

Contract: Bond Construction Corp.
BQ1015 Transmission Pipe & Valve



Contract

Between

**The Brooklyn Union Gas Company
d/b/a National Grid**

and

**Bond Civil Utility Construction, Inc.
for**

**BQ1015 Transmission Pipe & Valve
Funding Number: C047558**

AGREEMENT

This Agreement made and entered into on the date when signed by the party signing last in time, by and between Bond Civil Utility Construction, Inc. (hereinafter the “Contractor”), a Massachusetts Corporation, having its principal place of business at 10 Cabot Road, Suite 300 Medford, MA 02155 and The Brooklyn Union Gas Company d/b/a National Grid NY (“National Grid”), a New York corporation, having offices at 2 Hanson Place, Brooklyn, New York 11217 for the Work identified as:

BQ1015 Transmission Pipe & Valve

ARTICLE 1 - CONTRACT DOCUMENTS

The following documents, including all exhibits or attachments thereto, are incorporated into this Agreement by reference as if fully set forth herein. All documents below, referred to collectively and individually as the “Contract Documents” or “Agreement”, are intended to be complementary and contain the entire agreement between the parties with respect to its subject matter and supersede all prior and contemporaneous representations, proposals, discussions, and communications, whether oral or in writing, with respect thereto. The provisions of this Agreement shall be construed as consistent rather than conflicting to the greatest extent possible. In the event of conflict between the documents comprising this Agreement, they are listed below in descending order of precedence:

1. Agreement: Bond Contract BQ1015 4192024 NGRID SharePoint
2. Exhibit A: Non-Disclosure Agreement, dated 11/27/2023
3. Exhibit B: Supplemental Conditions, dated 4/19/2024
4. Exhibit C: Terms and Conditions, revision date 4/4/2024
5. Exhibit D: Statement of Work (SOW) & Addendums, dated 3/20/2024
6. Exhibit E: Special Conditions (to the Technical Scope of Work), dated 12/22/2023
7. Exhibit F: Technical Scope of Work & Design Package, dated 9/19/2023
8. Exhibit G: Pricing, dated 2/28/2024
9. Exhibit H: Schedule, dated 1/15/2024
10. Exhibit I: Safety
 - a. Exhibit I-1: N-1402 Contractor Safety Requirements, revision date 11/16/2022

11. Exhibit J: Environmental

- a. Exhibit J-1: Environmental Procedure EP6 Appendix B, revision date 5/28/2010
- b. Exhibit J-2: Environmental Procedure EP6 Appendix C, revision date 5/28/2010
- c. Exhibit J-3: Environmental Sustainability Policy, revision date 3/14/2019

12. Exhibit K: Background Check/Security

- a. Exhibit K-1: NGSP Attachment A, revision date 12/28/2022
- b. Exhibit K-2: NGSP Attachment B1, dated 12/21/2023
- c. Exhibit K-3: NGSP Attachment B2, dated 12/21/2023
- d. Exhibit K-4: NGSP Attachment C, revision date 12/28/2019

13. Exhibit L: Department of Transportation

- a. Exhibit L-1: SHW-101 Anti-Drug & Alcohol Procedure, revision date 1/24/2018
- b. Exhibit L-2: DOT-FMCSA Drug Alcohol Prevention Plan, revision date 8/18/2022
- c. Exhibit L-3: DOT-PHMSA Drug Alcohol Prevention Plan, revision date 8/4/2022
- d. Exhibit L-4: Contractor Compliance Affidavit, dated 12/21/2023

14. Exhibit M: Ethics

- a. Exhibit M-1: Supplier Code of Conduct, revision date 11/2023
- b. Exhibit M-2: Supplier Ethics Certification, dated 12/21/2023
- c. Exhibit M-3: Anti-Financial Crimes Policy, revision date 2/23/2022

ARTICLE 2 - SCOPE OF WORK

The Contractor hereby agrees to provide all materials, equipment, apparatus, tools, qualified labor, qualified supervision, services, insurance and facilities necessary to perform all Work in accordance with all the specifications and contract documents associated with this Agreement.

ARTICLE 3 – AGREEMENT DURATION

This Agreement shall commence on the Effective Date and shall continue for a period of (one year) from the Effective Date (the “Term”). Thereafter, this Agreement will automatically renew for one-year periods until or unless (i) Company provided notice to

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the Contractor of its intention not to renew, (ii) Company terminates in accordance with the terms of the Agreement, or (iii) Contractor completes the Project, Work and or Services in accordance with the project schedule under the Agreement.

ARTICLE 4 - CONTRACT PRICE

The contract price for the Work shall be in accordance with Exhibit E: Pricing, dated 2/28/24, below and shall be equitably adjusted to cover any additions, deletions, or changes to the Project pursuant to the Terms and Conditions.

ARTICLE 5 - NOTICES

All legal and contractual notices will be given to the designated Party by registered mail, certified mail or express (overnight) delivery service, postage prepaid, to the intended Party at the following address or at such changed address as may from time to time be designated in a notice similarly delivered or mailed to:

Contractor:

Bond Civil Utility Construction, Inc.

Attention: Paul M James, Corp. Sec.
10 Cabot Road, Suite 300
Medford, MA 02155
PJames@BondBrothers.com
857-301-3278

Company:

The Brooklyn Union Gas Company
d/b/a National Grid
Attention: Eric Alexander
25 Hub Drive
Melville, NY 11747
Eric.Alexander@NationalGrid.com
(516) 316-4780

ARTICLE 6 - ENTIRE AGREEMENT

This Agreement, including all Contract Documents, constitutes the entire Agreement between the Company and the Contractor, with respect to the Work specified, and all previous representations relative thereto, either written or oral are hereby annulled and superseded. No modification of any of the provisions of this Agreement shall be binding unless in writing and signed by a duly authorized representative of each party hereto.

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IN WITNESS WHEREOF, each party hereto has caused this Agreement to be executed by its duly authorized representative on the day and year set forth below.

Contractor:

Bond Civil Utility Construction, Inc.

DocuSigned by:
Kane Cuddy
7AF7EAF...
Signature

Kane Cuddy

Name

President

Title

April 22, 2024 | 2:53 PM BST

Date

Company:

The Brooklyn Union Gas Company
d/b/a National Grid

DocuSigned by:
Nicole McManus
3E13333F...
Signature

Nicole McManus

Name

Category Manager

Title

April 22, 2024 | 3:14 PM BST

Date

Exhibit G:

Pricing

Dated 2/28/2024



Exhibit G - Contract Pricing

Submitted by:

Bond Civil & Utility Construction, Inc.

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INSTRUCTIONS and NOTES

1. The requested data is to be entered into the Contract Pricing Document **as it has been provided**. The language and content of this original Contract Pricing document **shall not be altered in any way**, except as explicitly set forth in the instructions found on each tab. Alterations to the language and/or content of this original Contract Pricing document shall be a nullity and have no binding effect on the Company.
2. In addition to these instructions, Contractor shall follow the instructions found on individual tabs. All tabs shall be filled in completely, including to provide Contractor Name on this tab. Failure to follow such instructions or to complete this document in its entirety may result in rejection of bid.
3. The Lump Sum Pricing tab shall identify the Contract Price, which is fixed and firm for the duration of the Agreement. The Contract Price is a lump sum amount to be paid in U.S. dollars that is an all-inclusive amount that represents the entire compensation to Contractor for all Work set forth in the Agreement, inclusive of all costs (direct and indirect), overhead (field and home office), contingency, earned allowances, sales tax and profit for the Work described in the Agreement.
4. Complete all other tabs with rates that may apply, at the Company's sole discretion, to Change Orders pursuant to Article 14 of the Terms and Conditions. The prices set forth on such tabs shall reflect the all inclusive option and/or unit rates covering all costs for such options and/or units including but not limited to, all overhead, contingencies, incidentals, markup, sales tax and profit to procure each option and/or unit. Option Pricing and Unit Pricing shall remain valid for the duration of the Agreement and are not subject to adjustment, fluctuation, or escalation.



See Next Tab

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Lump Sum Pricing

Item Number	WBS Lv4 (no WBS for Non-Complex)	NGRID WBS Classification	Detail Description	UOM	Rate
08.04B.CD.01.02		Site setup	The installation of facilities required to run the project. Includes mobilization, demobilization, temporary office trailer (supply and installation), supply and installation of temporary power supply, water, sanitary facilities, dumpster, telephone, internet etc. Site compound temporary lighting. Lay down area to store material and equipment. Temporary drainage, environmental, and snow removal should be included in here.	LS	
08.04B.CC.02.01		Shut down	Activities associated with taking an asset out of service to perform a connection, including all labor, equipment and material to install remote opentings, fit-up, welding, backfill, temporary restoration, weld survey, cathodic protection valve operation, and purging	LS	
08.04B.PC.02.01		Demolition/Decommissioning	The labor, equipment, and material required to perform demolition, decommissioning, and removal of assets and material. Includes relocation of spoil waste and materials, etc. in preparation to be transported off site.	LS	
08.04B.CD.03.01		Transmission pipe installation	The installation/construction of transmission piping and fittings (other than valves) not covered in 04.04.01, 04.08.01 and 04.08.02. This includes any labor, equipment, and materials (not mentioned in 03.03) that are required to complete the works. Includes excavation, sheathing, fit-up, welding, backfill, temporary restoration, weld survey, and cathodic protection. Also includes open cut installations, HDD installations, pipe jacking, bridge crossings/attachments, above ground installations, and PIG launchers/receivers. Does not include Non-Destructive Examination	LS	
08.04B.CD.09.01		Valve installation	The installation of a valve. This includes any labor, equipment, and materials (excludes materials mentioned in 03.03) that are required to complete the works. Includes excavation, sheathing, fit-up, cutting, welding, backfill, and temporary restoration. Vault installation included in 04.11.	LS	
08.04B.CC.01		Preliminary Commissioning Testing	The activities related to assuring all installed items are free of defects which could arise during manufacture, delivery, or installation and that systems operate according to specifications and design prior to placing them in service. This includes the labor and equipment for undertaking these activities prior to final testing. This can include prepressure testing, baseline in-line inspection (caliper, MFL, etc.), PSSR, etc.	LS	
08.04B.CC.02.02		Gas in - Tie in	Tie-in (connection) to existing pipe. Includes labor, equipment and material required for live gas connections including, excavation, sheathing, fit-up, welding, backfill, temporary restoration, weld survey, cathodic protection valve operation, gas-in, odorization and monitoring. and all tie-in SOP activities.	LS	
08.04B.PC.04.01		Paving and Restoration	The supply and installation of asphalt or any final restoration materials including labor, equipment, and material to under take the activity.	LS	
08.04S.01.02		Contractor Project Management	All Contractor project management labor costs during Project Execution (4.4), including Site Material Coordinator and Site Safety Supervisor. Note: does not include SHE	LS	
08.04S.02.01		Contractor Profit and Fee	The fee we expect to pay the contractor. The fee includes Profit, Overheads they add onto the project (corporate costs, head office costs, insurances, training costs they incur to meet Federal and state law and NG requirements, provision of general equipment to their labor (such as PPE).	LS	

Lump Sum TOTAL

Sheet Instructions:

The bidder should add labor classifications as necessary in order to account for any labor resources required to complete out of scope services.

Definitions of Time Classifications	
Straight Time	Hours worked between 7am and 7pm
Saturday / extended day premium time	Hours worked on Saturday between 7am and 7pm; or any hours worked in overtime (i.e. 8/40 hours)
Sunday and holiday premium time	Hours worked on Sunday or federally recognized holiday between 7am and 7pm
Night Differential	Rate differential for hours worked during night hours of 7pm and 7am; to be applied to all day rates listed above

Labor Classification	Time Classification	UOM	Rate
Foreman	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Night Differential	per Hour	
Laborer	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Night Differential	per Hour	
Operating Engineer/Operator, excavator	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Night Differential	per Hour	
Operating Engineer/Operator, backhoe/tractor/digger/loader	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Night Differential	per Hour	
Chauffeur/dump truck driver	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Night Differential	per Hour	
Flagger	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Night Differential	per Hour	
Timberman Foreman	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Night Differential	per Hour	
Timberman	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Night Differential	per Hour	
Maintenance Person	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Night Differential	per Hour	
Welder and Welding Rig	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Night Differential	per Hour	
Welder Helper	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Night Differential	per Hour	
<i>Project Executive</i>	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Night Differential	per Hour	
<i>Sr. Project Manager</i>	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Night Differential	per Hour	
<i>Sr. Superintendent</i>	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Night Differential	per Hour	
<i>Assistant Superintendent</i>	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Night Differential	per Hour	
<i>Safety Manager</i>	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Night Differential	per Hour	
<i>Bidder to provide additional personnel</i>	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Daytime Differential	per Hour	
<i>Bidder to provide additional personnel</i>	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Daytime Differential	per Hour	
<i>Bidder to provide additional personnel</i>	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Daytime Differential	per Hour	
<i>Bidder to provide additional personnel</i>	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Daytime Differential	per Hour	
<i>Bidder to provide additional personnel</i>	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Daytime Differential	per Hour	
<i>Bidder to provide additional personnel</i>	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Daytime Differential	per Hour	
<i>Bidder to provide additional personnel</i>	Straight Time	per Hour	
	Saturday / extended day premium time	per Hour	
	Sunday and holiday premium time	per Hour	
	Daytime Differential	per Hour	

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Family	Item #	Item	Description	Notes / Size	UOM	Volume Interval	Rate	Qty	Ext
Backfill	1	Backfill: Clean Fill	Furnish and place acceptable clean sand backfill from non-site excavated material. Includes removal and disposal of associated excess material. These units apply to trench excavations when the NGrid representative determines that acceptable backfill material needs to be provided and/or if contaminated soils are encountered.		/ cubic yard	≤100 CY per day			
Backfill	2	Backfill: Clean Fill	Furnish and place acceptable clean sand backfill from non-site excavated material. Includes removal and disposal of associated excess material. These units apply to trench excavations when the NGrid representative determines that acceptable backfill material needs to be provided and/or if contaminated soils are encountered.		/ cubic yard	100.1 - 1000 CY per day			
Backfill	3	Backfill: Clean Sand	Furnish and place acceptable clean sand backfill from non-site excavated material. Includes removal and disposal of associated excess material. These units apply to trench excavations when the NGrid representative determines that acceptable backfill material needs to be provided and/or if contaminated soils are encountered.		/ cubic yard	≤100 CY per day			
Backfill	4	Backfill: Clean Sand	Furnish and place acceptable clean sand backfill from non-site excavated material. Includes removal and disposal of associated excess material. These units apply to trench excavations when the NGrid representative determines that acceptable backfill material needs to be provided and/or if contaminated soils are encountered.		/ cubic yard	100.1 - 1000 CY per day			
Backfill	5	Contaminated Soils: Stockpile	Stockpile contaminated soil from areas other than those identified in the project specification.		/ cubic yard				
Backfill	6	Contaminated Soils: Disposal	Disposal of contaminated soil from project site at a DEC certified disposal facility.		/ cubic yard				
Backfill	7	Reduced Cover Protection	Steel Plate Installation, One Inch Steel Plate Installed	Contractor to install one inch thick steel plate as protection over the gas main installed at reduced cover when directed by National Grid. Steel plates provided by National Grid.	each				
Excavation	8	Additional Excavation - Hand-digging only (includes length, width, or depth)	Adder rate for additional trench hand dig excavation needed beyond depth as depicted on drawing profiles	Inclusive of any additional labor, machinery, and materials for excavation, backfill, sheeting, shoring, and restoration	per CY	≤25 per day			
Excavation	9	Additional Excavation - Hand-digging only (includes length, width, or depth)	Adder rate for additional trench hand dig excavation needed beyond depth as depicted on drawing profiles	Inclusive of any additional labor, machinery, and materials for excavation, backfill, sheeting, shoring, and restoration	per CY	>25 per day			
Excavation	10	Additional Excavation - Machine & Hand-Digging (includes length, width, or depth)	Adder rate for additional trench M&H excavation needed beyond depth as depicted on drawing profiles	Inclusive of any additional labor, machinery, and materials for excavation, backfill, sheeting, shoring, and restoration	per CY	≤25 per day			
Excavation	11	Additional Excavation - Machine & Hand-Digging (includes length, width, or depth)	Adder rate for additional trench M&H excavation needed beyond depth as depicted on drawing profiles	Inclusive of any additional labor, machinery, and materials for excavation, backfill, sheeting, shoring, and restoration	per CY	>25 per day			
Excavation	12	Miscellaneous Pit: Timber/Steel Sheeted	Install miscellaneous timber / steel sheeting (for out of scope tie-in pits, jacking pits, misc. pits) and associated work. Includes furnishing material, labor, equipment, supporting all utilities, transportation, traffic plates, temporary restoration, and removal of sheeting. PE Stamped Drawings Required.	8 ft x 8 ft pit - to a maximum depth of 8 ft	/ cubic yard				
Excavation	13	Miscellaneous Pit: Timber/Steel Sheeted	Install miscellaneous timber / steel sheeting (for out of scope tie-in pits, jacking pits, misc. pits) and associated work. Includes furnishing material, labor, equipment, supporting all utilities, transportation, traffic plates, temporary restoration, and removal of sheeting. PE Stamped Drawings Required.	8 ft x 8 ft pit: 8.1 - 12.0 foot depth	/ cubic yard				
Excavation	14	Miscellaneous Pit: Timber/Steel Sheeted	Install miscellaneous timber / steel sheeting (for out of scope tie-in pits, jacking pits, misc. pits) and associated work. Includes furnishing material, labor, equipment, supporting all utilities, transportation, traffic plates, temporary restoration, and removal of sheeting. PE Stamped Drawings Required.	9 ft x 8 ft pit: 12.1 - 16.0 foot depth	/ cubic yard				
Excavation	15	Miscellaneous Pit: Timber/Steel Sheeted	Install miscellaneous timber / steel sheeting (for out of scope tie-in pits, jacking pits, misc. pits) and associated work. Includes furnishing material, labor, equipment, supporting all utilities, transportation, traffic plates, temporary restoration, and removal of sheeting. PE Stamped Drawings Required.	10 ft x 8 ft pit: 16.1 - 20.0 foot depth	/ cubic yard				
Excavation	16	Miscellaneous Pit: Non-Sheeted	Install miscellaneous pit (for out of scope pipeline trenching). Includes furnishing material, labor, equipment, supporting all utilities, transportation, temporary restoration, and traffic plates.	8 ft x 8 ft pit - to a maximum depth of 5 ft	/ cubic yard		\$ 1,207.83		
Excavation	17	Test Holes - Hand / Machine Excavated	Size of additional test holes is approx. 5 ft by 3 ft by 5 ft deep. The unit price includes pavement removal, patch etc. It is understood that this item will cover only the additional test holes NOT covered under the Lump Sum Bid. The lump sum price covers test holes for all mains, ducts, services, pipes, structures, etc. that are shown on the drawings or can be deducted.	Approx. 5 ft by 3 ft by 5 ft deep	each		\$ 3,352.77		
Excavation	18	Test Holes - Hand / Machine Excavated Adder	Adder rate for test hole sizes greater than 2.78 cubic yards (i.e. 5 ft by 3 ft by 5 ft deep). To be added to the unit cost of the test hole and is inclusive of pavement removal, patch etc.		/ cubic yard				
Excavation	19	Test Holes - Vacuum Excavated	Size of additional test holes is approx. 5 ft by 3 ft by 5 ft deep. The unit price includes pavement removal, patch etc. It is understood that this item will cover only the additional test holes NOT covered under the Lump Sum Bid. The lump sum price covers test holes for all mains, ducts, services, pipes, structures, etc. that are shown on the drawings or can be deducted.	Approx. 5 ft by 3 ft by 5 ft deep	each				
Excavation	20	Test Holes - Vacuum Excavated Adder	Adder rate for test hole sizes greater than 2.78 cubic yards (i.e. 5 ft by 3 ft by 5 ft deep). To be added to the unit cost of the test hole and is inclusive of pavement removal, patch etc.		/ cubic yard				
Excavation	21	Removal and Disposal of Debris (includes concrete sidewalks, concrete road paving, and blacktop paving).	This item to be utilized for the removal and proper disposal of any debris/materials found on the project due to a change in scope requested by National Grid. Covered debris/materials include buried or above grade. It includes mark out, saw cut or vermeer cut, removal and disposal of paving. Proper disposal must be performed and dump tickets transferred to National Grid (PM&CC).		/ square yard				

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Family	Item #	Item	Description	Notes / Size	UOM	Volume Interval	Rate	Qty	Ext
Welding	1	Butt Weld Steel Pipe /Tees/Fittings/Iso Joints	These units apply to complete steel welds for the pipe diameters indicated. These units to be used for both the addition and deletion to the original work scope. Includes cutting and end preparation.	1 In. dia to 2 In. dia. pipe	/EA				
Welding	2	Butt Weld Steel Pipe /Tees/Fittings/Iso Joints	These units apply to complete steel welds for the pipe diameters indicated. These units to be used for both the addition and deletion to the original work scope. Includes cutting and end preparation.	6 In. dia to 8 In. dia. pipe	/EA				
Welding	3	Butt Weld Steel Pipe /Tees/Fittings/Iso Joints	These units apply to complete steel welds for the pipe diameters indicated. These units to be used for both the addition and deletion to the original work scope. Includes cutting and end preparation.	12 In. dia. pipe	/EA				
Welding	4	Butt Weld Steel Valves	Butt Weld Steel Valves	2 In. to 4 In. dia. Valves	/EA				
Welding	5	Butt Weld Steel Valves	Butt Weld Steel Valves	6 In. to 8 In. dia Valves	/EA				
Welding	6	Butt Weld Steel Valves	Butt Weld Steel Valves	12 In. dia Valves	/EA				
Welding	7	Fillet Weld	Includes all surface preparation and welds	0.5 In. to 1 In. dia Fitting	/EA				
Welding	8	Fillet Weld	Includes all surface preparation and welds	1 In. to 2 In. dia Fitting	/EA				
Welding	9	Fillet Weld	Includes all surface preparation and welds	4 In. to 6 In. dia Fitting	/EA				
Welding	10	Fillet Weld	Includes all surface preparation and welds	8 In. dia Fitting	/EA				
Welding	11	Fillet Weld	Includes all surface preparation and welds	12 In. dia Fitting	/EA				
Welding	12	Western Purge	Complete western purge and install to main per NGrid Standards		/EA				
Welding	13	Special/Custom Fittings, Encirclement Type	Includes all surface preparation and welds	8 In dia Special/Custom Fittings, Encirclement Type	/EA				
Welding	14	Special/Custom Fittings, Encirclement Type	Includes all surface preparation and welds	12 In dia Special/Custom Fittings, Encirclement Type	/EA				
Welding	15	Cut & Prep Damaged Pipe	All inclusive unit price to cut and prep damaged ends of steel gas pipe that has been identified by National Grid upon delivery. Does not include cut and bevel elbows.	8 In. dia. Pipe	/EA				
Welding	16	Cut & Prep Damaged Pipe	All inclusive unit price to cut and prep damaged ends of steel gas pipe that has been identified by National Grid upon delivery. Does not include cut and bevel elbows.	12 In. dia. Pipe	/EA				

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Family	Item #	Item	Description	Notes	UOM	Volume Interval	Rate	Qty	Ext
Restoration	1	Concrete Curbing	Curbing, concrete up to 18"		Per LF				
Restoration	2	Sod	Prices include all labor and furnishing of material.		Per SF				
Restoration	3	Hydro Seed	Prices include all labor and furnishing of material.		Per SF				
Restoration	4	Topsoil Only -- 4" Lift	Prices include all labor and furnishing of material.		Per SF				
Restoration	5	Pedestrian Ramp	Pedestrian Ramp with curbing, including non-skid insert		Each				
Restoration	6	Mill and Pave	Mill and Pave (up to 2" depth) 50.1 to 100 SY		Per SY	< 100 SY			
Restoration	7	Mill and Pave	Mill and Pave (up to 2" depth) 100.1 to 500 SY		Per SY	100.1 to 500 SY			
Restoration	8	Mill and Pave	Mill and Pave (up to 2" depth) 500.1 to 1,000 SY		Per SY	500.1 to 1000 SY			
Restoration	9	Mill and Pave	Mill and Pave (up to 2" depth) > 1,000 SY		Per SY	> 1000 SY			
Restoration	10	Concrete, reinforced	Concrete, reinforced, sidewalk/driveway up to 7"		Per SF				
Restoration	11	Concrete, reinforced	Concrete, reinforced, > 7" to 12"		Per SF				
Restoration	12	Concrete, nonreinforced	Concrete, nonreinforced, up to 7"		Per SF				
Restoration	13	Concrete, nonreinforced	Concrete, nonreinforced, > 7" to 12"		Per SF				
Restoration	14	Concrete, nonreinforced	Concrete, nonreinforced, sidewalk/driveway up to 7"		Per SF				
Restoration	15	Saw-Cutting concrete/asphalt	Thickness ≤ 12in		Per LF				
Restoration	16	Saw-Cutting concrete/asphalt	Thickness 13 to 18		Per LF				
Restoration	17	Saw-Cutting concrete/asphalt	Thickness > 18		Per LF				
Restoration	18	Road Plates - Rental	Total steel plate rental rate for a period exceeding 90 days use at the tie-in pits or misc. pits installed.	Steel plate rental rate - Daily Rate	/day/pit				
Restoration	19	Road Plates - Rental	Total steel plate rental rate for a period exceeding 90 days use at the tie-in pits or misc. pits installed.	Steel plate rental rate - Weekly Rate	/week/pit				
Restoration	20	Road Plates - Rental	Total steel plate rental rate for a period exceeding 90 days use at the tie-in pits or misc. pits installed.	Steel plate rental rate - Monthly Rate	/month/pit				
Restoration	21	Road Plates - Recess	Recess Traffic Plates to be flush with surrounding road grade		each				
Restoration	22	Concrete, New York State road	Concrete, New York State road, reinforced and doweling ≤ 8" Quickset w/ 2" asphalt top	≤ 8"	Per SF				
Restoration	23	Concrete, New York State road	Concrete, New York State road, reinforced and doweling > 8" Quickset w/ 2" asphalt top	> 8"	Per SF				
Restoration	24	Asphalt	Asphalt, 2"		Per SY				
Restoration	25	Temporary Paving Hot Asphalt	3" thickness. These units apply to the installation of temporary paving above the scope of work identified in the lump sum bid. All inclusive price to furnish and install hot and/or cold patch.		Per SY				
Restoration	26	Binder only	Binder only, up to 4"		Per SY				
Restoration	27	Binder only	Binder only, > 4" to 7"		Per SY				
Restoration	28	Binder only	Binder only, > 7" to 10"		Per SY				
Restoration	29	Binder only	Binder only, > 10" to 14"		Per SY				
Restoration	30	Asphalt	Asphalt, 2"		Per SY				
Restoration	31	Temporary Paving Hot Asphalt	3" thickness. These units apply to the installation of temporary paving above the scope of work identified in the lump sum bid. All inclusive price to furnish and install hot and/or cold patch.		Per SY				
Restoration	32	Asphalt binder w/ top	Asphalt up to 6", binder w/ top		Per SY				
Restoration	33	Asphalt binder w/ top	Asphalt > 6" to 9", binder w/ top		Per SY				
Restoration	34	Asphalt binder w/ top	Asphalt > 9" to 16", binder w/ top		Per SY				
Restoration	35	Thermoplastic Lime Striping & Reflectors			Per LF				
Restoration	36	Asphalt Tip-Up Curb	Suffolk County DPW asphalt tip-up curb replacement		Per LF				
Restoration	37	Gravel/crushed stone	NYS DOT Item 4 stone base material.		Per CY				

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Family	Item #	Item	Description	Notes / Size	UOM	Volume Interval	Rate	Qty	Ext
Complete System	1	Add / Delete System	Add/Delete Steel System, Paved Roads - 12" Steel Pipe	All inclusive unit price to install pipe at "Bid" defined depths. Includes, but not limited to, costs for test holes, excavation, pipe installation, backfill, dewatering, etc. Pavement removal and temporary pavement are to be included in this price. Dewatering is included, NOT including a well point system. Permanent Paving will be covered by the applicable unit price.	LF				
Complete System	2	Add / Delete System	Add/Delete Steel System, In Unpaved areas - 12" Steel Pipe	All inclusive unit price to install pipe at "Bid" defined depths. Includes, but not limited to, costs for test holes, excavation, pipe installation, backfill, dewatering, etc. Pavement removal and temporary pavement are to be included in this price. Dewatering is included, NOT including a well point system. Permanent Paving will be covered by the applicable unit price.	LF				
Complete System	3	Add / Delete System	Add/Delete Steel System, Paved Roads - 8" Steel Pipe	All inclusive unit price to install pipe at "Bid" defined depths. Includes, but not limited to, costs for test holes, excavation, pipe installation, backfill, dewatering, etc. Pavement removal and temporary pavement are to be included in this price. Dewatering is included, NOT including a well point system. Permanent Paving will be covered by the applicable unit price.	LF				
Complete System	4	Add / Delete System	Add/Delete Steel System, In Unpaved areas - 8" Steel Pipe	All inclusive unit price to install pipe at "Bid" defined depths. Includes, but not limited to, costs for test holes, excavation, pipe installation, backfill, dewatering, etc. Pavement removal and temporary pavement are to be included in this price. Dewatering is included, NOT including a well point system. Permanent Paving will be covered by the applicable unit price.	LF				
<p>Note: These units are intended to capture addition or deletion of pipeline from the contract design drawings. If the route in the contract dwgs requires the roadway, sidewalk, or grass area to be disturbed, that cost should be included in the lump sum bid.</p>									

Prices shall include but shall not be limited to the following:

- all labor (including supervision), equipment, transportation and material other than materials provided by National Grid,
- securing the mark-out from ONE-CALL as the excavator,
- verification of mark-outs at job site prior to the start of work in accordance with Code Rule 753,
- all test-holes that are required to verify utilities in the path of construction per Code Rule 753,
- test holes performed at the direction of a Company representative while on a job (*reimbursed separately*),
- all test-holes performed in advance of a project for defining an installation lane,
- customer/abutter coordination and notification of the work as required,
- notification of project scheduling to the Company to satisfy notification to municipalities as required per permit stipulations,
- furnishing and placing barricades, fencing, plating, pedestrian bridges, cones, illuminated signs and any and all job site protection equipment as required by authority having jurisdiction and for general safety concerns,
- coordination and management of traffic, both vehicular and pedestrian including all flag-people, arrow boards, attenuators, and illuminated signs,
- all breaking, removal and disposal of roadway and sidewalk surfaces of various thickness and material,
- all excavating, removal and disposal of dirt, rocks, boulders, trolley tracks (*reimbursed separately greater than 25 trench feet*), masonry or concrete foundations and other subsurface material for trenches or openings,
- all breaking of ground frost,
- all hand-digging required around existing subsurface utilities,
- all hand-digging required for protection of existing trees (*reimbursed separately when directed by Arborist*), *AECOM arborists have specified when to hand-dig to our Supervisors, but they do not offer a directive on every job.*
- protection of existing trees (as per NYC Dept. of Parks & Recreation Standard),
- disposal of excess excavated material and debris,
- furnishing, delivering & installing clean suitable backfill material as necessary,
- support and protection of all existing substructures and utilities,
- [all pumping, removal and/or disposal of water or drilling mud from excavations](#) [1],
- all conventional pole supports i.e. heavy timber "A" framing,
- cutting the pipe,
- installing plastic or steel pipe, elbows and all appurtenances,
- fusing or welding the pipe, elbows and all appurtenances,
- field coating of all welds,
- installing mechanical couplings,
- installing valves and boxes (*steel main valves reimbursed separately*),
- all wood sheathing, stay bracing or shoring required for soil support per OSHA standards (*reimbursed separately only at depths 5 feet or greater*),
- fabricate and install all vertical and horizontal offsets as required,
- *Note: National Grid stocks some standard offsets that may be available to the contractor which include 4"- 8" diameters. When suitable prefabricated offset fittings are unavailable, the Contractor will be responsible for field fabricating offset piping and tie-in piping.*
- all retirement and/or abandonment of pipes in place,
- performing wipe sample for presence of PCB contaminants on pipe 4" diameter or greater (*kits furnished by National Grid*),
- installation of cathodic protection devices, insulators, anodes, test leads, and test point boxes where necessary,
- all required pipe preparation and installation of field applied cathodic protection coatings for pipe, valves and fittings,
- installation of all mechanical, welded or fused purge points,
- installation of underground locating devices and caution tape and verify integrity,
- installing steel protection plates (*furnished by National Grid*) for shallow cover where necessary,
- air testing of gas main for integrity,
- furnishing and installing clean fill,
- backfilling and tamping to ensure the required compaction,
- all steel or other traffic plating,
- temporary paving to be hot patch mix,
- saw-cutting as required,
- permanent paving restoration (*reimbursed separately see Section 6.0*),
- completion of all paperwork and field records including electronic data input within 5 days of mechanical completion,
- removal of coal tar wrap. *The coal tar wrap must be bagged and returned to National Grid's Greenpoint facility as per PED-NYC Gas Construction Standards, Specifications, and Procedures ENVR-5020.*

[1] Includes furnishing, operating and maintaining all necessary pumps and hose to properly remove water from excavated trenches and openings and keep them free of water during such time as work is being performed by the contractor or National Grid. All pumping shall be directed via hose to catch basins or sewers. All hoses shall be protected. Contract items shall include costs for dewatering of work locations at any continuous trench/pit location. Pumps larger than 3" or well-point systems will be compensated per separate negotiation.

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Family	Item #	Item	Description	Notes	UOM	Volume Interval	Rate	Qty	Ext
Corrosion Control	1	Test Station	1 lead, 2 anodes	Shall be used to compensate the contractor for the the installation of additional test stations including anodes and lead wire connections to gas main piping. Units to be used for test stations not included on the drawings and also to be used as a credit for test stations not installed by the contractor. This unit is to include excavation, backfill, temporary restoration, welding of anodes, and installation of a test box as per National Grid Standards and Technical Instructions. Materials to be supplied by National Grid.	each				
Corrosion Control	2	Test Station	2 lead, 4 anodes	Shall be used to compensate the contractor for the the installation of additional test stations including anodes and lead wire connections to gas main piping. Units to be used for test stations not included on the drawings and also to be used as a credit for test stations not installed by the contractor. This unit is to include excavation, backfill, temporary restoration, welding of anodes, and installation of a test box as per National Grid Standards and Technical Instructions. Materials to be supplied by National Grid.	each				

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Vertical Offset Matrix					
Pipe Diameter = 12 inches					
Offset Length (ft)	Additional Depth of Vertical Offset (ft)				
	0.0 - 2.0	2.1 - 4.0	4.1 - 6.0	6.1 - 8.0	8.1 - 10.0
≤ 10.0					
10.1 - 15.0					
15.1 - 20.0					
20.1 - 25.0					
25.1 - 30.0					
Adder per LF of offset length greater than 30 ft					

This is an all inclusive unit rate covering all additional costs associated with an unplanned vertical offset. Includes all inefficiencies, delays, and activities required to install a vertical offset from layout to final restoration. The offset shall include fusions and welds, CWI inspection and NDE. Unit rate assumes a minimum of (4) elbows, (2) 3x diameter vertical pups, and (1) 5x diameter horizontal pup.

Unit of Measure is Lump Sum.

Unit of Measure for Adder is PER LF and to be added to the 25.1-30.0 unit rate.

Horizontal Offset Matrix	
Offset Length (LF)	Pipe Diameter
	12
≤ 10.0	
10.1 - 20.0	
20.1 - 30.0	
30.1 - 40.0	
40.1 - 50.0	
Adder per LF of offset length greater than 50 ft	

This is an all inclusive unit rate covering all additional costs associated with an unplanned horizontal offset. This rate is additional to the lump sum value provided for the original design and includes all inefficiencies, delays, and activities required to install a horizontal offset from layout to final restoration. The offset shall include fusions and welds, CWI inspection and NDE. Unit rate assumes a minimum of (4) elbows, (3) 5x Diameter horizontal pups.

Unit of Measure is Lump Sum.

Unit of Measure for Adder is PER LF and to be added to the 40.1-50.0 unit rate.

Vertical Offset Matrix					
Pipe Diameter = 8 inches					
Offset Length (ft)	Additional Depth of Vertical Offset (ft)				
	0.0 - 2.0	2.1 - 4.0	4.1 - 6.0	6.1 - 8.0	8.1 - 10.0
≤ 10.0					
10.1 - 15.0					
15.1 - 20.0					
20.1 - 25.0					
25.1 - 30.0					
Adder per LF of offset length greater than 30 ft					

This is an all inclusive unit rate covering all additional costs associated with an unplanned vertical offset. Includes all inefficiencies, delays, and activities required to install a vertical offset from layout to final restoration. The offset shall include fusions and welds, CWI inspection and NDE. Unit rate assumes a minimum of (4) elbows, (2) 3x diameter vertical pups, and (1) 5x diameter horizontal pup.

Unit of Measure is Lump Sum.

Unit of Measure for Adder is PER LF and to be added to the 25.1-30.0 unit rate.

Horizontal Offset Matrix	
Offset Length (LF)	Pipe Diameter
	8
≤ 10.0	
10.1 - 20.0	
20.1 - 30.0	
30.1 - 40.0	
40.1 - 50.0	
Adder per LF of offset length greater than 50 ft	

This is an all inclusive unit rate covering all additional costs associated with an unplanned horizontal offset. This rate is additional to the lump sum value provided for the original design and includes all inefficiencies, delays, and activities required to install a horizontal offset from layout to final restoration. The offset shall include fusions and welds, CWI inspection and NDE. Unit rate assumes a minimum of (4) elbows, (3) 5x Diameter horizontal pups.

Unit of Measure is Lump Sum.

Unit of Measure for Adder is PER LF and to be added to the 40.1-50.0 unit rate.

