

BID FORM

ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT PRICE	TOTAL PRICE
105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1		
201-01	CLEARING AND GRUBBING	LS	1		
202-01.56	REMOVAL OF STRUCTURES & OBSTRUCTIONS (CATCH BASINS)	LS	1		
202-02.21	REMOVAL OF PIPE (STORM PIPE)	L.F.	1316		
202-03	REMOVAL OF RIGID PAVEMENT, SIDEWALK, ETC.	S.Y.	365		
202-03.01	REMOVAL OF ASPHALT PAVEMENT	S.Y.	2218		
203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	950		
203-03	BORROW EXCAVATION (UNCLASSIFIED)	C.Y.	100		
203-06	WATER	M.G.	1		
203-07	FURNISHING & SPREADING TOPSOIL	C.Y.	100		
209-05	SEDIMENT REMOVAL	C.Y.	100		
209-09.43	CURB INLET PROTECTION (TYPE 4)	EACH	31		
209-40.33	CATCH BASIN PROTECTION (TYPE D)	EACH	11		
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	1589		
307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	169		
407-20.05	SAW CUTTING ASPHALT PAVEMENT	L.F.	3568		
411-01.10	ACS MIX(PG64-22) GRADING D	TON	770		
415-01.02	COLD PLANING BITUMINOUS PAVEMENT	S.Y.	8320		
604-01.01	CLASS A CONCRETE (ROADWAY)	C.Y.	9		
604-01.02	STEEL BAR REINFORCEMENT (ROADWAY)	LB.	275		
604-01.04	1 1/2" STEEL PIPE HANDRAIL	L.F.	65		
607-02.02	15" CONCRETE PIPE CULVERT (CLASS III)	L.F.	3		
607-03.02	18" CONCRETE PIPE CULVERT (CLASS III)	L.F.	2039		
607-05.02	24" CONCRETE PIPE CULVERT (CLASS III)	L.F.	350		
607-40.08	CORRUGATED METAL PIPE ARCH (SIZE EQUIV. 48" ROUND)	L.F.	3		
607-57.06	REINFORCED CONCRETE PIPE ARCH (58"x36")	L.F.	22		
611-01.02	MANHOLES, > 4' - 8' DEPTH	EACH	1		
611-05.01	TRENCH DRAINS	L.F.	28		
611-05.02	12IN PVC PIPE FOR TRENCH DRAINS	L.F.	14		

ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT PRICE	TOTAL PRICE
611-07.01	CLASS A CONCRETE (PIPE ENDWALLS)	C.Y.	1.07		
611-07.02	STEEL BAR REINFORCEMENT (PIPE ENDWALLS)	LB.	153		
611-09.01	ADJUSTMENT OF EXISTING CATCH BASIN	EACH	1		
611-09.03	CAPPING EXISTING CATCHBASIN	EACH	1		
611-12.01	CATCH BASINS, TYPE 12, 0' - 4' DEPTH	EACH	7		
611-12.02	CATCH BASINS, TYPE 12, > 4' - 8' DEPTH	EACH	9		
611-14.02	CATCH BASINS, TYPE 14, > 4' - 8' DEPTH	EACH	1		
611-42.01	CATCH BASINS, TYPE 42, 0' - 4' DEPTH	EACH	3		
701-01.01	CONCRETE SIDEWALK (4 ")	S.F.	15675		
701-02	CONCRETE DRIVEWAY	S.F.	5964		
701-02.03	CONCRETE CURB RAMP	S.F.	1270		
702-01	CONCRETE CURB	C.Y.	14.4		
702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	178		
712-01	TRAFFIC CONTROL	LS	1		
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	125		
712-05.03	WARNING LIGHTS (TYPE C)	EACH	125		
712-06	SIGNS (CONSTRUCTION)	S.F.	526		
713-16.20	SIGNS (R1-1, STOP)	EACH	6		
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	206		
716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	2		
716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	210		
716-13.02	SPRAY THERMO PVMT MRKNG (60 mil) (6IN LINE)	L.M.	2.4		
717-01	MOBILIZATION	LS	1		
740-11.02	TEMPORARY SEDIMENT TUBE 12IN	L.F.	6380		
801-01	SEEDING (WITH MULCH)	UNIT	4.37		
801-03	WATER (SEEDING & SODDING)	M.G.	9		
803-01	SODDING (NEW SOD)	S.Y.	904		
	UTILITY - GAS				
920-13.05	Pre-Construction Site Video Recording - Gas	LS	1		
920-11	MDPE Gas Main Installation - Open Cut 8" MDPE gas main, SDR 13.5	LF	75		
920-12	MDPE Gas Main Installation - Open Cut 2" MDPE gas main, SDR 11	LF	1,175		

ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT PRICE	TOTAL PRICE
920-13	Adder for full clean stone backfill of trench with compaction per Section 02321 for areas in or within 3' of pavement	LF	1,250		
920-10.04	Polyethylene Gas Tee & Valve Installation 2" Polyethylene Main on New 2" Polyethylene Main Per KUB Fig. 15720-a2	EA	1		
920-20.90	Tie-Ins to Existing Gas Main / New Mains Tie-Ins & Valve Assemblies 1-Valve Tee for New 2-inch to New 8-inch PE Main Per KUB Fig. 15720-r8	EA	1		
920-20.91	Tie-Ins to Existing Gas Main / New Mains Tie-Ins & Valve Assemblies Straight Tie-In for 1-1/4 inch to 1-1/4 inch or 2 inch to 2 inch PE Main Per KUB Fig. 15720-w2	EA	1		
920-11.04	Tie-Ins to Existing Gas Main / New Mains Tie-Ins & Valve Assemblies 2" Polyethylene Straight Tie-In to 1 1/4" Polyethylene Main Per KUB Fig. 15720-x	EA	4		
920-12.04	Tie-Ins to Existing Gas Main / New Mains Tie-Ins & Valve Assemblies 8" Polyethylene Straight Tie-In to 8" Polyethylene Main Per KUB Fig. 15720-z8	EA	2		
920-13.04	Tie-Ins to Existing Gas Main / New Mains Tie-Ins & Valve Assemblies 2" Polyethylene Tie-In to Existing 4" Polyethylene Main w/Valve Per KUB Fig. 15720-uu4	EA	1		
920-14.04	8" IPS, MDPE Gas Valve Installation	EA	1		
920-20.92	Gas Service Reconnection- Short Side Service: 1/2" IPS & 1" IPS Polyethylene Residential Service on Polyethylene Main Per KUB Section 15345	EA	4		
920-20.93	Gas Service Reconnection- Short Side Service: 1" IPS & 1 1/4" IPS Polyethylene Small Commercial Service on Polyethylene Main Per KUB Section 15345	EA	1		
920-15.04	Gas Service Installation Short Side 1/2" IPS Residential Service Line with a 1 1/4" Riser on Polyethylene Main Per KUB Fig. 15345-b	EA	3		

ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT PRICE	TOTAL PRICE
920-16.04	Gas Service Installation Long Side 1/2" IPS Residential Service Line with a 1 1/4" Riser on Polyethylene Main Per KUB Fig. 15345-b	EA	14		
920-20.94	Gas Service Installation Long Side 1" IPS Small Commercial Service Line with a 1-1/4" Riser on Polyethylene Main Per KUB Fig. 15345-j	EA	2		
920-14.05	Condemn Existing Gas Facilities	LS	1		
920-17.04	Temporary Gas Main Bypass -1" Bypass - Per KUB Fig. 15720-yy	EA	3		
920-14	Pavement Repair, Base Course (Base Course Only) - Gas	LF	1,400		
920-18.04	Pipeline Marker Installation (Marker Furnished by Owner)	EA	5		
920-15.05	Cleanup Restoration & Closeout - Gas	LS	1		
	UTILITY – WATER				
920-19.05	Pre-Construction Site Video Recording - Water	LS	1		
920-16	8" Restrained Joint Water Line Under Pavement or Within 3' of Edge of Pavement Per Section 02321	LF	930		
920-17	6" Restrained Joint Water Line Under Pavement or Within 3' of Edge of Pavement Per Section 02321	LF	70		
920-19.04	Water Valve Installation 8" Gate Valve	EA	6		
920-20.04	2" Blow-off Valve Assembly	EA	1		
920-20.12	Fire Hydrant Assembly	EA	3		
920-20.20	Tie-Ins to Existing Facilities Sta. 0+00 Line '1': Tie into ex. 8" Cast Iron Line (Atlantic Ave. at Oswald St.) Tie-In #1	EA	1		
920-20.28	Tie-Ins to Existing Facilities Sta. 0+47 Line '1': Tie into ex. 6" Cast Iron Line (Oswald St.) Tie-In #2	EA	1		
920-20.36	Tie-Ins to Existing Facilities Sta. 0+00 Line '2': Tie into ex. 8" Cast Iron Line (Atlantic Ave at First Creek) Tie-In #3	EA	1		
920-20.44	Tie-Ins to Existing Facilities Sta. 4+87 Line '2': Tie into ex. 8" HDPE Line (Atlantic Ave at Pacific St.) Tie-In #4	EA	1		
920-20.52	Service Connection - Reconnection (service tap) - 1" and smaller	EA	53		
920-20.60	Service Connection - Meter well and lid, meter horn, and associated fittings - 1" and smaller	EA	53		

ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT PRICE	TOTAL PRICE
920-18	Service Connection - 3/4" copper service pipe	LF	1900		
920-19	Service Connection - 1" HDPE service pipe	LF	100		
920-20	Service Connection - 2" service pipe	LF	100		
920-20.05	Abandon Existing Mains - Water	LS	1		
920-20.68	Abandon Existing Valves, Air Valves, & Blowoff Assemblies	EA	5		
920-20.13	Abandon Existing Fire Hydrants	LS	1		
920-20.08	Pavement Repair, Base Course (Base Course Only) - Water	LF	2200		
920-20.76	District Meter Vaults: Meter Vaults: 5 - 7 Feet Deep, 4' precast concrete manhole with eccentric cone (0-180 degrees) including standard 26" frame and cover	EA	1		
920-20.84	District Meter Tap: 2" tap on 8" main	EA	1		
920-20.85	Antenna Assemblies: complete all labor and installation for antenna assemblies per KUB Specification 02950 including but not limited to manhole wall penetrations, all associated conduit and fittings, meter well, non-metallic lid, backfill, asphalt/concrete restoration, cleanup, landscaping, etc.	EA	1		

ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT PRICE	TOTAL PRICE
	UTILITY – WASTEWATER				
920-20.45	Pre-Construction Site Video Recording - Wastewater	LS	1		
920-20.16	Gravity Sewer Pipe, PVC, 8 Inches, Paved 0 – 6 Feet Deep	LF	142		
920-20.24	Gravity Sewer Pipe, PVC, 8 Inches, Paved 6 – 8 Feet Deep	LF	43		
920-20.86	PVC Sewer Lateral Appurtenances	EA	26		
920-20.32	PVC Sewer Lateral, 6-Inch Diameter, in Road	LF	423		
920-20.40	PVC Sewer Lateral, 6-Inch Diameter, in Easement	LF	680		
920-20.87	Manhole, Concrete, 4-Foot Diameter, 0 - 6 Feet Deep	EA	1		
920-20.88	Manhole, Concrete, 4-Foot Diameter, 6 - 8 Feet Deep	EA	1		
920-20.89	Locate and Excavate Manhole	EA	2		
920-20.53	Sewer Flow Control	LS	1		
920-10.03	Flowable Fill - Wastewater	CY	10		
920-20.48	Pavement Repair, Base Course (Base Course Only) - Wastewater	LF	185		

TOTAL BID \$ _____

TOTAL BID IN WORDS _____

The bidder acknowledges receipt of the following addenda.

Addendum No. _____ **Date:** _____

Addendum No. _____ **Date:** _____

Addendum No. _____ **Date:** _____

SECTION 01270 MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 SUMMARY

- A. The Unit Price Work shall include CONTRACTOR provided labor, materials, equipment, overhead, profit, insurance, incidentals, etc. to cover the finished Work. Cost of all applicable taxes, permits, etc. shall be included in the cost of construction of this Project. Even though an item of the Work is included in the Contract Documents, if it is not both covered herein and specifically itemized on the Unit Price Schedule of Section 00330, Bid Form, payment for it shall not be separately made. Such Work shall be considered a necessary part of or incidental to its related Work. The CONTRACTOR shall be paid only for quantities installed and approved by Resident Project Representative (RPR). Measurement for payment on a unit price basis shall be as described below. Payment for each unit installed shall be made according to the unit price bid, as listed in the Bid Form. Only those items appearing in the Bid Form will be considered for payment on a unit price basis.
- B. Applications for payment shall be submitted in accordance with Section 01290, Applications for Payment, Section 00700 - General Conditions, Section 00800 - Supplementary Conditions, and Section 00514 - Agreement. Cost of all applicable taxes, permits, etc., shall be included in the cost of construction of this Project.

1.02 MEASUREMENT

- A. General: Measuring, and metering devices used to measure quantity of materials for the Work shall be suitable for purpose intended and conform to tolerances and specifications as specified in National Institute of Standards and Technology, Handbook 44.
- B. Where measurement of quantities depends on elevation of existing ground, elevations obtained during construction will be compared with those shown on Drawings. Variations of 1 foot or less will be ignored, and profiles shown on Drawings will be used for determining quantities.

- C. Units of measure shown on Unit Price Schedule included with Bid Form shall be as follows, unless specified otherwise.

Item	Method of Measurement
AC	Acre—Field Measure by OWNER
CY	Cubic Yard—Field Measure in-place by OWNER within limits specified or shown
EA	Each—Field Count by OWNER
LF	Linear Foot—Horizontal Field Measure by OWNER
LS	Lump Sum—by OWNER
SF	Square Foot – Field Measure by OWNER
SY	Square Yard—Field Measure by OWNER
VF	Vertical Feet—Field Measure by OWNER
WK	Week—by OWNER

D. Definitions:

1. Acre (AC): Field measured and calculated OWNER. Measurement shall be horizontal distances measured to the nearest foot, calculated in square feet, converted to acres, and rounded to the nearest acre by OWNER.
2. Cubic Yard (CY): Field measured and calculated by OWNER. In-place yards prior to excavation or after placement and compaction. Measured to the nearest 0.5 foot, calculated in cubic feet, converted to cubic yards, and rounded to the nearest cubic yard.
3. Each (EA): Field counted by the OWNER as installed and accepted.
4. Linear Foot (LF): Field measured horizontally by the OWNER.
5. Lump Sum (LS): Field verified by OWNER.
6. Square Foot (SF): Field measured and calculated by OWNER. Measurement shall be horizontal distances measured to the nearest 0.1 foot and calculated to the nearest square foot.
7. Square Yard (SY): Field measured and calculated by OWNER. Measurement shall be horizontal distances measured to the nearest 0.5 foot, calculated in square feet, converted to square yards, and rounded to the nearest square yard by the OWNER.
8. Vertical Foot (VF): Field measured by OWNER in accordance with Paragraph D.4.a.2, above.
9. Week (WK): Field determined by OWNER as seven consecutive 24-hour days, rounded to the nearest week. A 1-day allowance for equipment set up and relocation shall be allowed. Multiple location times shall be added together to determine total time in weeks.

1.03 STORED MATERIALS AND EQUIPMENT

- A. No applications shall be processed by Owner which includes amounts for stored materials. Owner shall not pay Contractor for stored materials.
1. For unit price contracts or components Contractor's application for payment shall be based upon installed units identified on the bid form.
 2. For lump sum price contracts or components Contractor's application for payment shall be based upon approved schedule of values.

1.04 ITEMS NOT CONSIDERED AS PAY ITEMS

- A. Unless explicitly stated in this Contract Document, the following items are not considered as pay items:
1. **Clearing and Grubbing** (Section 02230)
 2. **Finish Grading** (Section 02310)
 3. **Control Blasting** (Section 02311)
 4. **General Excavation** (Section 02315)
 5. **Excavation, Bedding, and Backfill for Utilities** (Section 02321)
 6. **Waterlines – Disinfection and Testing** (Section 02516)
 7. **Sanitary Sewers – Air Testing Guidelines** (Section 02533)
 8. **Concrete for Utility Lines** (Section 03303)
 9. **Storage, Handling, and Transportation of Plastic Pipe** (Section 15101)
 10. **Tracer Wire Installation for Non-Electrically Conductive Pipe** (Section 15105)
 11. **Static Electric Discharge Procedure for Polyethylene Pipe** (Section 15265)
 12. **Natural Gas Polyethylene Pipe Joining Procedures** (Section 15350)
- B. **Unclassified excavation** for utilities is not a pay item unless explicitly stated in this Contract Document. Unclassified excavation shall be considered and designated a necessary part of the construction for trench depths as defined by the individual unit price for the line installation and as required by the Project Drawings. Unit prices bid for utilities with which unclassified excavation is connected shall be full compensation for this item.
- C. **Rock Excavation** is not a pay item unless explicitly stated in this Contract Document. Rock excavation shall be considered and designated a necessary part of the construction, and unit prices bid for items which rock excavation is connected shall be full compensation for this item.
- D. Payment will not be made for rejected or unused products. Payment will not be made for the following:

1. Loading, hauling, and disposing of rejected material.
2. Quantities of material wasted or disposed of in manner not called for under Contract Documents.
3. Rejected loads of material, including material rejected after it has been placed by reason of failure of Contractor to conform to provisions of Contract Documents.
4. Material not unloaded from transporting vehicle.
5. Defective Work not accepted by Owner.
6. Material remaining on hand after completion of Work.

1.05 BID ITEM PAYMENT

- A. Payment for unit price items covers all the labor, materials, overhead, and services necessary to furnish and install the following items.
- B. Payment for the bid items will be as follows:

Pay Item No. 1015 - Pre-Construction Site Video Recording is a lump sum pay item. Video recording shall include all materials, equipment, and labor to record the gas route at the beginning of the project as specified in Section 01380.

Pay Item No(s). 4000b, e, f - MDPE Gas Main Installation -Open Cut exclusive of road boring, includes trench excavation providing no less than required minimum cover up to 8' maximum trench depth, pipe, fittings, bedding, testing and purging, complete per section 15720. Gas Main Installations are linear foot pay items. The quantities of pipe in place for which payment will be allowed shall be expressed in linear feet of gas main in terms of the horizontal length of **each** pipe installed in place as measured along the centerline of the trench with no deductions for valves or fittings where depth is measured from the top of the pipe to the proposed/finished grade. Such payment shall be full compensation for installing gas main including pipe bedding, excavation, backfill per Section 15720, tracer wire, and all other work necessary for and incidental to completion of the work. **The CONTRACTOR will furnish all gas line materials required for the gas line installation including tracer wire.**

Pay Item No(s). 4005b, r.1 - Polyethylene Gas Tee & Valve Installation (complete all labor and installation for tie-ups including installation of tees, couplings, reducers, valves and valve boxes and other fittings as required by section 15720) are per each pay items only when the valve installation in not included as part of a gas main tie-in or gas service connection. Unit prices bids for each shall be full compensation for this item and for all labor to complete the installation including bedding, valve box installation, pipe connections, backfill as required, and necessary equipment as required to complete the item in accordance

with the Drawings and Specifications. **The CONTRACTOR will furnish all gas line materials required for the gas valve installation.**

Pay Item No(s). 4010 b, c, g, g.2.- Tie-ins to Existing Gas Main / New Mains Tie-Ins & Valve Assemblies (complete all labor and installation for tie-ups including installation of tees, couplings, reducers, backfill, asphalt/concrete restoration, cleanup/restoration, pressure test, & tracer wire, valves and valve boxes and other fittings and bypasses as required by section 15720.)

Gas main tie-ins to existing / new mains are per each pay items. Unit price bids for each tie-in shall be full compensation for each specific tie-in including all labor, installation of all fittings, valves, reducers, couplings, and incidentals as required to complete the tie in. **The CONTRACTOR will furnish all gas line materials required for the gas main tie-ins.**

Pay Item No(s). 4015 b - Gas Valve Installation are per each pay items only when the valve installation is not included as part of a gas main tie-in or gas service connection. Unit prices bids for each shall be full compensation for this item and for all labor to complete the installation including bedding, valve box installation, pipe connections, backfill as required, and necessary equipment as required to complete the item in accordance with the Drawings and Specifications. **The CONTRACTOR will furnish all gas line materials required for the gas valve installation.**

Pay Item No(s). 4020 a, c - Gas Services Reconnection – Short Side Service: **The following unit prices will be utilized for the reconnection/interception of existing services where the point of connections is on the same side of the road as the gas main including pipe from the main to the property line/ back of KUB easement or edge of pavement/curb, tapping tee, valve, valve box, EFV, couplings, tracer wire, backfill, asphalt/concrete restoration, cleanup/restoration, pressure test and NGUS as required by Section 15345.** Gas Services Installation are per each pay items and shall be full compensation for this item and for all labor to complete the installation including pipe connections, pipe, fittings, valves, valve boxes, EFV, backfill, restoration as required, and necessary equipment as required to complete the item in accordance with the Drawings and Specifications. **The CONTRACTOR will furnish all gas line materials required for Gas Service Reconnection – Short Side Service installation.**

Pay Item No(s). 4030 b - Gas Service Installation – Short Side Service: **The following unit prices will be utilized for the installation/full replacement of new or existing services for properties on the same side of the road as the gas main including 150' of pipe from the gas main to the meter location, tapping tee, valve, valve box, EFV, riser, couplings, tracer wire, tracer wire clip, riser**

protective sleeve backfill, asphalt/concrete restoration, cleanup/restoration, pressure test and NGUS as required by Section 15345. Gas Service Installation – Short Side Service is a per each pay item and shall be full compensation for this item and for all labor to complete the installation including connections, pipe, fittings, valves, valve boxes, EFV, backfill, restoration, and necessary equipment as required to complete the item in accordance with the Drawings and Specifications 15345. **The CONTRACTOR will furnish all gas line materials required for Gas Service Installation – Short Side Service.**

Pay Item No(s). 4035 b, j - Gas Service Installation – Long Side Service: The following unit prices will be utilized for the installation/full replacement of new or existing services for properties on the opposite side of the road as the gas main including the road bore, bore pipe, up to 150' of pipe from the long side property line to the meter location, tapping tee, valve, valve box, EFV, riser, couplings, tracer wire, tracer wire clip, riser protective sleeve, backfill, asphalt/concrete restoration, cleanup/restoration, pressure test and NGUS as required by Section 15345. Gas Service Installation – Long Side Service is a per each pay item and shall be full compensation for this item and for all labor to complete the installation including the road bore, bore pipe, connections, pipe, fittings, valves, valve boxes, EFV, backfill, restoration, and necessary equipment as required to complete the item in accordance with the Drawings and Specifications 15345. **The CONTRACTOR will furnish all gas line materials required for Gas Service Installation – Long Side Service.**

Pay Item No. 4050a – Condemn Existing Gas Facilities is a lump sum price pay item which includes, but is not limited to, the disconnecting, purging and sealing of existing facilities as indicated on the drawings, removal of valve boxes no longer in service and any above ground appurtenances, backfill, asphalt/concrete restoration, & cleanup/restoration. Lump sum bid shall be full compensation for this item and for all labor, line purging and sealing, installation of caps, crushed stone backfill as required, and necessary equipment required to complete the condemnation of existing gas facilities including any above ground appurtenances as directed by the Drawings and the Resident Project Representative.

Pay Item No. 4065a – Temporary Gas Main Bypass is a per each unit price pay item. Unit price bid for each bypass shall be full compensation for all labor, bypass line, fittings, valves, reducers, couplings, NGUS and incidentals as required to install the bypass to insure continuity of gas service to customers in accordance with the Drawings and Specifications 15720 or as directed by the Owner. **The CONTRACTOR will furnish all gas line materials required for the gas main bypasses.**

Pay item 6005b - Pavement Repair (Installed by Contractor): Permanent Patching, Base Course is a linear foot unit price pay item. Unit price item

includes excavation of temporary pavement repair, excavation of stone base as needed, material (Base Grade B or B-M), compaction, cleanup, striping (if needed), milling (if needed), and straight line truing of existing surface as needed. See KUB Standards Section 02321 General Excavation, Bedding and Backfill for Utilities; Section 02740 Pavement Repair; Section 02770 Concrete for Utilities and Concrete Pavement Construction; and Section 1740 Surface Restoration Special Provisions. Pay item 6005b shall be paid exclusive of Pay Item Nos. 6005a and 6005c and shall not be priced in combination with pay items 6005a or 6005c for any area(s) of work (payment for any given unit of measure shall be made for either Item Nos. 6005a, 6005b or 6005c). Payment for this unit price item will be made based on the length of trenches, to the limits of excavation, including manhole excavations, as specified in the bid documents OR as approved in writing by OWNER.

Pay Item No. 6010g – Removal and Replacement, Pipeline Marker Installation is a per each marker unit price pay item. Unit price bid for each pipeline marker shall be full compensation for each installed pipeline marker. Pipeline markers shall be provided by the OWNER.

Pay Item No. 6045 - Cleanup Restoration & Closeout is a lump sum price pay item. Lump sum price bid for site restoration, lawn repair, landscape repair, etc., shall be full compensation for this item and for all labor, materials, water and equipment required to complete the restoration to its original or better condition. Payments for this lump sum item will be made based on percentage of work complete for the entire project. **It is highly recommended that the CONTRACTOR photograph existing conditions at the Site prior to commencing with the Work.**

END OF SECTION
[HOME](#)

Z:\00244-0024\Transportation\Dgn\CONSTR\002.sht

Footnotes	KUB ITEM NO.	TDOT ITEM NO.	PARTICIPATING				NON PARTICIPATING				
			DESCRIPTION	UNIT	ROADWAY QUANTITIES	GAS QUANTITIES	WATER QUANTITIES	WASTEWATER QUANTITIES	TOTAL		
		105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1					1	
		201-01	CLEARING AND GRUBBING	LS	1					1	
(1)		202-01.56	REMOVAL OF STRUCTURES & OBSTRUCTIONS (CATCH BASINS)	LS	1					1	
		202-02.21	REMOVAL OF PIPE (STORM PIPE)	L.F.	1316					1316	
		202-03	REMOVAL OF RIGID PAVEMENT, SIDEWALK, ETC.	S.Y.	365					365	
		202-03.01	REMOVAL OF ASPHALT PAVEMENT	S.Y.	2218					2218	
		203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	950					950	
		203-03	BORROW EXCAVATION (UNCLASSIFIED)	C.Y.	100					100	
		203-06	WATER	M.G.	1					1	
		203-07	FURNISHING & SPREADING TOPSOIL	C.Y.	100					100	
		209-05	SEDIMENT REMOVAL	C.Y.	100					100	
(2)		209-09.43	CURB INLET PROTECTION (TYPE 4)	EACH	28	1	1		1	31	
(2)		209-40.33	CATCH BASIN PROTECTION (TYPE D)	EACH	8	1	1		1	11	
(8)(9)		303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	1447	41	33		68	1589	
(8)(9)		307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	124	7	9		29	169	
		407-20.05	SAW CUTTING ASPHALT PAVEMENT	L.F.	3568					3568	
(8)(9)		411-01.10	ACS MIX(PG64-22) GRADING D	TON	750	3	4		13	770	
		415-01.02	COLD PLANING BITUMINOUS PAVEMENT	S.Y.	8320					8320	
(3)		604-01.01	CLASS A CONCRETE (ROADWAY)	C.Y.	9					9	
(3)		604-01.02	STEEL BAR REINFORCEMENT (ROADWAY)	LB.	275					275	
		604-01.04	1 1/2" STEEL PIPE HANDRAIL	L.F.	65					65	
(4)		607-02.02	15" CONCRETE PIPE CULVERT (CLASS III)	L.F.	3					3	
(4)		607-03.02	18" CONCRETE PIPE CULVERT (CLASS III)	L.F.	2039					2039	
(4)		607-05.02	24" CONCRETE PIPE CULVERT (CLASS III)	L.F.	350					350	
(4)		607-40.08	CORRUGATED METAL PIPE ARCH (SIZE EQUIV. 48" ROUND)	L.F.	3					3	
(4)		607-57.06	REINFORCED CONCRETE PIPE ARCH (58"x36")	L.F.	22					22	
		611-01.02	MANHOLES, > 4' - 8' DEPTH	EACH	1					1	
(4)		611-05.01	TRENCH DRAINS	L.F.	28					28	
(4)		611-05.02	12IN PVC PIPE FOR TRENCH DRAINS	L.F.	14					14	
		611-07.01	CLASS A CONCRETE (PIPE ENDWALLS)	C.Y.	1.07					1.07	
		611-07.02	STEEL BAR REINFORCEMENT (PIPE ENDWALLS)	LB.	153					153	
		611-09.01	ADJUSTMENT OF EXISTING CATCH BASIN	EACH	1					1	
		611-09.03	CAPPING EXISTING CATCHBASIN	EACH	1					1	
		611-12.01	CATCH BASINS, TYPE 12, 0' - 4' DEPTH	EACH	7					7	
(5)		611-12.02	CATCH BASINS, TYPE 12, > 4' - 8' DEPTH	EACH	9					9	
		611-14.02	CATCH BASINS, TYPE 14, > 4' - 8' DEPTH	EACH	1					1	
		611-42.01	CATCH BASINS, TYPE 42, 0' - 4' DEPTH	EACH	3					3	
(8)(9)		701-01.01	CONCRETE SIDEWALK (4 ")	S.F.	15000	225	225		225	15675	
(8)(9)		701-02	CONCRETE DRIVEWAY	S.F.	5614		225		225	5964	
(8)(9)		701-02.03	CONCRETE CURB RAMP	S.F.	1270					1270	
		702-01	CONCRETE CURB	C.Y.	2.5	5.3			6.6	14.4	
		702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	178					178	
		712-01	TRAFFIC CONTROL	LS	1					1	
		712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	125					125	
		712-05.03	WARNING LIGHTS (TYPE C)	EACH	125					125	
		712-06	SIGNS (CONSTRUCTION)	S.F.	526					526	
		713-16.20	SIGNS (R1-1, STOP)	EACH	6					6	
(6)		716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	206					206	
(6)		716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	2					2	
(6)		716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	210					210	
(6)		716-13.02	SPRAY THERMO PVMT MRKNG (60 mil) (6IN LINE)	L.M.	2.4					2.4	
		717-01	MOBILIZATION	LS	0.6	0.1	0.2		0.1	1	
(2)		740-11.02	TEMPORARY SEDIMENT TUBE 12IN	L.F.	5300	360	360		360	6380	
		801-01	SEEDING (WITH MULCH)	UNIT			1.85		2.52	4.37	
		801-03	WATER (SEEDING & SODDING)	M.G.	9					9	
		803-01	SODDING (NEW SOD)	S.Y.	904					904	
			UTILITY - GAS								
	1015	920-13.05	Pre-Construction Site Video Recording - Gas	LS		1				1	
(7)	4000 b.	920-11	MDPE Gas Main Installation - Open Cut 8" MDPE gas main, SDR 13.5	LF		75				75	
(7)	4000 e.	920-12	MDPE Gas Main Installation - Open Cut 2" MDPE gas main, SDR 11	LF		1175				1175	
(7)	4000 f.	920-13	Adder for full clean stone backfill of trench with compaction per Section 02321 for areas in or within 3' of pavement	LF		1250				1250	
(7)	4005 b.	920-10.04	Polyethylene Gas Tee & Valve Installation 2" Polyethylene Main on New 2" Polyethylene Main Per KUB Fig. 15720-a2	EA		1				1	
(7)	4005 r.1.	920-20.90	Polyethylene Gas Tee & Valve Installation 2" Polyethylene Main on New 8" Polyethylene Main Per KUB Fig. 15720-r8	EA		1				1	
(7)	4010 b.	920-20.91	Tie-Ins to Existing Gas Main / New Mains Tie-Ins & Valve Assemblies 2" Polyethylene Straight Tie-In to 2" Polyethylene Main Per KUB Fig. 15720-w2	EA		1				1	
(7)	4010 c.	920-11.04	Tie-Ins to Existing Gas Main / New Mains Tie-Ins & Valve Assemblies 2" Polyethylene Straight Tie-In to 1 1/4" Polyethylene Main Per KUB Fig. 15720-x	EA		4				4	
(7)	4010 g.	920-12.04	Tie-Ins to Existing Gas Main / New Mains Tie-Ins & Valve Assemblies 8" Polyethylene Straight Tie-In to 8" Polyethylene Main Per KUB Fig. 15720-z8	EA		2				2	
(7)	4010 g.2.	920-13.04	Tie-Ins to Existing Gas Main / New Mains Tie-Ins & Valve Assemblies 2" Polyethylene Tie-In to Existing 4" Polyethylene Main w/Valve Per KUB Fig. 15720-uu4	EA		1				1	
(7)	4015 b.	920-14.04	8" IPS, MDPE Gas Valve Installation	EA		1				1	
(7)	4020 a.	920-20.92	Gas Service Reconnection- Short Side Service: 1/2" IPS & 1" IPS Polyethylene Residential Service on Polyethylene Main Per KUB Section 15345	EA		4				4	

Footnotes	KUB ITEM NO.	TDOT ITEM NO.	DESCRIPTION	UNIT	ROADWAY QUANTITIES	NON PARTICIPATING					
						GAS QUANTITIES	WATER QUANTITIES	WASTEWATER QUANTITIES	TOTAL		
			UTILITY - GAS								
	(7)	4020 c.	Gas Service Reconnection- Short Side Service: 1" IPS & 1 1/4" IPS Polyethylene Small Commercial Service on Polyethylene Main Per KUB Section 15345	EA		1				1	
	(7)	4030 b.	Gas Service Installation Short Side 1/2" IPS Residential Service Line with a 1 1/4" Riser on Polyethylene Main Per KUB Fig. 15345-b	EA		3				3	
	(7)	4035 b.	Gas Service Installation Long Side 1/2" IPS Residential Service Line with a 1 1/4" Riser on Polyethylene Main Per KUB Fig. 15345-b	EA		14				14	
	(7)	4035 j.	Gas Service Installation Long Side 1" IPS Small Commercial Service Line with a 1-1/4" Riser on Polyethylene Main Per KUB Fig. 15345-j	EA		2				2	
	(7)	4050 a.	Condemn Existing Gas Facilities	LS		1				1	
	(7)	4065 a.	Temporary Gas Main Bypass -1" Bypass - Per KUB Fig. 15720-yy	EA		3				3	
		6005 b.	Pavement Repair, Base Course (Base Course Only) - Gas	LF		1400				1400	
		6010 g.	Pipeline Marker Installation (Marker Furnished by Owner)	EA		5				5	
		6045	Cleanup Restoration & Closeout - Gas	LS		1				1	
			UTILITY - WATER								
		1015	Pre-Construction Site Video Recording - Water	LS			1			1	
(7)	3000 f.	920-16	8" Restrained Joint Water Line Under Pavement or Within 3' of Edge of Pavement Per Section 02321	LF			930			930	
(7)	3000 h.	920-17	6" Restrained Joint Water Line Under Pavement or Within 3' of Edge of Pavement Per Section 02321	LF			70			70	
(7)	3010 d.	920-19.04	Water Valve Installation 8" Gate Valve	EA			6			6	
(7)	3015 a.	920-20.04	2" Blow-off Valve Assembly	EA			1			1	
(7)	3015 d.	920-20.12	Fire Hydrant Assembly	EA			3			3	
(7)	3020 a.	920-20.20	Tie-Ins to Existing Facilities Sta. 0+00 Line 1": Tie into ex 8" Cast Iron Line (Atlantic Ave. at Oswald St.) Tie-In #1	EA			1			1	
(7)	3020 b.	920-20.28	Tie-Ins to Existing Facilities Sta. 0+47 Line 1": Tie into ex 6" Cast Iron Line (Oswald St.) Tie-In #2	EA			1			1	
(7)	3020 c.	920-20.36	Tie-Ins to Existing Facilities Sta. 0+00 Line 2": Tie into ex 8" Cast Iron Line (Atlantic Ave at First Creek) Tie-In #3	EA			1			1	
(7)	3020 d.	920-20.44	Tie-Ins to Existing Facilities Sta. 4+87 Line 2": Tie into ex 8" HDPE Line (Atlantic Ave at Pacific St.) Tie-In #4	EA			1			1	
(7)	3025 a.	920-20.52	Service Connection - Reconnection (service tap) - 1" and smaller	EA			53			53	
(7)	3025 h.	920-20.60	Service Connection - Meter well and lid, meter horn, and associated fittings - 1" and smaller	EA			53			53	
(7)	3025 o.	920-18	Service Connection - 3/4" copper service pipe	LF			1900			1900	
(7)	3025 p.	920-19	Service Connection - 1" HDPE service pipe	LF			100			100	
(7)	3025 q.	920-20	Service Connection - 2" service pipe	LF			100			100	
		3030 a.	Abandon Existing Mains - Water	LS			1			1	
		3030 b.	Abandon Existing Valves, Air Valves, & Blowoff Assemblies	EA			5			5	
		3030 c.	Abandon Existing Fire Hydrants	LS			1			1	
(7)	6005 b.	920-20.08	Pavement Repair, Base Course (Base Course Only) - Water	LF			2200			2200	
(7)	6051 a.	920-20.76	District Meter Vaults: Meter Vaults: 5 - 7 Feet Deep 4' precast concrete manhole with eccentric cone (0-180 degrees) including standard 26" frame and cover	EA			1			1	
(7)	6051 b.	920-20.84	District Meter Tap: 2" tap on 8" main	EA			1			1	
(7)	7030	920-20.85	Antenna Assemblies: complete all labor and installation for antenna assemblies per KUB Specification 02950 including but not limited to manhole wall penetrations, all associated conduit and fittings, meter well, non-metallic lid, backfill, asphalt/concrete restoration, cleanup, landscaping, etc.	EA			1			1	
			UTILITY - WASTEWATER								
		1015	Pre-Construction Site Video Recording - Wastewater	LS				1		1	
(7)	2115 a.	920-20.16	Gravity Sewer Pipe, PVC, 8 Inches, Paved 0 - 6 Feet Deep	LF				142		142	
(7)	2115 b.	920-20.24	Gravity Sewer Pipe, PVC, 8 Inches, Paved 6 - 8 Feet Deep	LF				43		43	
(7)	2420	920-20.86	PVC Sewer Lateral Appurtenances	EA				26		26	
(7)	2425 a.	920-20.32	PVC Sewer Lateral, 6-Inch Diameter, in Road	LF				423		423	
(7)	2425 b.	920-20.40	PVC Sewer Lateral, 6-Inch Diameter, in Easement	LF				680		680	
(7)	2435 a.	920-20.87	Manhole, Concrete, 4-Foot Diameter, 0 - 6 Feet Deep	EA				1		1	
(7)	2435 b.	920-20.88	Manhole, Concrete, 4-Foot Diameter, 6 - 8 Feet Deep	EA				1		1	
(7)	2535	920-20.89	Locate and Excavate Manhole	EA				2		2	
(7)	2630	920-20.53	Sewer Flow Control	LS				1		1	
		2640	Flowable Fill - Wastewater	CY				10		10	
(7)	6005 b.	920-20.48	Pavement Repair, Base Course (Base Course Only) - Wastewater	LF				185		185	

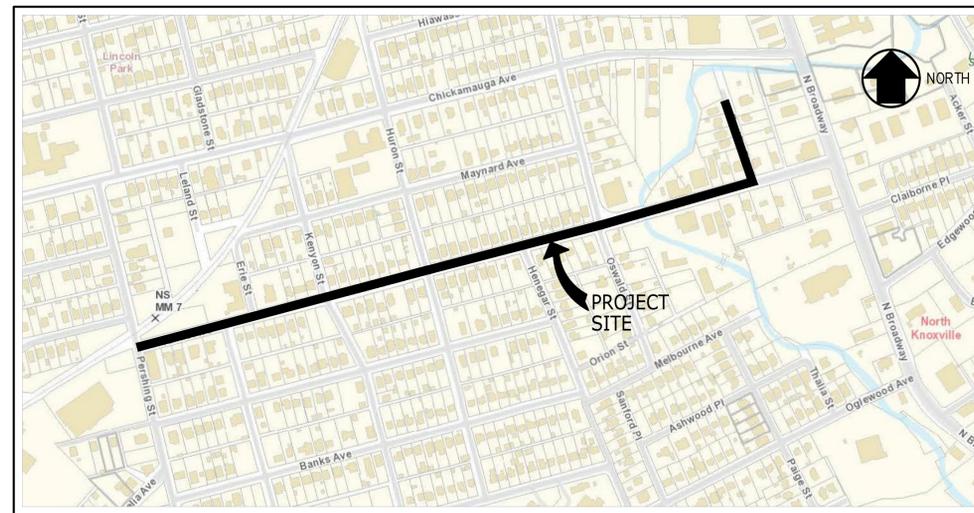
FOOTNOTES:

- ITEM INCLUDES REMOVAL OF DRAINAGE STRUCTURES AT STA.101+03; STA.101+67 STA.105+59; STA.105+93; STA.108+99; STA.109+37; STA.122+46; STA.122+87; STA.126+48; STA.126+52; STA.127+40; STA.127+45; STA.128+51
- SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT. ALL QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER.
- ITEM QUANTITIES ARE FOR THE INSTALLATION OF THE RESIDENTIAL STEPS, MM-PS-1.
- THE COST OF EXCAVATION AND BEDDING FOR THE INSTALLATION OF PIPE CULVERTS, SEWERS, ETC. ARE NOT TO BE PAID FOR DIRECTLY, BUT WILL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF PIPE.
- CATCH BASIN, TYPE 12, SHALL BE GRATE ONLY WITH NO CURB IRON OPENING FOR STRUCTURES #2 AND #20.
- CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THERMOPLASTIC.
- ITEM INCLUDES ALL MATERIALS, LABOR, EQUIPMENT AND TRAFFIC CONTROL

KNOXVILLE UTILITIES BOARD ATLANTIC AVENUE WATER, SEWER & GAS IMPROVEMENTS

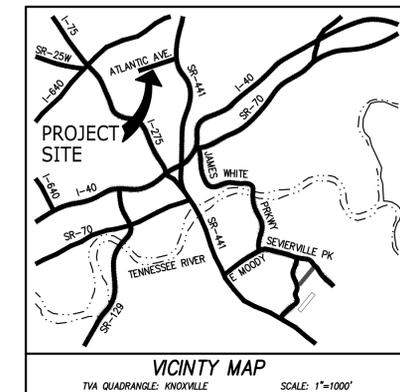
DRAWING INDEX

SHEET NO.	TITLE
G0.01	COVER SHEET
G0.02	GENERAL NOTES AND LEGEND
G0.03	LOCATION PLAN & DRAWING SHEET KEY
W1.01	WATER SERVICE REPLACEMENT PLAN WATER LINE PLAN - LINE '1' - STA. 0+00 TO STA. 0+47 E.O.L.
W1.02	WATER SERVICE REPLACEMENT PLAN WATER LINE PROFILE - LINE '1' - STA. 0+00 TO STA. 0+47 E.O.L. WATER LINE PLAN & PROFILE - LINE '2' - STA. 0+00 TO STA. 8+61 E.O.L.
SA1.01	SANITARY SEWER SERVICE REPLACEMENT PLAN
SA1.02	SANITARY SEWER SERVICE REPLACEMENT PLAN
SA2.01	SANITARY SEWER OPEN CUT PLAN & PROFILE
G1.01	GAS SERVICE REPLACEMENT PLAN GAS LINE PLAN & PROFILE - LINE 'A' - STA. 0+00 TO STA. 5+22 E.O.L.
G1.02	GAS SERVICE REPLACEMENT PLAN GAS LINE 'B' PLAN - STA. 0+00 TO STA. 2+20± E.O.L. ② GAS LINE 'C' PLAN - STA. 0+00 TO STA. 0+74± E.O.L. ② GAS LINE 'D' PLAN - STA. 0+00 TO STA. 3+82± E.O.L. ②
D1.01	STANDARD DETAILS ②
D1.02	STANDARD DETAILS
D1.03	DISTRICT METER INSTALLATION DETAILS



LOCATION MAP

SCALE: 1" = 400'
800 0 400 800



VICINITY MAP

TVA QUADRANGLE: KNOXVILLE SCALE: 1"=1000'

PREPARED BY:

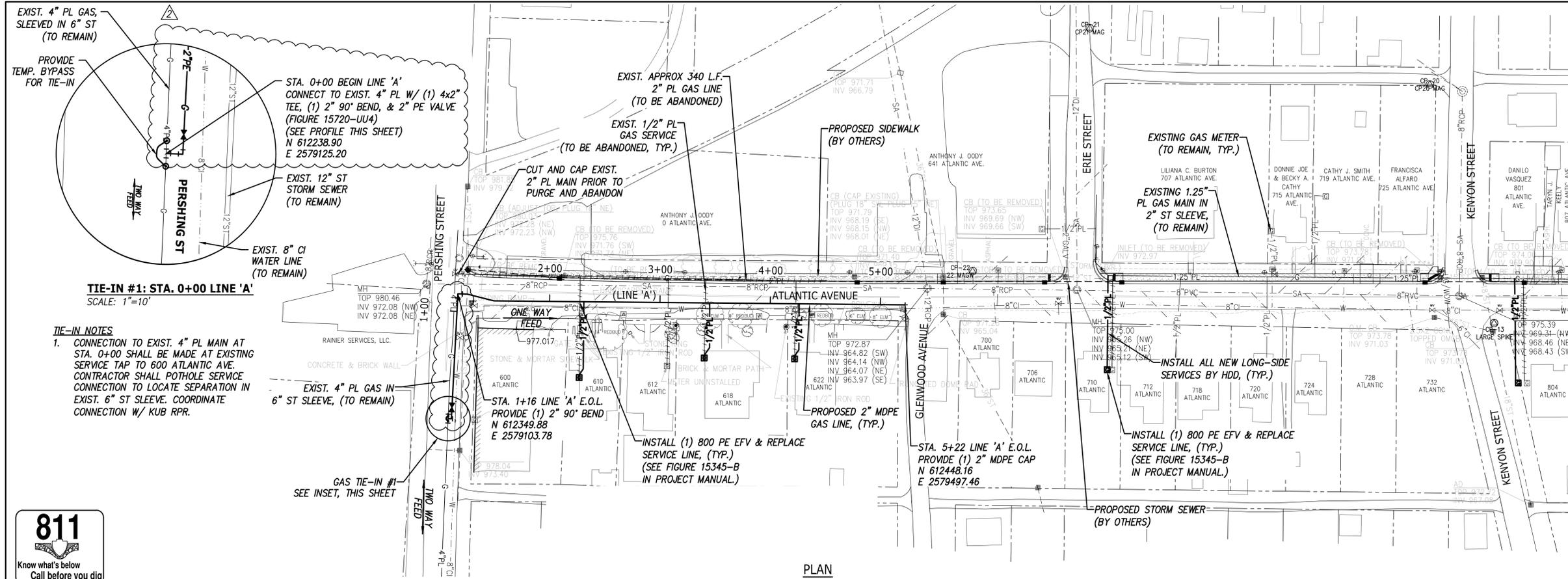
CANNON & CANNON INC
CONSULTING ENGINEERS - FIELD SURVEYORS
TEL: 865.670.8555 8550 Kingston Pike
www.cannon-cannon.com Knoxville, TN 37919
FAX: 865.670.8866



<p style="text-align: center;">ENGINEER</p> <p style="text-align: center;">CANNON & CANNON INC CONSULTING ENGINEERS - FIELD SURVEYORS TEL: 865.670.8555 8550 Kingston Pike www.cannon-cannon.com Knoxville, TN 37919 FAX: 865.670.8866</p>	<p style="text-align: center;">DESIGNED WML</p> <p style="text-align: center;">DRAWN WBW</p> <p style="text-align: center;">CHECKED TFT</p>	<p style="text-align: center;">APPROVED</p> <p style="text-align: center;">ENGINEER</p> <p style="text-align: center;">WATER, SEWER & GAS</p>		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>REVISION</th> <th>APPR.</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>2/25/21</td> <td>ISSUE FOR CONSTRUCTION</td> <td>WML</td> </tr> <tr> <td>1</td> <td>8/30/21</td> <td>RE-ISSUE FOR CONSTRUCTION</td> <td>WML</td> </tr> <tr> <td>2</td> <td>4/12/22</td> <td>REV. PER OWNER COMMENTS</td> <td>WML</td> </tr> </tbody> </table>	NO.	DATE	REVISION	APPR.	0	2/25/21	ISSUE FOR CONSTRUCTION	WML	1	8/30/21	RE-ISSUE FOR CONSTRUCTION	WML	2	4/12/22	REV. PER OWNER COMMENTS	WML	<p style="text-align: center;">SCALE</p> <p style="text-align: center;">AS SHOWN</p> <p style="text-align: center;">DATE</p> <p style="text-align: center;">02/25/2021</p>	<p style="text-align: center;">KUB ENGINEERING DIVISION</p>	<p style="text-align: center;">KNOXVILLE UTILITIES BOARD ATLANTIC AVENUE WATER, SEWER & GAS IMPROVEMENTS</p> <p style="text-align: center;">COVER SHEET</p>	<p style="text-align: right;">CCI PROJECT NO: 00309-0394</p> <p style="text-align: center;">SHEET</p> <p style="text-align: center; font-size: 24pt;">G0.01</p> <p style="text-align: right; font-size: 8pt;">SHEET 1 OF 13</p>
NO.	DATE	REVISION	APPR.																					
0	2/25/21	ISSUE FOR CONSTRUCTION	WML																					
1	8/30/21	RE-ISSUE FOR CONSTRUCTION	WML																					
2	4/12/22	REV. PER OWNER COMMENTS	WML																					

04/12/2022

ATLANTIC AVENUE WATER, SEWER & GAS IMPROVEMENTS



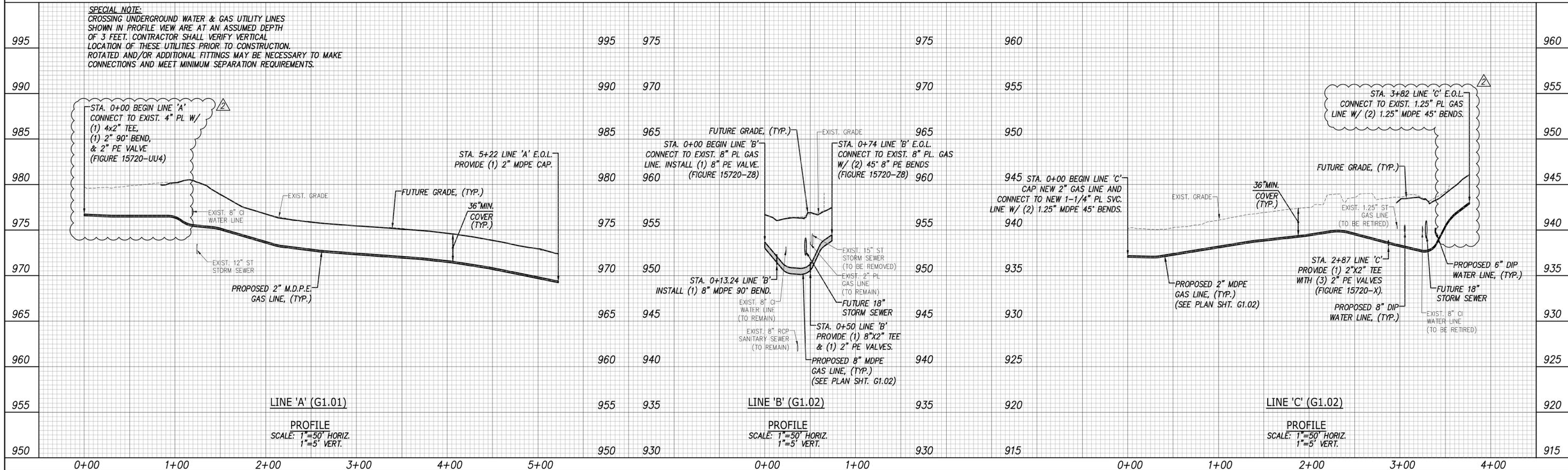
MATCH LINE (SEE SHEET G1.02 FOR CONT.)

- NOTES:**
- WHERE SERVICES ARE SHOWN AS SERVICE LINES ONLY AND NO PROPOSED METER OR RISER SYMBOL IS INDICATED, THESE SHALL BE CONSIDERED AS SERVICE RE-CONNECTS. WHERE SERVICE LINES ARE SHOWN ALL THE WAY TO THE METER AND PROPOSED METER/RISER SYMBOL, THESE SHALL BE CONSIDERED SERVICE REPLACEMENTS.
 - CONSULT K.U.B. INSPECTOR PRIOR TO ALL SERVICE REPLACEMENTS/RECONNECTIONS. SPECIFIC FIELD CONDITIONS MAY REQUIRE FULL REPLACEMENT OF SERVICE WHERE RECONNECTIONS SHOWN. K.U.B.'S ON-SITE INSPECTOR WILL MAKE FINAL DETERMINATION AT THE TIME OF INSTALLATION.
 - ALL GAS SERVICES SHALL BE REPLACED TO AVOID CONFLICT WITH PROPOSED STORM. REFER TO SIDEWALK AND STORM PLANS, BY OTHERS.
 - ALL CTS SERVICES WILL REQUIRE A CTS 400 EFV.

LEGEND

— G —	PROPOSED MAIN
— G —	PROPOSED 0.5" IPS SERVICE
— G —	EXISTING (TO REMAIN)
--- G ---	EXISTING (TO BE ABANDONED)

PLAN



LINE 'A' (G1.01)

LINE 'B' (G1.02)

LINE 'C' (G1.02)

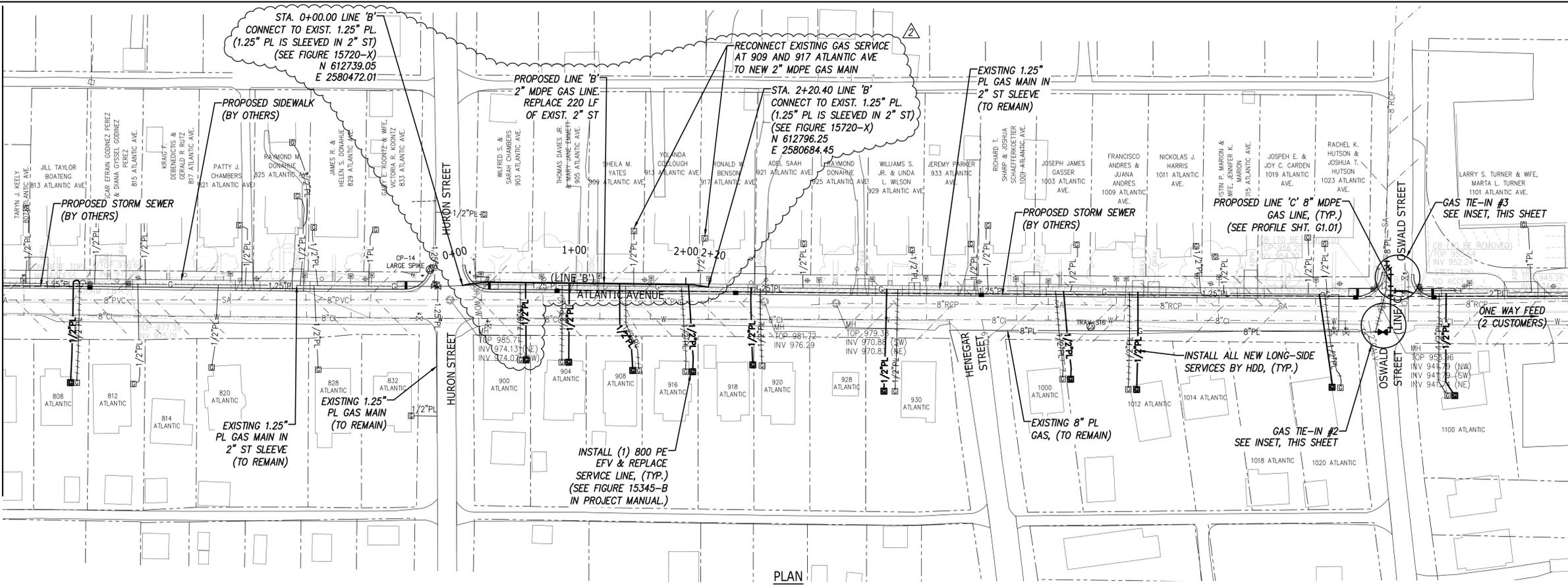
PROFILE
SCALE: 1"=50' HORIZ.
1"=5' VERT.

PROFILE
SCALE: 1"=50' HORIZ.
1"=5' VERT.

PROFILE
SCALE: 1"=50' HORIZ.
1"=5' VERT.

ENGINEER	DESIGNED WML	APPROVED		NO.	DATE	REVISION	APPR.	SCALE	 KUB ENGINEERING DIVISION	KNOXVILLE UTILITIES BOARD ATLANTIC AVENUE WATER, SEWER & GAS IMPROVEMENTS GAS SERVICE REPLACEMENT PLAN GAS LINE PLAN & PROFILE LINE 'A' - STA. 0+00 TO STA. 5+22 E.O.L.	CCI PROJECT NO: 00309-0394
 CANNON & CANNON INC CONSULTING ENGINEERS - FIELD SURVEYORS TEL: 865.670.8555 WWW.CANNON-CANNON.COM	DRAWN WBW	ENGINEER		0	2/25/21	ISSUE FOR CONSTRUCTION	WML	AS SHOWN		SHEET G1.01 SHEET 9 OF 13	
CHECKED TFT	WATER, SEWER & GAS		1	8/30/21	RE-ISSUE FOR CONSTRUCTION	WML	DATE				
			2	4/12/22	REV. PER OWNER COMMENTS	WML	02/25/2021				

MATCH LINE (SEE SHEET G1.01 FOR CONT.)



PLAN

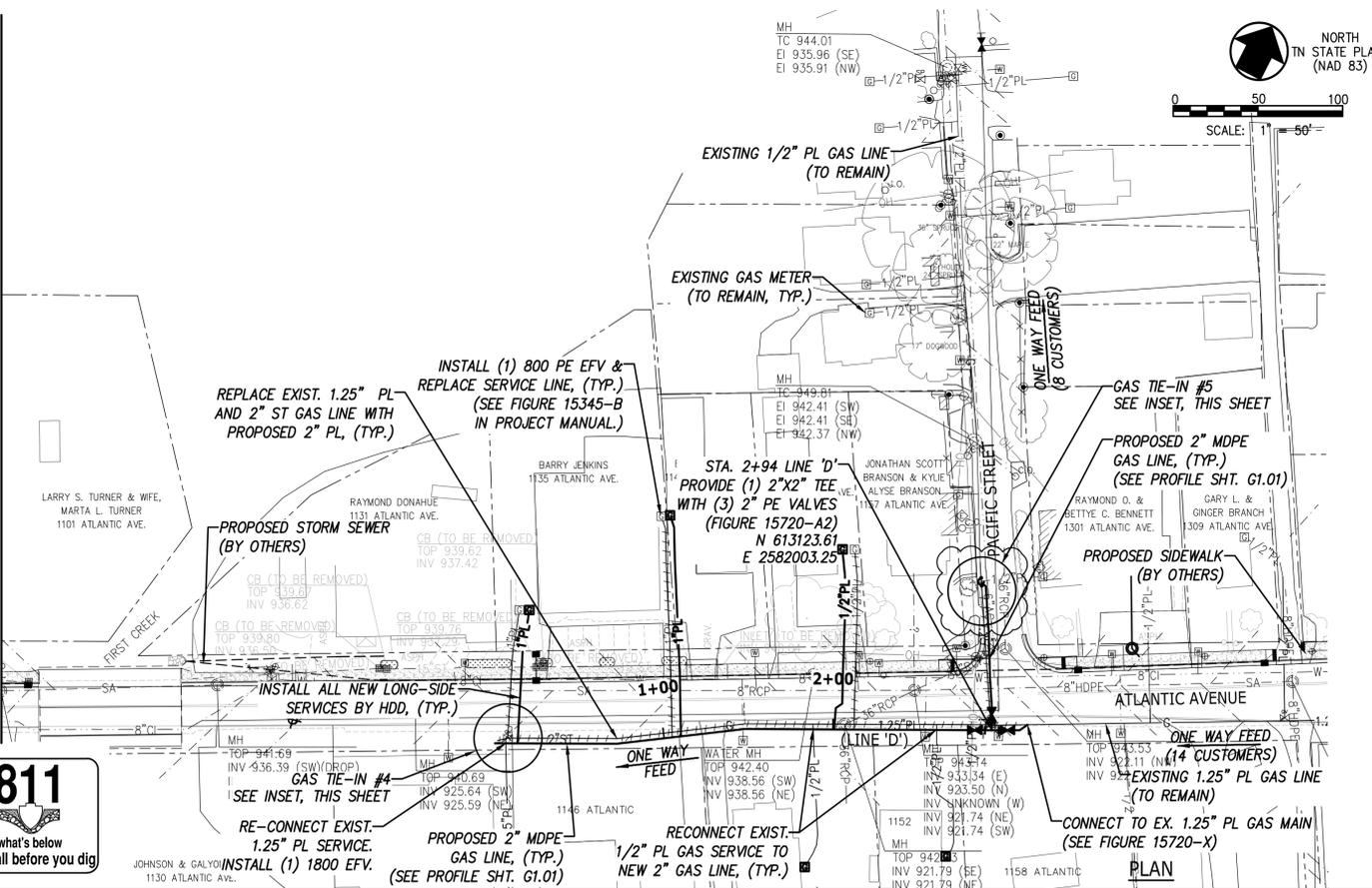
MATCH LINE (SEE BELOW FOR CONT.)

- NOTES:**
- WHERE SERVICES ARE SHOWN AS SERVICE LINES ONLY AND NO PROPOSED METER OR RISER SYMBOL IS INDICATED, THESE SHALL BE CONSIDERED AS SERVICE RE-CONNECTS. WHERE SERVICE LINES ARE SHOWN ALL THE WAY TO THE METER AND PROPOSED METER/RISER SYMBOL, THESE SHALL BE CONSIDERED SERVICE REPLACEMENTS.
 - CONSULT K.U.B. INSPECTOR PRIOR TO ALL SERVICE REPLACEMENTS/RECONNECTS. SPECIFIC FIELD CONDITIONS MAY REQUIRE FULL REPLACEMENT OF SERVICE WHERE RECONNECTS SHOWN. K.U.B.'S ON-SITE INSPECTOR WILL MAKE FINAL DETERMINATION AT THE TIME OF INSTALLATION.
 - ALL GAS SERVICES SHALL BE REPLACED TO AVOID CONFLICT WITH PROPOSED STORM. REFER TO SIDEWALK AND STORM PLANS, BY OTHERS.
 - ALL CTS SERVICES WILL REQUIRE A CTS 400 EFV.

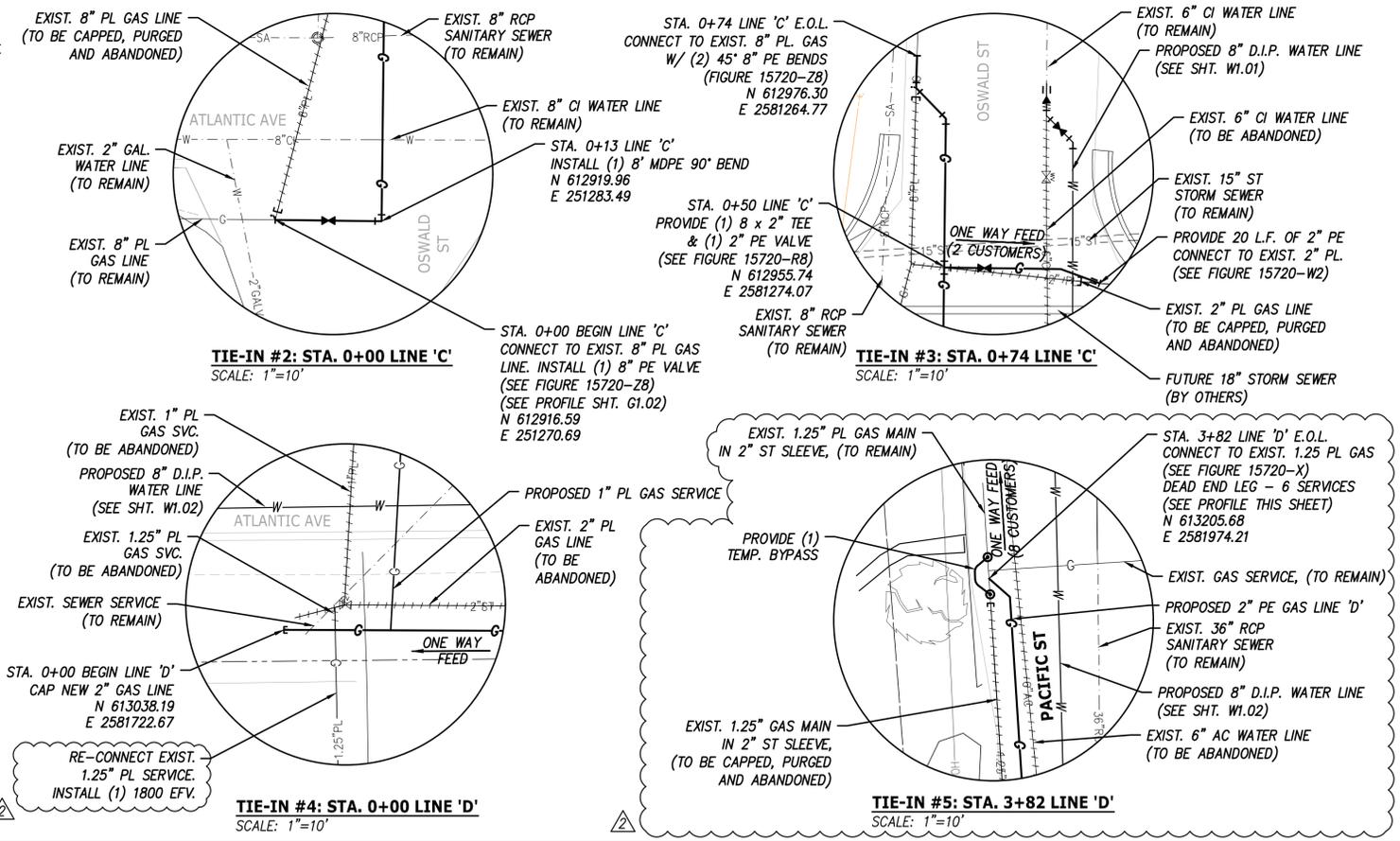
LEGEND

	PROPOSED MAIN
	PROPOSED 0.5" IPS SERVICE
	EXISTING (TO REMAIN)
	EXISTING (TO BE ABANDONED)

MATCH LINE (SEE ABOVE FOR CONT.)



PLAN



ENGINEER

 CONSULTING ENGINEERS - FIELD SURVEYORS
 TEL: 865.670.8555
 8550 Kingston Pike
 Knoxville, TN 37919
 FAX: 865.670.8666

DESIGNED
WML
 APPROVED
 ENGINEER
 WATER, SEWER & GAS



NO.	DATE	REVISION	APPR.
0	2/25/21	ISSUE FOR CONSTRUCTION	WML
1	8/30/21	RE-ISSUE FOR CONSTRUCTION	WML
2	4/12/22	REV. PER OWNER COMMENTS	WML

SCALE
AS SHOWN
DATE
02/25/2021

KUB
 ENGINEERING DIVISION

KNOXVILLE UTILITIES BOARD
 ATLANTIC AVENUE
 WATER, SEWER & GAS IMPROVEMENTS
 GAS SERVICE REPLACEMENT PLAN
 GAS LINE 'B' PLAN - STA. 0+00 TO STA. 2+20± E.O.L.
 GAS LINE 'C' PLAN - STA. 0+00 TO STA. 0+74± E.O.L.
 GAS LINE 'D' PLAN - STA. 0+00 TO STA. 3+82± E.O.L.

CCI PROJECT NO:
00309-0394
 SHEET
G1.02
 SHEET 10 OF 13