DETAIL





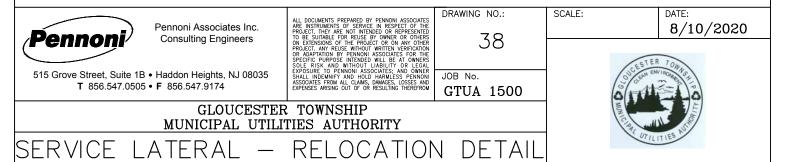


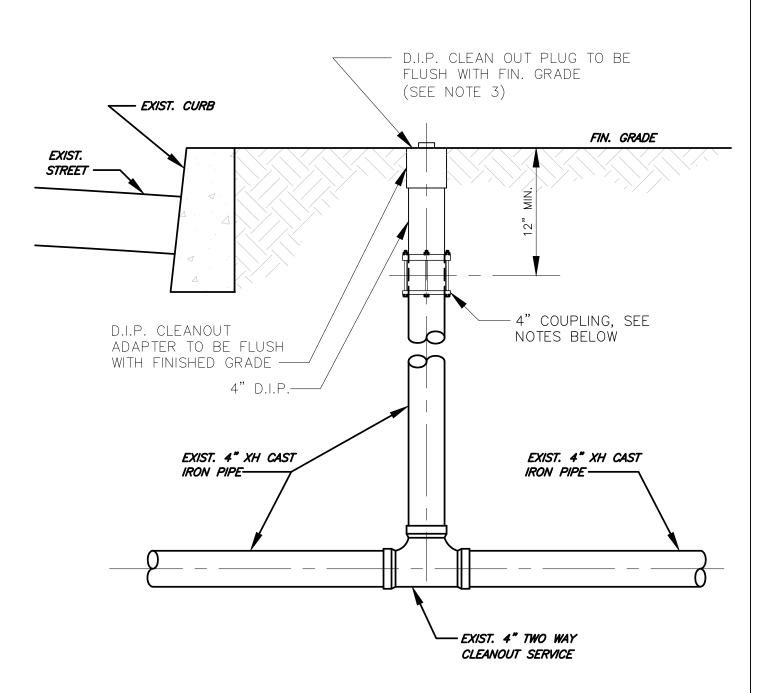
SAFETY PLATFORM DETAIL FOR DEEP MANHOLES



NOTE:

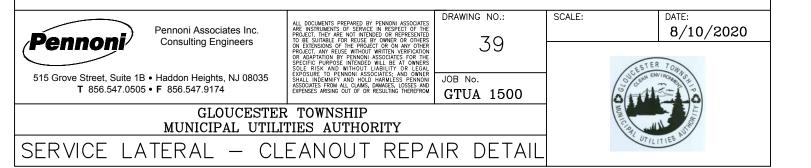
- 1. EDGE OF EXIST. PIPE SHALL BE CUT SQUARE PRIOR TO INSTALLING COUPLING.
- 2. COUPLING TO BE DRESSER STYLE 253 WITH STAINLESS STEEL HARDWARE, OR APPROVED EQUAL.
- 3. ALSO TO BE USED WHEN CLEANOUT IS ALSO A SHUSTER VENT.





NOTE: 1. EDGE OF EXIST. PIPE SHALL BE CUT SQUARE PRIOR TO INSTALLING COUPLING.

- 2. COUPLING TO BE DRESSER STYLE 162, OR APPROVED EQUAL.
- 3. ALSO TO BE USED WHEN CLEANOUT IS ALSO A SHUSTER VENT.



CONCRETE THRUST BLOCKS	m	6" 1'-0'	0" 1'-0'	4" 1'-3'	6" 1'-6'	6" 2'-0"	
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COMPRESSIVE STRENGTH WITHIN 3000 PSI BE BLOCKS SHALL FOR THRUST ALL CONCRETE М.

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THE BEAR SUCH THAT THEY FITTING FROM SHALL BE POURED OF THE TRENCH. THE THRUST BLOCKS UNDISTURBED WALL 4.

THE TABULATED CONTACT BEARING AREAS LISTED ARE FOR HORIZONTAL AND DOWNWARD FOR UPWARD THRUST NOT APPLICABLE THRIIST ONIY AND ARF

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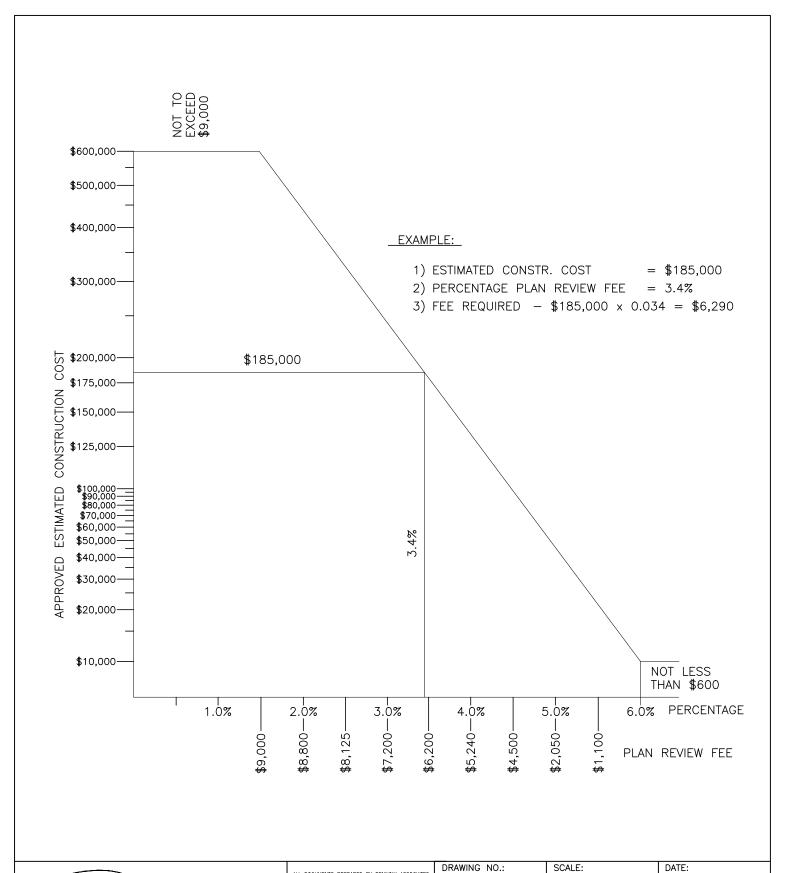
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8/10/2020

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