

1140 N. PROVIDENCE ROAD  
MEDIA, PENNSYLVANIA 19063  
TEL: 610.566.7044  
FAX: 610.566.3258

### ADDENDUM NO.5

#### **Trainer Borough - New Borough Administration, Police and Community Center**

**October 28, 2019**

The following are revisions, clarifications, or additions to the contract drawings for the above referenced project:

- 1) Question: Addendum No. 2 indicates the gas service installation is part of the Site Contractor scope, but no information regarding the gas service (i.e. pipe material, pipe size, depth, etc.) is given on the drawings. Please verify this work is part of the site contractor scope, and if so, please provide the needed information to price this work.

Answer: The gas service should be plastic per PECO standards and specifications.

- 2) Question: What is the proposed pipe material for the 3" diameter and smaller water service?

Answer: Due to the length of connection and location under parking lots and drive aisles, all water lines should be cement-lined ductile iron (CLDI) pipe

- 3) Question: CWA Drawings do not appear to provide a spec or detail for the proposed water meter pit, please provide additional information about the proposed meter pit.

Answer: Refer to CWA Drawing 1900-S.

- 4) Question: 1. EPDM Roofing. Drawings call out 60mil Black Rein EPDM, spec calls out 45mil Black Rein EPDM. Which is correct? 2. EPDM Roofing. Spec calls out 30year warranty. Is this correct? If so membrane thickness will need to be increased. 3. EPDM Roofing. Drawings call out R-30 polyiso. Spec calls out R-30 extruded. Which insulation is correct? If extruded a coverboard will need to be added as EPDM cannot be glued to extruded. 4. EPDM Roofing. Is a coverboard required. There is mention of it in spec but nothing in particular is called out.

Answer: .45 mil reinforced EPDM membrane shall be used, provide manufactures max year warranty. Insulation shall be Polyiso in minimum thickness to achieve R-30 insulation value. No coverboard is required unless specifically required by manufacturer to achieve warranty.

- 5) Question: What type of pipe is the existing 12" diameter water main in Township Line Road for the proposed wet tap?

Answer: The existing 12" diameter water main in Township Line Road is Cement Lined Cast Iron (CLCI) installed in 1915.

- 6) Question: What size are the drain lines which connect the roof drains to the site stormwater system?

Answer: As shown on the "Roof Drain Structure Detail" on Sheet 17 of the Reverse Subdivision and Land Development plans, the pipe to connect the roof drain collection system to the storm sewer system should be 6" HDPE at a 2% minimum slope.

- 7) Question: Are the trench drains shown within the Sally Port area part of the Site Contract? If so, please provide a detail.

Answer: Trench drains within the sally port are part of the general contractor's scope.

- 8) Question: Under Advertisement for Bids, the language states " Bids must be submitted electronically via the PennBid Program on the forms furnished by the Owner...." However under Instructions to Bidders Paragraph 2 it states " Each bid must be in a sealed envelope...". Furthermore, Paragraph 1 states there will be a public bid opening despite it being uploaded online? Are we to both upload via PennBid AND submit a sealed hard copy on site? Please clarify the proper bid submission method and bid opening procedure.

Answer: All Bids will be submitted electronically thru PennBid. There will be no Public Bid opening and No hard copy bid is required to be submitted. Bids will be opened thru Pennbid and will be released shortly thereafter on Pennbid's site as soon as the borough has authorized its release, which should take no more than 30 mins.

9) Question: The detail for trench restoration in PennDOT Road on Sheet 20 shows base course restoration with either 8" concrete or 6" bituminous. Which one is required?

Answer: For bidding purposes assume a 6" bituminous base course. It is not anticipated that a concrete base course exists in township line road

10) Question: Please provide a pavement restoration detail for Nealy Boulevard.

Answer: PennDOT road restoration detail on sheet 20 may be used for Nealy Boulevard as well. For bidding purposes Assume 6" bituminous base course

11) Question: After review of the drawings, specs, and Addn 1-4, please advise on the following items. a. In Addn 3, there is reference to the bid form having the building broken out as two separate prices, verify that is the case since I do not see a bid form in the specs. As apparently noted, it is for accounting purposes only. Verify? b. Is there a completion time frame for this project? c. In Rm 105 (Comm Ctr), they reference #7 which is an noted as "reserved" on sheet A-1, advise if any casework scope is required for this Rm? d. At typical Restroom counters on A-6 (Comm Ctr), verify if the c'top only is solid surface and if the apron is plam? The side view on 4/A-6 almost appears to have an angled support or cabinet below, verify scope below the c'top? e. In (Borough Bldg) Rms 206 (bottom wall) & Corridor 235 (outside Rm 230), it appears they show something, is this a shelf/rod unit? Verify what is required in these two locations if anything? f. In Rm 213, the c'top and ledge for the desk (dtl 5/A-17) call for "granite". Who is this by? They have a section for solid surface, but do not reference any granite, advise? g. At typical open counter locations (ex Rm 234 at section 1/A-19 reference), they note in-wall support braces as "victory brckets by steel design solutions", I assume all of these supports are by others since they are tied into the walls. They are not listed in any spec I see. Advise otherwise?

Answer: All bids will use PennBids Site to submit a bid, the form on PennBid's site has been set up to allow for the two separate building prices, Again this is simply for accounting purposes only the bid award will be for both buildings. Completion time frame is 240 days and is within the Bid documents.

Room 105 in community center. This is furniture supplied and installed by the owner there is no casework required for this room.

Restroom counters in community center. The counter top and apron will be solid surface. Sloping P.lam shown in detail shall be eliminated. In

place of this install insulation on hot, cold and Drain lines to meet ADA code. Provide Lav Guard 2 by truebro for bidding purposes.

Room 206 there is no casework required, all items shown are furnishings supplied by owner.

Room 235 this is a shelf and rod for coats and supplies.

Room 213 All granite is by General contractor for bidding purposes price granite level 2, furthermore all support brackets are to be supplied and installed by the General Contractor.

12) Question: Which contract will handle the installation of the electric service to the pump station?

Answer: This will under the general contractor's scope

13) Question: Will under cutting of the building pad fall under the site soil allowance?

Answer: Correct

14) Question: Will temporary fencing be required to secure the site, and if so which contract will this fall under?

Answer: Yes a site fence will be required to secure the site. This will be the responsibility of the general contractor

15) Question: Under which contract will the installation of the flag pole be in?

Answer: The installation of the Flagpole will be the responsibility of the general contractor.

16) Question: In the Multiple Contract Summary provided in Addendum No. 2, it states the General Construction Contract will provide incoming primary work and any PECO required work. The Site Contract summary indicates the site utilities including gas service is part of the Site Contract which I imagine would also be PECO. Please clarify which contract should include the gas service.

Answer: All gas services are in the scope of the Site contractor. Peco work referred to in the Multiple contract summary as stated refers only to the Electric division of PECO.

17) Question: Addendum No. 2 states the Site Contractor is responsible for tapping fees. Typically, these fees are unknown until permit applications are approved and issued and then paid by the Owner. Please consider removing the responsibility of these costs from the Site Contractor's scope since they will likely not be known until after bids are received.

Answer: Given this fact the borough will rescind the requirement for tapping fees to be included with the scope. And these will now be handled directly by the borough at the time they are known.

18) Question: A question answered in Addendum No. 3 stated that Allowance No. 1 shall be carried in the Site Package. Since the PennBid bid form does not have a separate item for this Allowance, should we assume that the lump sum price that bidders enter should include \$50,000 for Allowance No. 1?

Answer: correct the allowance should be included within the lump sum price. This will apply to both contracts. Per addendum 3 the administration building should carry the allowance.

19) Question: Due to the close proximity of the community center to the proposed retaining wall, standard geo-grid reinforcement will not be feasible. Please indicate what method of retention should be used in areas less than 12' from face of building wall

Answer: Final design and installation of the retaining wall is within the scope of the site contract as such for bidding purposes the wall should be priced as directed in addendum 3.

END OF ADDENDUM



**CWA** Chester Water Authority

P.O. Box 467  
Chester, Pennsylvania 19016-0467  
Tel: (610) 876-8185

August 1, 2019  
5800  
Trainer Borough Hall

Mr. Nathan D. Krawzyk, P.E.  
Kelly & Close Engineers  
1786 Wilmington Pike, Suite 300  
Glen Mills, PA 19342

Re: Possible Water Service, Trainer Borough Hall, Township Line Road, Trainer Borough,  
Delaware County, CWA Drawing No. C-3632

Dear Mr. Krawzyk:

Enclosed is Chester Water Authority (CWA) Drawing No. 1900-S, sheets 17, 18, 19, 20, 21, 22, 23B, 25, 27 and 28 which details the CWA specifications for the meter pit and meter setter with cross connection control which is required to be furnished and installed by you for the 8-inch diameter dual service for the proposed Trainer Borough Buildings. The commercial meter will be 1-1/2-inch diameter. Also enclosed is CWA Drawing No. C-3632 which shows the proposed service location.

The estimated cost for the 8-inch diameter dual service installation from the 12-inch diameter water main located along Township Line Road, based on your fire flow requirement of 1,000 gpm and peak commercial flow rate of 100 gpm, is as follows:

1) Estimated Connection Fee	\$ 9,200.00
2) Capacity Charge	\$ 3,845.50
3) Distribution Fee	\$ 0.00
4) Customer Facility Fee	\$ 695.00
5) Security Deposit for Business Office	\$ 975.00
<b>Total Cost -</b>	<b>\$ 14,715.50</b>

The price will be good for at least six (6) months and otherwise as long as the current rates as defined in the Rules and Regulations are applicable.

The pressure in the water main at your proposed service location is anticipated to average between 55 and 65 psi at a U.S.G.S. elevation of approximately 50 feet.

Please see the enclosed sheet for standard installation conditions, agreement, application forms and schedule for meter and consumption rates. The current monthly cost for the 8-inch diameter fire service is \$872.86. The current monthly cost of the 1-1/2-inch diameter commercial meter is \$61.56 plus consumption. The total monthly cost for both meters is \$934.42 plus consumption.

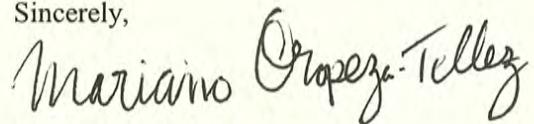
Page 2  
5800  
Trainer Borough Hall  
August 1, 2019

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Please complete: (1) Agreement covering the installation of water service; (2) Lead Free Certification; and, (3) Application for Water Supply Service and return them to CWA along with your check or money order in the amount of \$14,715.50. These three (3) forms must be completed in their entirety in order for CWA to proceed with the installation of this service.

If you have any questions regarding this matter, please feel free to contact us.

Sincerely,



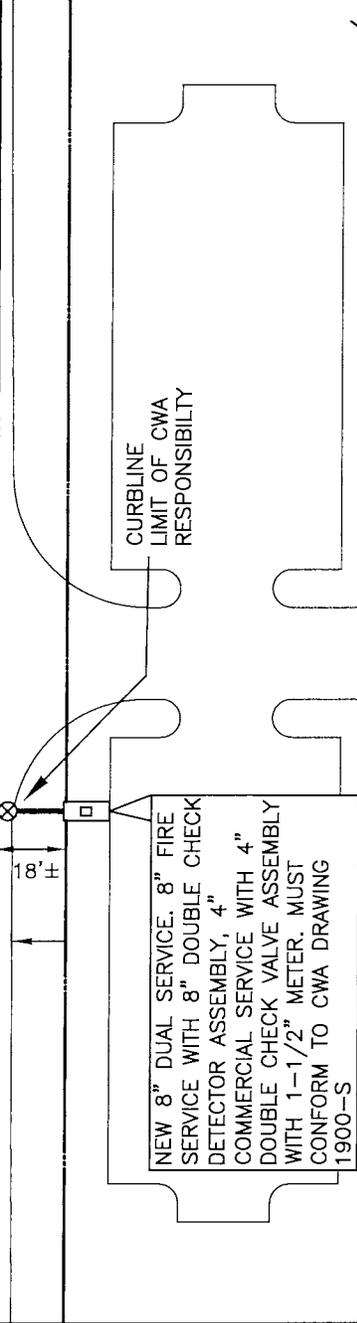
Mariano Oropeza-Tellez  
Distribution Engineer

MOT/sh  
enclosures

**TOWNSHIP LINE RD (SR 3008)**

12X8 FULL BODY TAPPING SLEEVE

12CLCI 1915



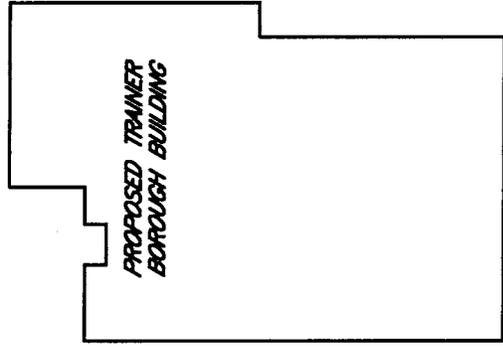
NEW 8" DUAL SERVICE. 8" FIRE SERVICE WITH 8" DOUBLE CHECK DETECTOR ASSEMBLY, 4" COMMERCIAL SERVICE WITH 4" DOUBLE CHECK VALVE ASSEMBLY WITH 1-1/2" METER. MUST CONFORM TO CWA DRAWING 1900-S

CURBLINE LIMIT OF CWA RESPONSIBILITY



**PROPOSED TRAINER BOROUGH BUILDING**

TOWNSHIP LINE RD  
N/L TRAINER BOROUGH  
TAX MAP# 46-1-1.6

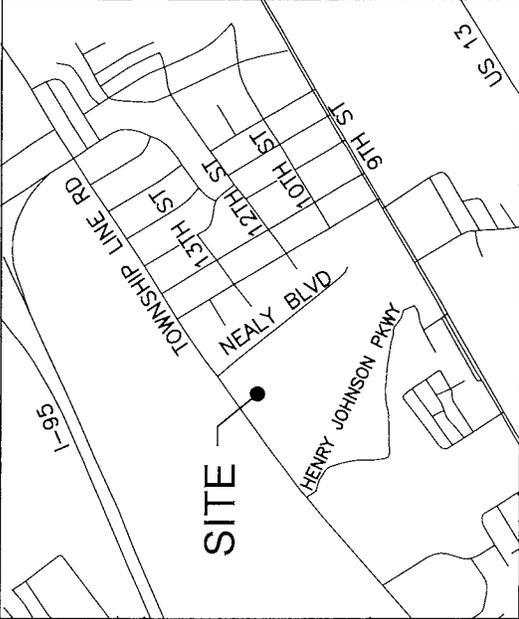


**PROPOSED TRAINER BOROUGH BUILDING**

CONTACT:  
NATHAN D KRAWZYK, P.E.  
PROJECT ENGINEER  
KELLY ENGINEERS  
610-358-9363

WDMS MAIN SEGMENT:  
JM105F13 TO JT030F13

FILE: 5800 TRAINER BOROUGH HALL



**LOCATION MAP**

V.G. MAP NO.	"F13"
NEAREST C.W.A. HYDRANT NO.	TR035F13
EXPECTED PRESSURE AT SERVICE	55-65 PSI
PRESSURE DISTRICT	VGEH
FRONTAGE OF PROPERTY	
WIDTH OF PAVING	60'
LOCATION OF MAIN FROM EDGE OF ROAD	N/A
NEAREST TELEPHONE POLE NO.	
DISTANCE FROM POLE	
DISTANCE FROM NEAREST VALVE	500'±
DISTANCE FROM NEAREST HYDRANT	720'±
RIGHT OF WAY WIDTH	40'
NEW OR EXISTING HOUSE/BUILDING	NEW
YEAR EXISTING MAIN INSTALLED	1915
ELEVATION AT SERVICE	50'
ELEVATION AT HYDRANT	55'

1. INSTALLATION COSTS ARE DETERMINED BASED ON SHOWN LOCATION. EXACT LOCATION OF SERVICE TO BE DETERMINED IN FIELD. CUSTOMER TO NOTIFY CHESTER WATER AUTHORITY OF ANY PROPOSED SIGNIFICANT CHANGE TO THE LOCATION SHOWN ON THIS PLAN.
2. CONTACT PA ONE CALL AT 811 AT LEAST (3) THREE WORK DAYS PRIOR TO ANY EXCAVATIONS.

**CWA CHESTER WATER AUTHORITY**

PROJECT LOCATION: TRAINER BOROUGH DELAWARE COUNTY, PA.	PROJECT: 8" DUAL SERVICE TOWNSHIP LINE RD. FOR TRAINER BOROUGH HALL	SCALE: 1"=50'	DATE: 4/22/2018	SHEET 1 OF 1	SHEETS
		PROJ. ENGR.:		DRAWN BY: M.C.	
		APPD. BY:	ACCT. NO.: 00008-083	DWG. NO.:	C-3632
			FILE NO.: SEE ABOVE		

May 17, 2019

Chester Water Authority  
**Attn: Mariano Oropeza-Tellez**  
415 Welsh Street  
P. O. Box 467  
Chester, PA 19016

Re: Lead Certification, Trainer Borough Hall, Township Line Road, Trainer Borough, Delaware County, CWA Drawing No. C-3632

Dear Mr. Oropeza-Tellez:

In compliance with Pennsylvania DEP regulations and Chester Water Authority's letter of August 1, 2019, please be advised that all potable plumbing connections for the above referenced property will be connected using lead free components.

I understand that the pressure at the curb line is anticipated to average between 55 and 65 psi.

Sincerely,

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**Customer Signature**

CHESTER WATER AUTHORITY  
AGREEMENT COVERING INSTALLATION OF WATER SERVICES

AGREEMENT made this \_\_\_\_\_ day of \_\_\_\_\_, 2019, by and between CHESTER WATER AUTHORITY, Party of the First Part (hereinafter called the Authority, and

**Trainer Borough**

Party of the Second Part, (hereinafter called the Patron), each intending and agreeing to be legally bound hereby,  
WITNESSETH;

WHEREAS, the patron is the owner or developer of a certain tract of land in Delaware County, Pennsylvania

WHEREAS, the Patron has requested that the Authority furnish a supply of water to a portion or all of his said property by installing a water service at the following location:

**Township Line Road**

**Trainer Borough**

AND, WHEREAS, the Authority is willing to install the water service to supply the Patron's said property, as requested, upon terms and conditions hereinafter set forth:

NOW, THEREFORE, in consideration of the premises and of the mutual promises herein contained, the parties hereto covenant and agree as follows:

1. The Authority agrees to supply the materials for the said proposed service installation and to do all the work incidental to the construction thereof.

2. The Patron agrees to pay the Authority simultaneously with the execution and delivery of this Agreement the sum of (a) \$9,200.00, the said sum being 100% of the estimated total cost of one (1) 8-inch diameter dual service. The Patron agrees to pay the Authority, within thirty (30) days after being invoiced for said service installation, 100% of any amount by which the actual cost to the Authority as defined in the Authority's Rules Rates and Regulation, Section 11.09, of the said service installation shall have exceeded the said estimated cost thereof, which actual cost shall be determined by the Authority and shall include the permit fee charged by any City or Municipality, plus the cost of any work required by PennDOT. If 100% of the actual cost of the said installation shall be less than the sum paid by the Patron to the Authority on account thereof at the time of execution of this Agreement, the Authority shall promptly refund the said overage to the Patron upon completion of the said work contemplated hereby. The Patron also agrees to pay the Authority a capacity charge (b) \$3,845.50, a distribution fee of (c) \$0.00, customer facility fee of (d) \$695.00, security deposit in the amount of (e) \$975.00, the total estimated amount of (sum of a+b+c+d+e) forwarded with this agreement is \$14,715.50.

3. The Authority agrees to supply all material and will do all work incidental to the installation of service lines from main to curb line.

4. This agreement embodies the entire agreement between the parties hereto, and there are no agreements, understandings, conditions, warranties or representations, oral or written, expressed or implied, with reference to the subject, after hereof that are not merged in this agreement or superseded hereby.

5. The price will be good for at least six (6) months, and otherwise as long as the current rates as defined in the Rules and Regulations are applicable.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be duly executed the day and year first above written.

CHESTER WATER AUTHORITY

JOB NO. \_\_\_\_\_

PATRON \_\_\_\_\_  
(PRINT NAME)

G/L NO. \_\_\_\_\_

GEOGRAPHICAL

\_\_\_\_\_  
(SIGN NAME)

LOCATION CE

TAPPING FEE JOB NO. N/A

TAPPING FEE AMOUNT

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

DRAWING NUMBER C-3632

DATE: 7/18/19  
FILE NO. : 5800

PATRON:

CONTRACTOR:

METER PIT SIZE: (INSIDE) LENGTH: 12'-0" WIDTH: 6'-0"  
HEIGHT: 6'-0"

METER SETTING REQUIRED: SINGLE: \_\_\_\_\_ DOUBLE: ✓

LOCATION: 500 ft. SW of Nealy Boulevard,  
Trainer Borough, PA

DRAWING APPLICABLE FOR THIS SETTING ARE CWA 1900-S, SHEETS (17, 18, 19, 20, 21, 22, 23, 23A, 23B)  
24, 24A, (25, 26, 27, 27A & 28)

DOMESTIC/COMMERCIAL

SERVICE LINE:

PIT PIPING SIZE: 4-inch Diameter  
SERVICE SIZE: 8-inch Diameter  
DESIGN AVG. RATE FLOW: 1,698 GPD  
DESIGN MAX. RATE FLOW: 100 GPM  
METER SIZE: 1 1/2-inch Diameter  
METER TYPE: OMNI T<sup>2</sup>  
BACKFLOW PREVENTION DEVICE: 4-inch Double Check Valve assembly  
SPOOL PIECE LENGTH: 3'-8" Approximately  
SPOOL PIECE DIAMETER: 2-inch Diameter

REVISED 7/17/13 C.J.T.

CHESTER WATER AUTHORITY



PROJECT LOCATION:  
CWA SERVICE AREA

PROJECT:  
DOMESTIC/COMMERCIAL  
SERVICE LINE

SHEET 17 OF  
DWG. NO.: 1900-S

FIRE SERVICE LINE:

PIT PIPING SIZE: 8 - inch Diameter

SERVICE SIZE: 8 - inch Diameter

DESIGN AVG. RATE FLOW: \_\_\_\_\_

DESIGN MAX. RATE FLOW: 1000 GPM

METER SIZE: 5/8" x 3/4" Diameter

METER TYPE: iPerl

BACKFLOW PREVENTION DEVICE: 8" Double Check Detector assembly

SPOOL PIECE LENGTH: 3' - 8" Approximately

SPOOL PIECE DIAMETER: 8 - inch Diameter

BY: P. Alex Mays DATE: 7/18/19

REVISED 7/17/13 C.J.T.

CHESTER WATER AUTHORITY



PROJECT LOCATION:  
CWA SERVICE AREA

PROJECT:  
FIRE SERVICE LINE

SHEET 18 OF  
DWG. NO.: 1900-S

1. CONTACT CWA METER SHOP SUPERINTENDENT AT 610-876-0940 TO DETERMINE SUITABLE METER PIT LOCATION.
2. METER PIT IS TO BE LOCATED IN GRASS OR SIDEWALK AREA WHICH WILL NOT BE SUBJECT TO VEHICULAR LOADING. BOLLARDS MUST BE INSTALLED AROUND METER PIT IF PIT IS INSTALLED IN PARKING AREA WITH PRIOR APPROVAL BY CWA.
3. METER PIT IS TO BE SET BETWEEN ONE INCH AND FOUR INCHES ABOVE FINISHED GRADE IN GRASS AREA SO AS NOT BE SUBJECT TO FLOODING FROM RAINFALL RUN-OFF. AN EXTENSION COLLAR MAY BE USED IF APPROVED BY DISTRIBUTION ENGINEER.
4. METER PIT SHALL BE CONSTRUCTED OF POURED OR PREFABRICATED CONCRETE (4000 STRENGTH, MIN.)
5. ANY ALTERATIONS TO PIT MUST BE SUBMITTED TO THE CWA FOR APPROVAL BEFORE CONSTRUCTION.
6. DOOR FRAME TO HAVE MINIMUM CLEAR OPENING AS PER SCHEDULE ON SHEET 27.
7. ACCESS DOOR SHALL BE SINGLE LEAF ALUMINUM AS MANUFACTURED BY THE BILCO CO., A.C. MILLER CONCRETE PRODUCTS, INC., ALTOMARE PRECAST COMPANY, OR EQUAL. SEE SCHEDULE ON SHEET 27 FOR TYPE AND SIZE OF ACCESS DOOR. DOOR TO BE EQUIPPED WITH SNAPLOCK AND REMOVABLE T-HANDLE.
8. 1", 1 1/2", AND 2" GATE VALVES TO BE MUELLER STYLE H - 10914, OR JENKINS BRONZE VALVE NO. 49 OR BALL VALVES NIBCO S580-S585 WITH WORKING PRESSURE RATING 125 PSI.
9. 4", 6", 8", AND 10" GATE VALVES TO BE MANUFACTURED IN ACCORDANCE WITH LATEST AWWA SPEC. C-509, RATED 200 PSI WORKING PRESSURE. VALVES TO OPEN LEFT AND HAVE OUTSIDE SCREW AND YOKE.
10. TEES, VALVES, AND OTHER APPURTENANCES LOCATED IN METER PIT TO BE SUPPORTED AS REQUIRED BY ADJUSTABLE PIPE SUPPORTS. FOUR PIPE SUPPORTS ARE REQUIRED FOR SINGLE METER SETTING AND SIX FOR DOUBLE METER SETTING.
11. CUSTOMER MUST PROVIDE AND MAINTAIN DRAINAGE SYSTEM WHICH WILL PREVENT METER PIT FLOODING.
12. IF FLOOR OF METER PIT IS CONCRETE SLAB, A SUMP MUST BE LOCATED IN ANY CORNER OF PIT WHICH WILL PROVIDE POSITIVE DRAINAGE BY EITHER A SUMP PUMP OR PASSIVE DRAINAGE.
13. IF SOIL CONDITIONS PROVIDE DRAINAGE, STONE OR GRAVEL FLOOR MAY BE SUBSTITUTED FOR CONCRETE SLAB. CONCRETE PADS MUST BE PROVIDED FOR PIPE SUPPORTS. FOOTINGS FOR METER PIT WALLS SHALL BE CONSTRUCTED OF POURED CONCRETE.
14. 1", 1 1/2", AND 2" CHECK VALVES FOR CROSS CONNECTION CONTROL TO HAVE BRASS HINGE PINS WITH STANDARD SOLID BRASS HINGES, LATEST AWWA SPEC. C-508, C-510, OR C-511. ACCEPTABLE MANUFACTURER: WATTS 709, WILKINS 950, FEBCO 805Y, HERSEY FDC.

REVISED 7/17/13 C.J.T.

## CHESTER WATER AUTHORITY

	PROJECT LOCATION: CWA SERVICE AREA	PROJECT: METER PIT GENERAL NOTES	SHEET 19 OF
			DWG. NO.: 1900-S

15. 4", 6", 8", AND 10" CHECK VALVES FOR CROSS CONNECTION CONTROL TO HAVE BRONZE GATE RINGS AND SEAT RINGS. GATE TO BE HUNG FROM STAINLESS STEEL HINGE PINS WITH HEAVY SOLID BRONZE HINGES, LATEST AWWA SPEC. C-508, C-510, OR C-511. ACCEPTABLE MANUFACTURER: HERSEY #2, CONBRACO SERIES 40-100, WATTS 709, AMES 2000 DCA, AMES 2000SE.
- 15A 4", 6", 8", AND 10" DETECTOR CHECK VALVES FOR CROSS CONNECTION CONTROL TO HAVE BRONZE GATE RINGS AND SEAT RINGS. GATE TO BE HUNG FROM STAINLESS STEEL HINGE PINS WITH HEAVY SOLID BRONZE HINGES, LATEST AWWA SPEC. C-508, C-510, OR C-511. ACCEPTABLE MANUFACTURER: FEBCO MODEL 806YD DCDA, CONBRACO SERIES 40-600, WATTS 709 DDC
16. REDUCED PRESSURE BACKFLOW PREVENTER, FEBCO. MODEL 825 OR EQUAL, MAY BE REQUIRED IN LIEU OF THE DOUBLE CHECK VALVE ASSY. AS REQUIRED BY THE CWA ENGINEER.
17. ALL SERVICE PIPING FROM WATER MAIN TO CURB WILL BE INSTALLED BY THE CWA AT THE EXPENSE OF THE CUSTOMER. ALL OTHER PIPING WILL BE FURNISHED AND INSTALLED BY CUSTOMER.
18. METER WILL BE PURCHASED AND SET BY THE CWA
19. CUSTOMER REQUIRED TO PROVIDE REDUCING ARRANGEMENT SHOULD THE METER BE OF SIZE SMALLER THAN PIPING. SPECIFIED SPOOL PIECE LENGTH MUST BE PROVIDED FOR THE METER INSTALLATION.
20. SPOOL PIECE TO BE SOLID, CWA WILL CUT AS REQUIRED.
21. CUSTOMER TO PROVIDE FLANGED COUPLING ADAPTER ON SPOOL PIECE.
22. ALL METER SETTINGS MUST BE INSPECTED BY METER DEPT. BEFORE BACKFILLING. CALL 610-876-8185, EXT. 249.
23. ALL 0 - 150 PSI GAUGES (6) MUST BE FACING UP. TWO (2) GAUGES ARE TO BE LOCATED ON WATER MAIN SIDE OF CHECK. FOUR (4) GAUGES ARE TO BE LOCATED ON CUSTOMER SIDE OF CHECK.
24. ALL 0 - 150 PSI GAUGES (3) MUST BE FACING UP ONE (1) GAUGE IS TO BE LOCATED ON WATER MAIN SIDE OF CHECK. TWO (2) GAUGES ARE TO BE LOCATED ON CUSTOMER SIDE OF CHECK.
25. ALL PIPE 1", 1 1/2", AND 2" TO BE TYPE K COPPER, WITH MECHANICLE TYPE FITTINGS OR WITH NO LEAD SOLDER.
26. ALL PIPE 4" AND LARGER TO BE DUCTILE IRON CLASS 52, CEMENT LINED, WITH CAST OR DUCTILE IRON FITTINGS.
- 26A. ALL 3" PIPING MUST CONFORM TO SPECIFICATIONS FOR PIPING 2" AND SMALLER OR 4" AND LARGER. A COMBINATION OF THE SPECIFICATIONS WILL NOT BE APPROVED FOR USE.
27. SERVICE WILL NOT BE PROVIDED UNTIL METER PIT AND PIPING IS COMPLETED AND APPROVED.
28. THIS DRAWING IS ONLY APPLICABLE FOR THE JOB AND LOCATION LISTED ON CWA DWG. NO. 1900-S, SHEETS 17 & 18.

REVISED 7/17/13 C.J.T.

## CHESTER WATER AUTHORITY

	PROJECT LOCATION: CWA SERVICE AREA	PROJECT: METER PIT GENERAL NOTES	SHEET 20 OF
			DWG. NO.: 1900-S

29. POSSIBLE PRECAST PIT SUPPLIERS:

- A. ALTOMARE PRECAST INC., 4300 WISSAHICKON AVE., PHILADELPHIA, PA. 19129, ATTN.: MARK or PAUL ALTOMARE - 215-225-8800, FAX 215-225-8900
- B. ROTONDO/PENN CAST, 514 TWP. LINE RD., P.O. BOX 210, TELFORD, PA. 18969, ATTN.: JIM VALENT - 1-800-523-2273 OR 215-257-8081.
- C. A.C. MILLER CONC. PRODUCTS, SPRING CITY, PA. 19475, ATTN.: DAVE GAUTREAU 1-800-229-2922.
- D. J.F. GILLESPIE, INC., PRECAST CONCRETE PRODUCTS, 2547 BRUNETTA DR., VINELAND, NJ 08360, 1-609-692-2233.

30. CONTRACTOR MUST SUBMIT CATALOG CUTS OF MATERIAL AND A DIMENSIONED PIT PIPING SCHEMATIC TO CWA FOR APPROVAL.

31. ALL PIPING 4" AND LARGER ENTERING AND EXISTING THE METER PIT MUST BE RESTRAINED TO PIT WALL.

32. ALL FLANGED FITTINGS ARE TO BE CAST OR DUCTILE IRON CEMENT LINED IN ACCORDANCE WITH AWWA C-104 AND C-110, MECHANICAL JOINT FITTINGS ARE TO BE CAST OR DUCTILE IRON, CEMENT LINED IN ACCORDANCE WITH AWWA C-104, C-110, C-111 AND C-153. ALL FITTINGS ARE TO BE OF USA MANUFACTURER.

33. CUSTOMER IS RESPONSIBLE TO BRING SERVICE LINE TO CURB FOR TIE IN BY CWA.

34. BILCO LADDER UP (GALVANIZED) APPROVED EQUAL REQUIRED TO BE INSTALLED IN PIT.

35. IF AN 8-INCH OR LARGER METER IS REQUIRED FOR DOMESTIC SERVICE, CWA WILL PROVIDE A SPECIAL METER PIT DESIGN. CONTACT CWA ENGINEERING DEPARTMENT FOR DETAILS.

36. IF A TURBINE METER IS REQUIRED, A 2-INCH TAP MUST BE PROVIDED AT A DISTANCE OF TWO TIMES THE PIPE DIAMETER DOWNSTREAM OF THE METER.

37. JOINT RESTRAINT - APPROVED MANUFACTURERS:  
- MEGALUG BY EBBA IRON  
- UNI FLANGE SERIES 1400 BY FORD METER BOX CO.  
- ALLGRIP BY STARR PIPE PRODUCTS CO.

REVISED 7/17/13 C.J.T.

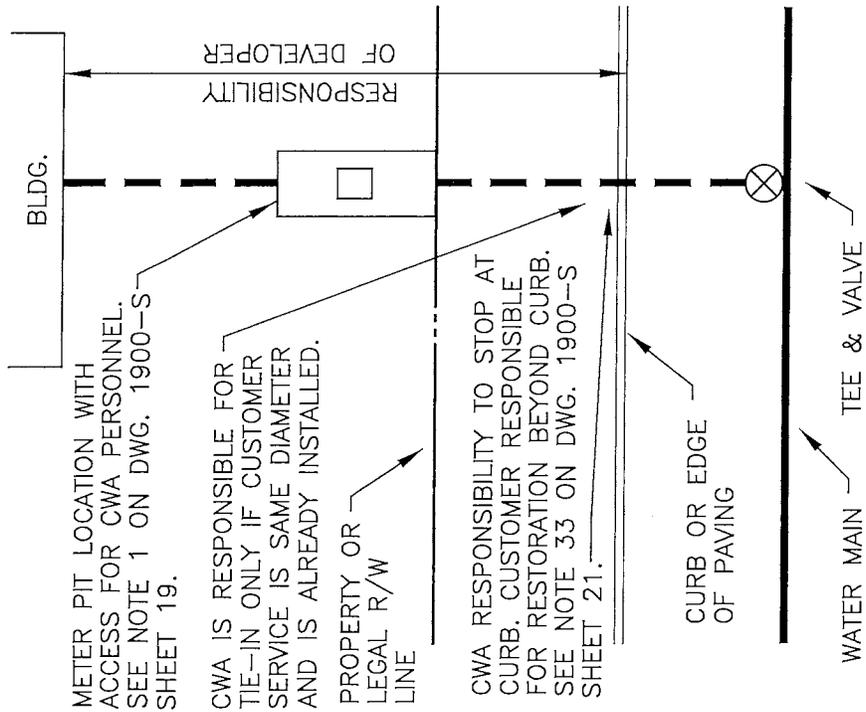
**CHESTER WATER AUTHORITY**



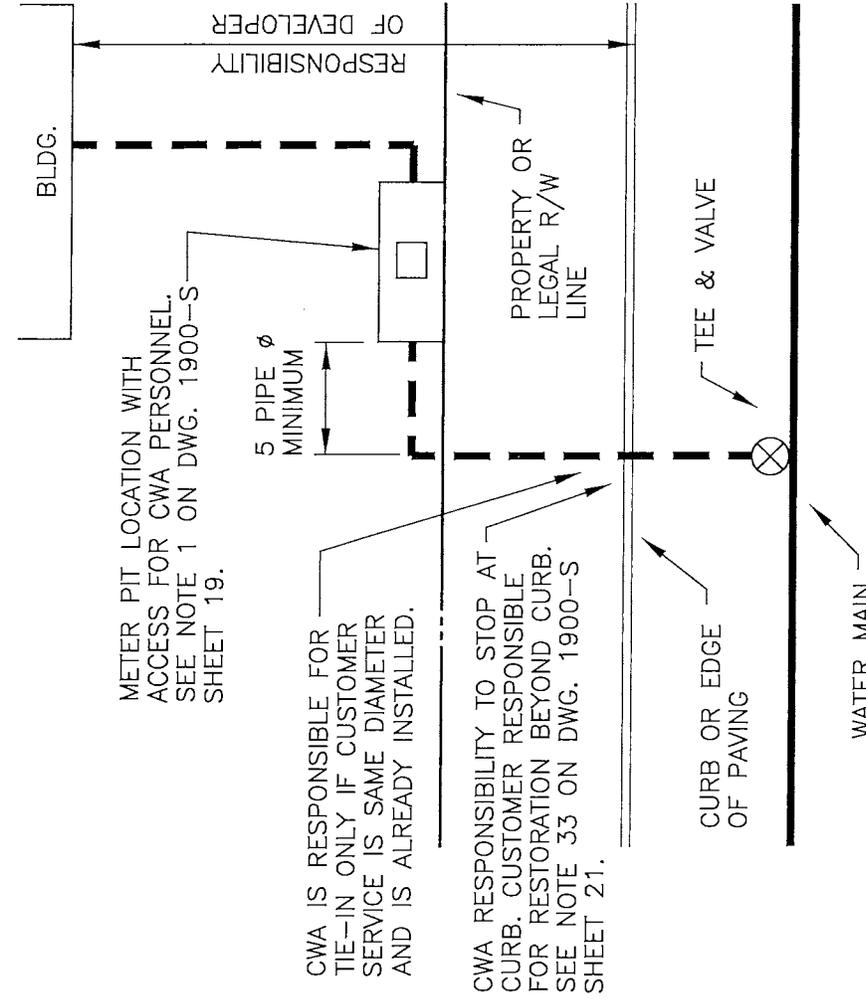
PROJECT LOCATION:  
CWA SERVICE AREA

PROJECT:  
METER PIT GENERAL NOTES

SHEET 21 OF  
DWG. NO.: 1900-S



**METER PIT INSTALLATION FOR  
4", 6", 8" & 10" SERVICES**

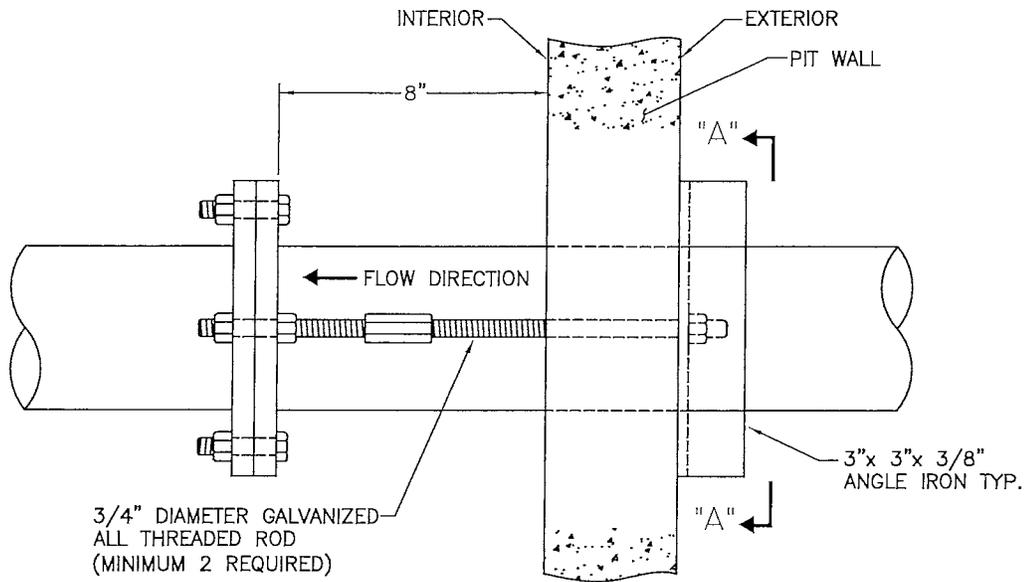


**ROTATED METER PIT INSTALLATION FOR  
4", 6", 8" & 10" SERVICES**

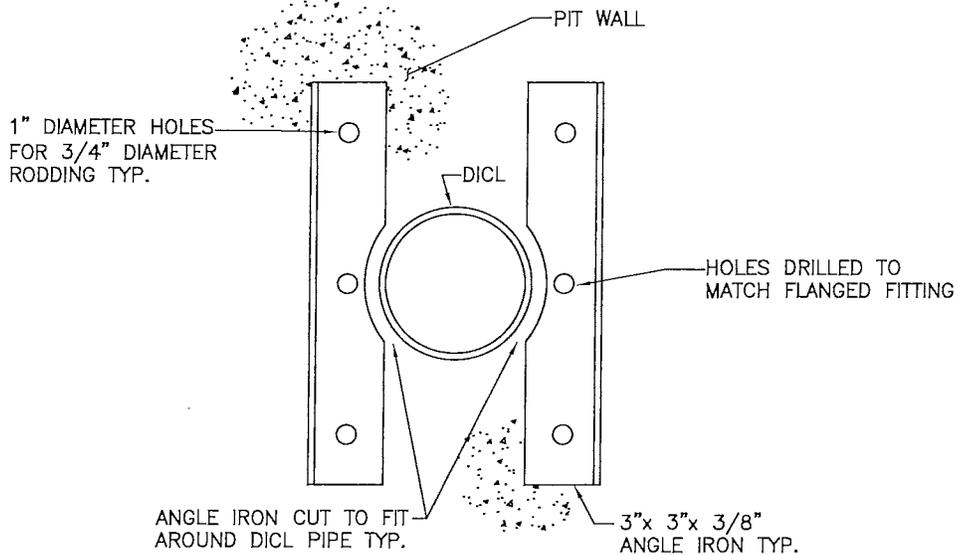
REVISED 3/23/09 C.J.T.

**CWA CHESTER WATER AUTHORITY**

PROJECT LOCATION: CWA SERVICE AREA	PROJECT: TYPICAL METER PIT INSTALLATION			SCALE: NONE	DATE: 4/18/97	SHEET 22 OF	SHEETS
	CWA SERVICE AREA			APPD. BY:	PROJ. ENGR.: D.J.L.	DRAWN BY:	D.J.L.
			ACCT. NO.:	DWG. NO.:		1900-S	
			FILE NO.:				



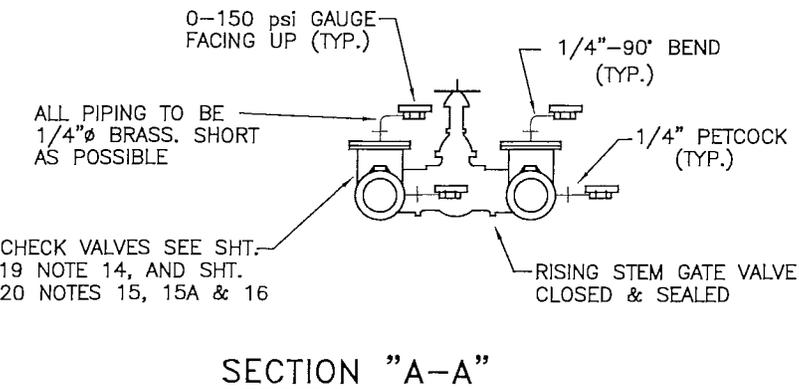
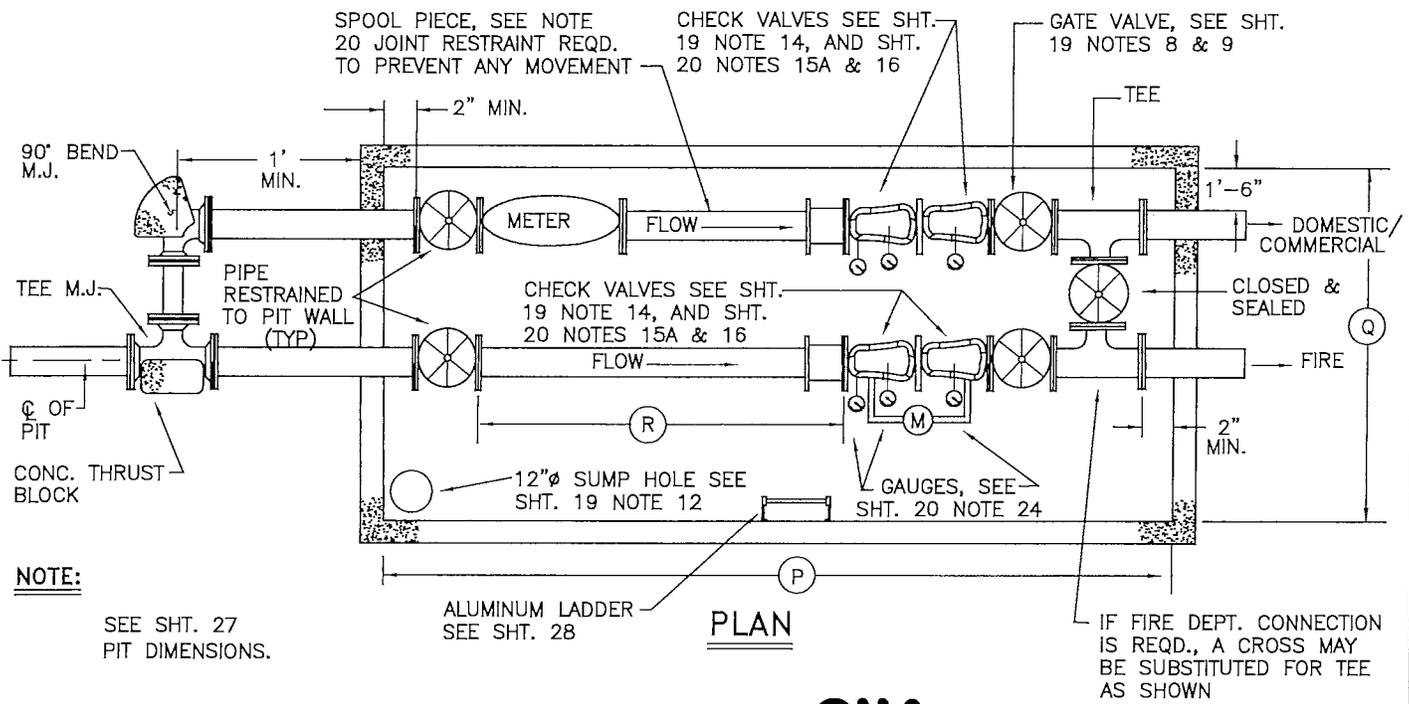
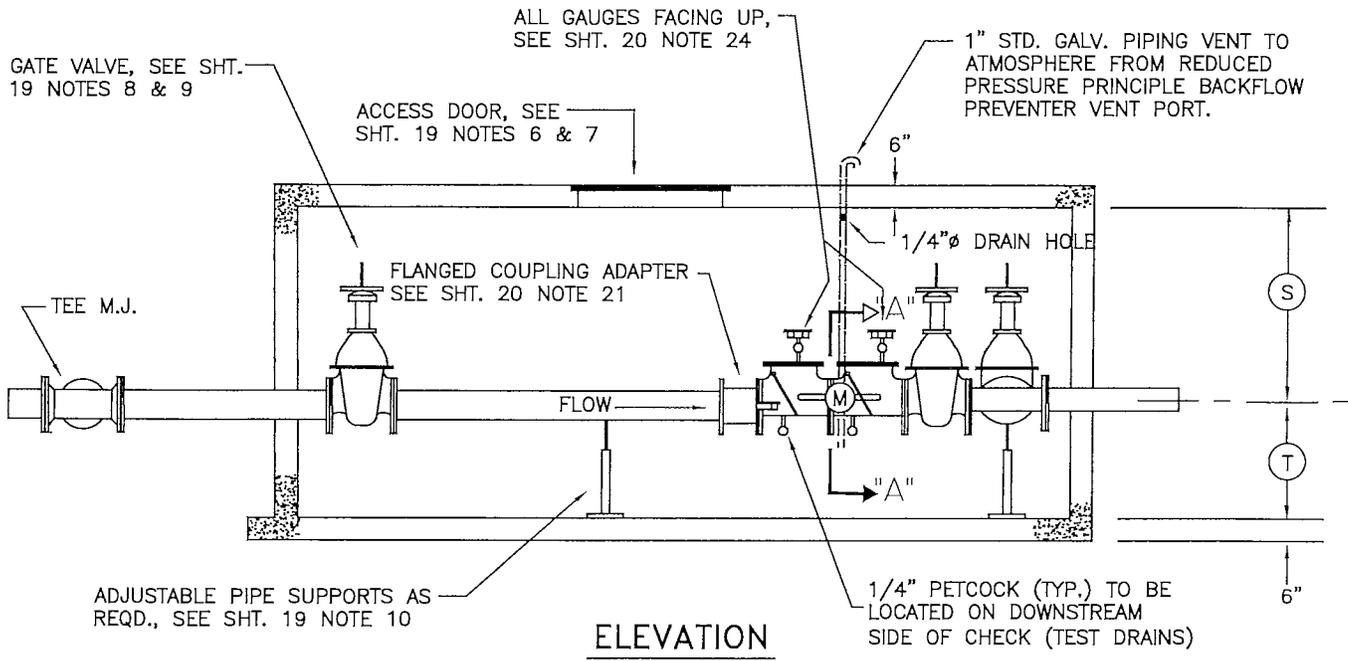
**RODDING DETAIL**



**SECTION "A-A"**



<b>CHESTER WATER AUTHORITY</b>	
PROJECT LOCATION: CWA SERVICE AREA	
PROJECT: METER PIT RODDING DETAIL	
SCALE: NONE	SHEET 23B OF
DRAWN BY: C.J.T.	DATE: 7/9/13
APPD. BY:	DWG. NO.: 1900-S



REVISED 7/17/13 C.J.T.

<b>CHESTER WATER AUTHORITY</b>	
PROJECT LOCATION: <b>CWA SERVICE AREA</b>	
PROJECT: <b>METER PIT - STANDARD DESIGN DOUBLE METER-FIRE SETTING FOR 4", 6", 8" &amp; 10" METERS</b>	
SCALE: NONE	SHEET 25 OF
DRAWN BY: JAS	DATE: 11/27/00
APPD. BY:	DWG. NO.: 1900-S

COMMERCIAL  
SINGLE METER SETTING

SERVICE SIZE	PIT & PIPING DIMENSIONS (INSIDE)						BY-PASS SIZE
	A	B	C	D	E	DOOR SCHEDULE BILCO NO. SIZE	
4"	10'-0"	6'-0"	3'-8" APPROX.	3'-6"	2'-6"	K-4	3' x 3' 2"
6"	12'-0"	6'-0"	3'-8" APPROX.	3'-6"	2'-6"	K-4	3' x 3' 4"
8"	12'-0"	6'-0"	3'-8" APPROX.	3'-6"	2'-6"	K-4	3' x 3' 4"
10"	12'-0"	6'-0"	4'-0" APPROX.	3'-6"	2'-6"	K-4	3' x 3' 4"

DOUBLE METER SETTING

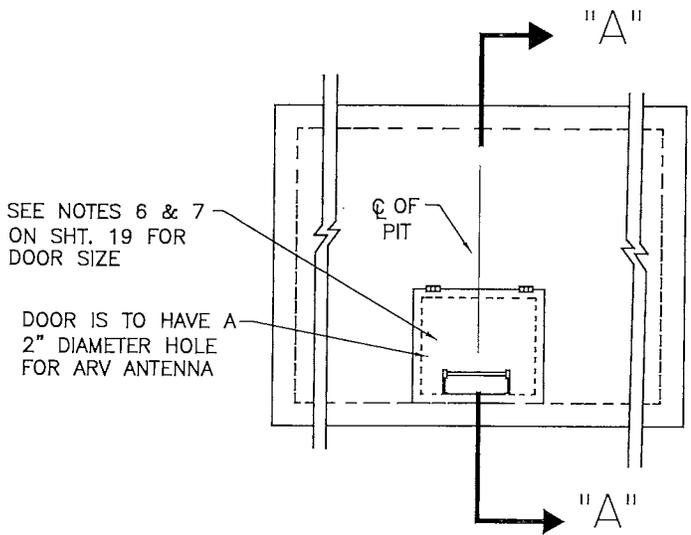
SERVICE SIZE	PIT & PIPING DIMENSIONS (INSIDE)						DOOR SCHEDULE BILCO NO. SIZE
	P	Q	R	S	T		
4"	12'-0"	6'-0"	3'-8" APPROX.	3'-6"	2'-6"	K-4	3' x 3'
6"	12'-0"	6'-0"	3'-8" APPROX.	3'-6"	2'-6"	K-4	3' x 3'
8"	12'-0"	6'-0"	3'-8" APPROX.	3'-6"	2'-6"	K-4	3' x 3'
10"	14'-0"	6'-0"	4'-0" APPROX.	3'-6"	2'-6"	K-4	3' x 3'

PROJECT NAME: Trainer Borough Municipal Buildings NOTE:

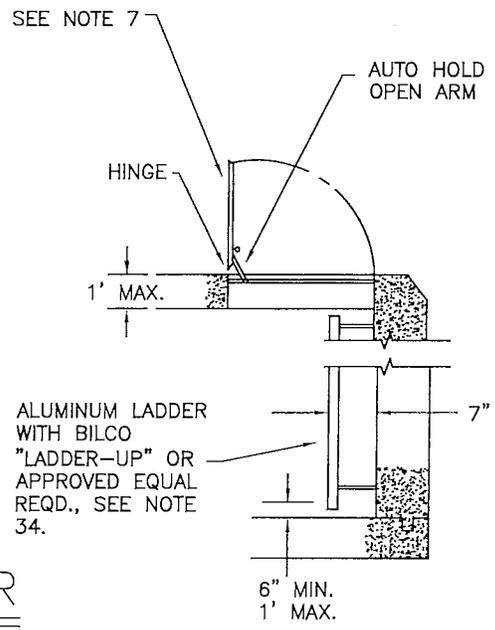
FILE NO.: 5800 FIRE SIZE: 8-inch Diameter A SMALLER METER PIT MAY BE APPROVED IF MEASURED SCHEMATIC  
DATE: 7/18/19 DOMESTIC SIZE: 4-inch w/ 1 1/2" meter IS SUBMITTED FOR REVIEW.

**CWA** CHESTER WATER AUTHORITY

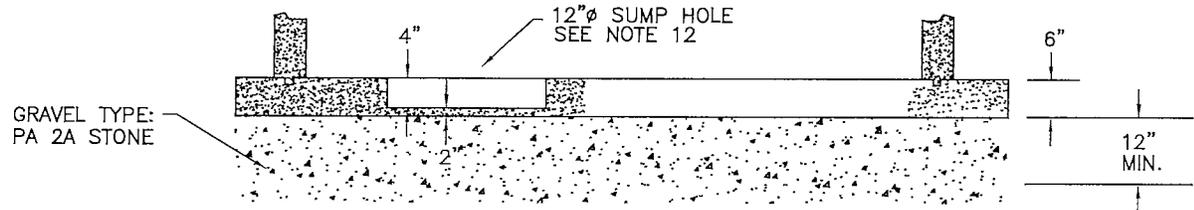
PROJECT LOCATION: CWA SERVICE AREA	PROJECT: METER PIT SPECIFICATIONS PIT & PIPING SIZES		SCALE: NONE	DATE: 4/18/97	SHEET 27 OF	SHEETS
	APPD. BY:		PROJ. ENGR.: D.J.L.	ACCT. NO.:	DRAWN BY:	DWG. NO.:
						1900-S



PLAN VIEW - ACCESS DOOR



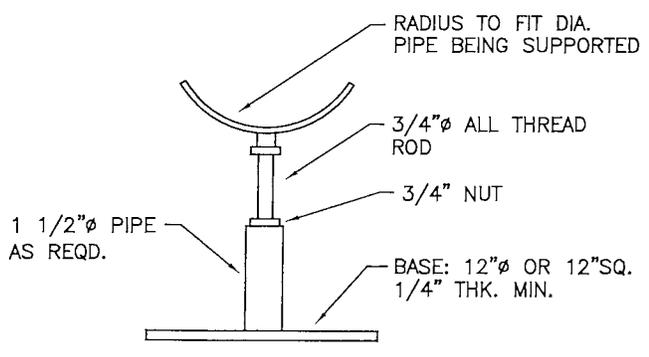
SECTION "A-A"



CONCRETE FLOOR DESIGN



GRAVEL FLOOR DESIGN



TYPICAL PIPE SUPPORT DETAIL



REVISED 7/17/13 C.J.T.

<b>CHESTER WATER AUTHORITY</b>	
PROJECT LOCATION: <b>CWA SERVICE AREA</b>	
PROJECT: <b>METER -- PIT STANDARD DESIGN DETAILS</b>	
SCALE: NONE	SHEET 28 OF
DRAWN BY: JAS	DATE: 4/18/97
APPD. BY:	DWG. NO.: 1900-S

**Chester Water Authority  
Service Installation Conditions**

CWA installation will end at the curblineline/edge of paving. You will have to install the service from the curb/edge of paving into the house prior to CWA installation. CWA's responsibility ends at the curb stop or outside box.

Our rules and regulations require that an Agreement be signed for the service installation by the customer. It is estimated that the installation will be made within eight (8) weeks of receipt of all the completed forms and the required payment and provided that the service from the curb/edge of paving into the house has been installed as noted above. **You may contact Chester Water Authority's Construction Superintendent at 610-876-0940 ext. 2232 for the current installation schedule.**

In order to comply with regulation of the Pennsylvania Department of Environmental Resources and prior to the activation of the water service to this project, it will be necessary for you to provide Chester Water Authority a certification that the potable plumbing in this project has been constructed using lead free materials. Water service to this project will not be activated unless this certification is on record at the Authority's Main Office.

Enclosed are the following items:

- 1) Agreement covering the installation of water service.
- 2) Lead Free Certification
- 3) Application for Water Supply Service
- 4) Application for the Use of Water

**Please complete and return the above referenced items #1, 2, and 3 in the enclosed self-addressed envelope to Felicia A. Flood, Customer Service Lead.** The customer responsible for payment of the water bill is required to sign the Application for Water Supply Service.

You must also contact our customer service department three (3) to five (5) days prior to requiring the activation of our water service. Chester Water Authority Customer Service can be contacted at 610-876-8181 between 9:00 AM and 5:00 PM Monday through Friday.

**CHESTER WATER AUTHORITY  
COMPARATIVE RATE SCHEDULE  
NEW RATES EFFECTIVE JULY 1, 2016**

<b>CONSUMPTION CHARGES -GENERAL SERVICE – Includes Residential, Commercial, Industrial, and Municipal Customers</b>					
		<b>Village Green East</b>		<b>Village Green West</b>	
<u>Gallons Per Month</u>		<u>Rate Effective 7/1/10</u> <u>Per 1,000 Gallons</u>		<u>Rate Effective 7/1/10</u> <u>Per 1,000 Gallons</u>	
For the First	25,000	\$	4.61	\$	5.92
For the Next	225,000		2.96		4.15
For all Over	250,000		2.31		2.95

<b>CONSUMPTION CHARGES - WATER UTILITIES</b>					
		<b>Village Green East</b>		<b>Village Green West</b>	
<u>Consumption Charges</u>		<u>Rate Effective</u> <u>7/1/16</u>		<u>Rate Effective</u> <u>7/1/16</u>	
Rate per 1,000 Gallons		2.87		\$ 3.11	
Rate per 1,000 Gallons for Customers subject to SRBC charge of \$0.33 per 1,000 gallons		3.20		3.44	

<b>BASE CHARGES – Village Green East and West Service Areas – All Customers</b>			
<u>Size of Meter</u>		<u>Rate Effective 7/1/10</u> <u>Per Month</u>	
5/8	Inch	\$	12.10
3/4 *	Inch (Combined General & Fire)		14.26
3/4	Inch		18.36
1 *	Inch (Combined General & Fire)		14.26
1	Inch		27.54
1-1/2	Inch		61.56
2	Inch		104.87
3	Inch		222.59
4	Inch		365.90
6	Inch		663.01
8	Inch		1,587.60
10	Inch		2,395.44
12	Inch		2,691.36

\* Residential General Service and Fire Service Combined.

<b>BASE CHARGES – PRIVATE FIRE PROTECTION SERVICE – All Customers</b>					
		<b>Village Green East Service Area</b>		<b>Village Green West Service Area</b>	
<u>Size of Meter or</u> <u>Service Size, If Unmetered</u>		<u>Rate Effective 7/1/10</u> <u>Per Month</u>		<u>Rate Effective 7/1/10</u> <u>Per Month</u>	
5/8	Inch	\$	9.40	\$	11.55
3/4	Inch		14.26		17.16
1	Inch		22.14		25.74
1-1/2	Inch		48.82		57.20
2	Inch		78.73		92.73
3	Inch		134.46		158.29
4	Inch		241.06		281.49
6	Inch		482.11		563.20
8	Inch		872.86		1,020.58
10	Inch		1,442.99		1,689.42
12	Inch		2,078.57		2,429.92

<b>FIRE PROTECTION SERVICE – PUBLIC FIRE HYDRANTS</b>					
		<b>Village Green East</b>		<b>Village Green West</b>	
		<u>Rate Effective 7/1/10</u> <u>Per Month</u>		<u>Rate Effective 7/1/10</u> <u>Per Month</u>	
Rate per Hydrant		\$ 32.30		\$ 36.30	

**Please return the following items to:**

**Felicia Flood  
Chester Water Authority  
P. O Box 467  
Chester, PA 19016**

- 1) Agreement covering the installation of water service**
- 2) Lead Free Certification**
- 3) Application of Water Supply Service**
- 4) Check in the requested amount**

**CHESTER WATER AUTHORITY  
APPLICATIONS FOR THE USE OF WATER**

**APPLICATION**

Applications for the use of water shall be made in writing on forms provided by Chester Water Authority (CWA). The form must be completed in its entirety and shall be signed by the customer. If a customer has an unpaid balance of water charges at a previous location or there is an unpaid balance at the new location, all monies due must be paid before a new service can be turned on.

A new application must be made and approved by CWA upon any change in ownership of property when the owner is the customer, or in any tenancy where the tenant is the customer, or in the service, as described in the application. CWA shall have the right to discontinue the water supply until new application has been made and approved.

If water service into the property is not available, application for the installation of a new service shall be made to CWA.

**DEPOSIT**

As a guarantee for the payment of water bills, customers shall make and keep on deposit with CWA an estimated 4 months' water bill. The deposit may be waived by CWA where its records disclose that the customer regularly pays water bills when due or, being a new customer, where adequate evidence of financial responsibility is submitted. If any customer fails to pay the water bill when due, the customer may be required to make a deposit as a condition to future service. In the case of tenant-occupied property, on all requests for service, CWA shall require a security deposit from the tenant or landlord owner, in an amount equal to the estimated water usage for two quarterly billings. CWA may hold such security deposit for a maximum period of one year but, upon good cause shown, may continue to hold said security deposit for a period in excess of one year.

**TRANSFER OF SERVICE**

A customer, without additional charge, may transfer service from one property to another by properly notifying CWA in advance of such transfer. Any security deposit shall be applied to the final bill, and a new security deposit shall be required for the new location.

**BILLING**

Bills will be mailed at regular intervals based on meter readings. On occasion, such bills may be estimated. All bills for water service shall be payable on or before the due date. Payments may be made by mail or during established business hours at CWA's Business Office located at 415 Welsh Street in the City of Chester, Delaware County, PA.

All customers shall provide access to the property for CWA's representative to obtain readings of any water meter or meters attached to the water service serving the property. The water service may be discontinued if CWA is not provided access to read meters. When CWA is unable to obtain a meter reading, an estimated bill shall be rendered on the basis of the best information or method available.

**CHESTER WATER AUTHORITY  
APPLICATION FOR WATER SUPPLY SERVICE**

**FOR OFFICE USE ONLY**

Account No: \_\_\_\_\_

Deposit No: \_\_\_\_\_ Amount: \_\_\_\_\_

REMARKS \_\_\_\_\_  
\_\_\_\_\_

<b>Customer Name:</b>	Last	First	Middle Initial
-----------------------	------	-------	----------------

Social Security No. (if a Corporation, Tax Identification No.)	Driver's License No. (State)
--	------------------------------

Telephone No: (Day)	(Night)
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<b>Spouse's Name:</b>	Last	First	Middle Initial
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Spouse's Social Security No.	Spouse's Driver's License No. (State)
------------------------------	---------------------------------------

<b>Service Address</b>	City	State	Zip Code
------------------------	------	-------	----------

<b>Mailing Address (if different than Service Address)</b>	City	State	Zip Code
--	------	-------	----------

**Customer is: (complete the appropriate section)**

\_\_\_ Owner and occupant of the property.

\_\_\_ Tenant/Renter occupying property.

Landlord's Name: \_\_\_\_\_

Landlord's Address: \_\_\_\_\_

\_\_\_ Landlord with tenants occupying property. List tenant names and apartment numbers on the reverse side of this form.

I represent that the above information is true. I understand that any false information provided may cause the Authority to terminate the water service. I have also read and understand the information given to me regarding the application for the use of water, which outlines my responsibilities as a customer.

\_\_\_\_\_  
Customer Signature

\_\_\_\_\_  
Date

Dear Chester Water Authority Customer:

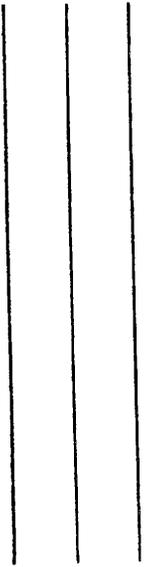
Chester Water Authority has an ongoing program to require the installation of check valves on all new and retrofitted water service connections. This program is part of a public health precaution to provide what is called cross connection control. This will ensure that once water enters a property or customer's home, it will not be allowed to reenter the Chester Water Authority's distribution system.

We want to make you aware that this check valve could accentuate or magnify a problem that could occur if your hot water heater malfunctioned by overheating. If your hot water heater overheats with the check valve in place, the expanded water will not be allowed back through the meter and back into CWA's distribution system. The water will have to be released into an expansion tank which should be part of your hot water plumbing system.

If you have any questions or are having a specific problem regarding the operation of your water system, please feel free to call one of our Customer Service Representatives at (610) 876-8181 or (800) 793-2323 and we will be happy to have someone discuss your problem with you.

Chester Water Authority





Felicia Flood  
Chester Water Authority  
PO Box 467  
Chester PA 19016

