UNITY ROAD PRV BUILDING UPGRADES AND WATERMAIN IMPROVEMENTS NEWPORT, NEW HAMPSHIRE

ADDENDUM #1

DATE: FEBRUARY 13, 2025 TO: PLAN HOLDERS

This ADDENDUM #1 shall become part of the Bidding Documents, Contract Documents and Technical Specifications (Documents) for the above referenced project. BIDDERS, please acknowledge receipt of this ADDENDUM #1 on the BID FORM (Page 1). This ADDENDUM #1 consists of 20 pages in total.

- 1. The bid schedule included in the technical specifications and contract documents for PRV Building Upgrades and Watermain Improvements has been updated to reflect an additional item and a removal of an item. Bid items (#22 and #AA1-22) have been removed regarding the 2" conduit. Bid Items (#AA1-20 and #AA1-31) for watermain interconnection and flaggers has been added to the Additive Alternate Bid. The Measurement and Payment section and the Bid Schedule in the spec book has also been updated. These two documents are attached to this addendum and shall replace the corresponding sections in the spec book.
- 2. The construction plans have been updated to reflect a change in the existing watermain layout at the end of Beverly Street. This update can be seen on sheets (2.4), (3.7), (3.8), (4.3), and (4.4). The updated sheets have been added to the plan set available for download on https://horizonsengineering.com/
- 3. The construction plans have been updated to reflect a change in the notes for demolition/rehab of the existing PRV building. These notes specifically address the FFE and existing door. These updates can be seen on sheet (5.1). The updated sheets have been added to the plan set available for download on https://horizonsengineering.com/
- 4. The construction plans have been updated to reflect a change in the notes for disconnection of existing water components below grade in the PRV building. These updates can be seen on sheet (5.2). The updated sheets have been added to the plan set available for download on https://horizonsengineering.com/
- 5. The dual WSO installation shown on Sheet (3.3) has been altered to show one shutoff with a larger diameter service line as a replacement for the existing 6" main serving the two residential lots. Refer to the note on the above sheet callout.

- 6. It was confirmed during the pre-bid meeting that the two Davis-Bacon wage determinations in the spec book apply. The Building Construction Type applies for all work pertaining to and within 5' of the exterior of the PRV Building. All other work, including watermain work, will utilize the Heavy Construction Type wage determination.
- 7. All updated documents can be found on Horizons Engineering.com, under Projects to Bid.

End of Addendum #1

BID SCHEDULE

BASE BID FOR UNITY ROAD PRV BUILDING UPGRADES AND WATER MAIN IMPROVEMENTS. FOR PRV BUILDING INTERIOR AND EXTERIOR PIPING, APPURTANCES AND BUILDING UPGRADES. INTERCONNECTION TO EXISTING ACTIVE WATERMAINS AND FUTURE CONNECTION LOCATION. FOR UNITY ROAD WATER MAIN CONSTRUCTION, INTERCONNECTIONS (C-4.1–4.3) AND SERVICES FROM STATION 0+00 AT EXISTING PRV BUILDING TO BEVERLY STREET, STATION 35+65. INTERCONNECTIONS TO EXISTING PRV BUILDING (C-3.1) AND INTERCONNECTION TO EXISTING WATERMAINS NEAR BEVERLY STREET (C-3.7). BID ITEMS 2-8 PERTAIN TO PRV WORK ONLY SHOWN ON SHEETS (C5.1 - 5.3).

************************** Brief Description; Unit or Lump Sum Price Item Quantity (both words and numbers) and Units No. Price ******************************** 1. General Conditions, Mobilization, and Miscellaneous Work, Per Lump Sum: ______Dollars And _____Cents (\$______) 1 LS 2. Demolition of Roof and Interior with Disposal, Per Lump Sum: And Cents (\$) 1 LS 3. Construction of Roof, Facia Soffit, Per Lump Sum: And Cents (\$ 1 LS 4. Electrical Upgrades, Per Lump Sum: _____Dollars And Cents (\$ 1 LS 5. Interior Upgrades (Insulation/Walls), Per Lump Sum: And Cents (\$) 1 LS 6. Exterior Watermain Piping, Per Lump Sum: And ____Cents (\$______) 1 LS 7. Interior Plumbing and PRV, Per Lump Sum: _____ Dollars And Cents (\$ 1 LS 8. Basement Fill and Concrete Floor, Per Lump Sum: And Cents (\$_____) 1 LS

Ten Inch H	DPE Pipe, Per Linear Foot:	Dellara			
And	Cents (\$	Dollars	3615 LF	\$	
Ten Inch G	-				
And	Cents (\$	Dollars)	11 EA	\$	
Eight Inch	Gate Valve, Per Each:				
And			14 EA	\$	
Short side			er Each:		
And	Cents (\$	Dollars)	11 EA	\$	
Long Side (Bored) Water Service Conne	ection, Per Eac	h:		
 And	Cents (\$	Dollars)	2 EA	\$	
7' Hydrant	Assembly, Per Each:				
And	Cents (\$	Dollars)	7 EA	\$	
		Dollars	, i ci camp sai		
And	Cents (\$)	1 LS	\$	
Brook Viev	• •		l, Per Lump Su	ım:	
And	Cents (\$		1 LS	\$	
Lorraine St	reet (6") Connection, Bored		Per Lump Sum	:	
			1 LS	\$	
William Str	reet (6") Connection, Bored	-	er Lump Sum:	:	
And	Cents (\$		1 LS	\$	
Beverly Str	reet (6") Connection, Open C		d, Per Lump Si	um:	
And	Cents (\$		1 LS	\$	
	_	nity Road			
(6", 8", 10'	'), Per Lump Sum:	Dollars			
And	Cents (\$		1 LS	\$	
	And	Ten Inch Gate Valve, Per Each: AndCents (\$	Ten Inch Gate Valve, Per Each:	Ten Inch Gate Valve, Per Each:	AndCents (\$

21.	STA 24+00 Wall Repair/Replacement, Per Lump SumDollars	n:	
	AndCents (\$)	1 LS	\$
22.	Bituminous Concrete Pavement, Per Ton: Dollars		
	AndCents (\$)	140 TON	\$
23.	15" HDPE Culvert Replacement, Per Linear Foot:Dollars		
	Dollars AndCents (\$)	150 LF	\$
24.	4" Temporary Water and Associated Pavement Repair, Per Lump Sum:		
	Dollars AndCents (\$)	1 LS	\$
25.	Unsuitable Material, Per Cubic Yard:	1 13	Ψ
	Dollars AndCents (\$)	200 CY	\$
26.	Rock Excavation, Per Cubic Yard:Dollars		
	AndCents (\$)	125 CY	\$
27.	Restoration of Surfaces, Per Lump Sum:Dollars		
	AndCents (\$)	1 LS	\$
28.	Erosion Control Practices, Per Lump Sum:Dollars		
	AndCents (\$)	1 LS	\$
29.	Loam and Seeding, Per Lump Sum:Dollars		
	AndCents (\$)	1 LS	\$
30.	Traffic Control, Per Lump Sum:Dollars		
	AndCents (\$)	1 LS	\$
31.	Flaggers, Per Man Hour:Dollars		
	AndCents (\$)	2000 HR	\$

ADDITIVE ALTERNATE #1 – BEVERLY STREET TO PIKE HILL ROAD

ALTERNATE BID FOR UNITY ROAD WATERMAIN CONSTRUCTION, INTERCONNECTIONS TO BEVERLY AND ELAINE STREET (C-4.4-4.5) AND INTERCONNECTION TO EXISTING WATERMAINS NEAR PIKE HILL ROAD (C-3.8 ALT). SERVICES FROM BEVERLY STREET TO PIKE HILL ROAD AT STATION 39+32.

*****	*****	********	*****	*****	********
AA1-1.		onditions, Mobilization and			
	Miscellane	eous Work, Per Lump Sum:			
			Dollars		
	And	Cents (\$)	1 LS	\$
ΔΔ1-9	Ten Inch F	IDPE Pipe, Per Linear Foot:			
AAI 3.	TCIT IIICITT	ibi E i ipe, i ei Eineai i oot.	Dollars		
	A n d	Cents (\$		20515	ċ
	Anu	cents (\$)	385 LF	\$
AA1-10	.Ten Inch (Gate Valve, Per Each:			
			Dollars		
	And	Cents (\$)	1 EA	\$
AA1-11	.Fight Inch	Gate Valve, Per Each:			
, , , , , , , ,			Dollars		
	Δnd	Cents (\$	Bollars	1 EA	\$
	Aliu	cents (y	/	ILA	¥
AA1-12	.Short Side	(Non-Bored) Water Service		er Each:	
			Dollars		
	And	Cents (\$)	2 EA	\$
A A 1 1 O	Davianti Ct	reat (CII) Commenties Dorod	a.a.d		
AA1-19	•	reet (6") Connection, Bored	and		
	Sieevea (F	Replaces Item 19), Per Each:	- "		
			Dollars		
	And	Cents (\$)	1 EA	\$
AA1-20	.Interconn	ection to Existing Mains on l	Jnity Road		
		") (Replaces Item 20), Per Lu	•		
	(- , - , -	,, -,,,,	Dollars		
	And	Cents (\$)	1 LS	\$
^^4	Ditamaina	Cauranta Daviduranta David			
AA1-22	.Bituminot	is Concrete Pavement, Per T			
		0 . /6	Dollars	20 701	A
	And	Cents (\$)	30 TON	\$
AA1-24	.4" Tempo	rary Water and Associated P	avement		
		r Lump Sum:			
			Dollars		
	And	Cents (\$)	1 LS	\$
ΔΔ1-25	Unsuitable	e Material, Per Cubic Yard:			
, v (1 -2J	. 51134114111	inaccial, i ci cabic raid.	Dollars		
	And	Cents (\$	Dollars	25 CY	ć

AA1-26.Rock Excavation, Per Cubic Yard:						
			_Dollars			
	And	_Cents (\$)	30 CY	\$	
AA1-27.	Restoration of	Surfaces, Per Lump Sum:				
			_Dollars			
	And	Cents (\$)	1 LS	\$	
AA1-28.Erosion Control Practices, Per Lump Sum:						
			_Dollars			
	And	_Cents (\$)	1 LS	\$	
AA1-29.	Loam and Seed	ing, Per Lump Sum:				
		0 / .	_Dollars			
	And	_Cents (\$)	1 LS	\$	
AA1-30.Traffic Control, Per Lump Sum:						
			_Dollars			
	And	_Cents (\$)	1 LS	\$	
AA1-31. Flaggers, Per Man Hour:						
			_Dollars			
	And	_Cents (\$)	120 HR	\$	
AA1-32. Elaine Street (6") Connection, Bored and						
Sleeved, Per Lump Sum:						
			_Dollars			
	And	_Cents (\$)	1 LS	\$	

Total Alternate Bid Price in Words

SECTION 01 22 13

MEASUREMENT AND PAYMENT

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. The provisions of the Contract, including General and Supplemental Conditions and General Requirements (if any), apply to the work specified in this Section.

1.2 RELATED WORK SPECIFIED ELSEWHERE

General Conditions
Supplemental Conditions

1.3 DESCRIPTION

- **A.** For unit price items, the Contractor shall be paid for the actual amount of work accepted and for the actual amount of materials in place during the period of construction. After the work is completed and before final payment is made therefore, the Engineer shall make final measurements to determine the quantities of the various items of work accepted as the basis for final payment.
- **B.** For lump sum items, the Contractor shall be paid on the basis of actual work accepted until the work item is completed. Upon completion of the item, 100 percent of the lump sum price may be paid, subject to the terms of the General Conditions or Supplemental Conditions.
- C. All units of measurement shall be standard United States convention as applied to the specific items of work by tradition and as interpreted by the Engineer.

1.4 SCOPE OF PAYMENT

- **A.** Payments to the Contractor will be made for the actual quantities of the contract items performed and accepted in accordance with the Contract Documents. Upon completion of construction, if these actual quantities show either an increase or decrease from the quantities given in the Bid, the contract unit prices will still prevail, except as provided hereinafter.
- **B.** The Contractor shall accept in compensation, as herein provided, in full payment for furnishing all materials, labor, tools, equipment, and incidentals necessary to complete the work and for performing all work contemplated and embraced by the Contract; also for all loss or damage arising from the nature of the Work, or from the action of the elements, or from any unforeseen difficulties which may be encountered during the prosecution of the work and until its final acceptance by the Engineer; and for all risks of every description connected with the prosecution of the work, except as provided herein; also for all expenses incurred in consequence of the suspension of the work as herein authorized.

- C. No extra payment shall be made to the Contractor for any delays caused by lack of progress, defective workmanship, or rescheduling of work by other contractors, subcontractors, or equipment and material suppliers.
- **D.** No additional payment will be allowed because of differences between field dimensions and those shown on the Drawings.
- E. Additional costs caused by ill-timed or defective work, or work not conforming to Contract Documents including costs for additional services of Engineer, shall be paid for by the party causing the rejected or non-conforming work.
- **F.** Work done on written instructions of Engineer, other than defective or non-conforming work, shall be paid for by the Owner.
- **G.** The cost of shop drawing reviewed by the Engineer in excess of two submissions shall be deducted from the Contractor's monthly invoices, based upon a rate of \$100 per hour.

1.5 PAYMENT FOR INCREASED OR DECREASED QUANTITIES

A. When alterations in the quantities of work not requiring Change Orders, as herein provided for, are ordered and performed, the Contractor shall accept payment in full at the contract price for the actual quantities of work done. No allowance will be made for anticipated profits. Increased or decreased work involving Change Orders will be paid for as stipulated in such Change Orders.

1.6 ELIMINATED ITEMS

- A. Should any unit price items contained in the proposal form be found unnecessary for the proper completion of the work contracted, the Engineer may eliminate such unit price items from the Contract, and such action shall in no way invalidate the Agreement, and no allowance will be made for items so eliminated in making final payment to the Contractor.
- **B.** Should any equipment or material be eliminated under a lump sum item, a Change Order shall be issued as stipulated in the General Conditions.

1.7 PARTIAL PAYMENTS

- **A.** Partial payments shall be made monthly as the work progresses. All partial invoices and payments shall be subject to correction in the final quantity invoice and payment.
- **B.** No monthly payment shall be required to be made when, in the judgment of the Engineer, the Work is not proceeding in accordance with the provisions of the Contract Documents, or when in his judgment the total value of the Work performed since the last payment amounts to less than \$1,000.
- C. Retained amounts shall be limited, except where greater retention is necessary under specific circumstances specifically provided for in the General Conditions.

D. No partial payment shall be made upon fuels, supplies, lumber, false work, or other materials, or on temporary structures of any kind which are not a permanent part of the Contract.

1.8 FINAL PAYMENT

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1.9 PAYMENT FOR MATERIAL DELIVERED

A. When requested by the Contractor, and at the discretion of the Owner, payment may be made for all or part of the value of acceptable, non-perishable materials and equipment which are to be incorporated into the Work, which have not been used and which have been delivered to the construction site and placed in storage places acceptable to the Owner. The Application for Payment shall be accompanied by such data, satisfactory to the Owner, that will establish the Owner's title to the material and equipment and protect the Owner's interest therein, including insurance.

Each subsequent Application for Payment shall include an affidavit of the Contractor stating that all previous progress payments received on account of the Work have been applied to discharge in full all of the Contractor's obligations reflected in prior Applications for Payment. The Owner shall have the right to deduct from the next progress payment an amount equal to payment for said material and/or equipment if reasonable and adequate proof is not submitted.

B. Materials and equipment, when so paid for by the Owner, shall become the property of the Owner and, in the event of default on the part of the Contractor, the Owner may use, or cause to be used, these materials and equipment in the construction of the Work. The Contractor shall be responsible for any damage to, or loss of, the materials and equipment. The amount thus paid by the Owner shall reduce the estimated amounts due the Contractor as the material is incorporated into the Work.

1.10 DESCRIPTION OF PAY ITEMS

- **A.** The following pay items describe the measurement of and payment for the work to be done under the respective items listed in the Bid.
- **B.** Each unit or lump sum price stated in the Bid shall constitute full compensation, as herein specified, for each item of the work completed.

1.11 PAY ITEMS

Item No. 1 Mobilization

A. Measurement for payment for General Conditions and Mobilization shall consist of project management, preparatory, and miscellaneous work and operations including but not limited to the following:

- 1. Supervision and project management
- 2. Overnight accommodations
- 3. Submittals
- 4. Equipment delivery
- 5. Office trailers and utilities
- 6. Sanitary facilities
- 7. Detour/construction/project signs
- 8. Furnishing of Bonds/Insurance (including NHDOT Excavation Permit and Bureau of Rail and Transit Temporary Access Bonds)
- 9. Utility crossings and relocations (unless otherwise provided for)
- 10. Project record drawings and record tie sheets
- 11. Testing
- 12. Removal and disposal of existing pipe within trench if needed
- 13. Removal of existing hydrants, gate valves, valve boxes and covers, curb boxes and tops to be abandoned and salvaged to owner's yard
- 14. Cutting and capping of all mains and services to be abandoned
- 15. Tree clearing, grubbing, and disposal
- 16. Dust Control
- 17. Survey/Layout

B. Payments:

- Payment shall be made at the contract lump sum price, which price shall be full
 compensation for all costs incurred in furnishing labor, tools, materials and
 equipment and incidental work item costs for the preparatory work and operations
 described in the above Measurement section for General Conditions and
 Mobilization.
- 2. For the purpose of computing payments, the adjusted contract price shall include all contract unit price and lump sum items except the contract lump sum price for this Item.
- 3. Payments shall be made as follows:
 - a. First payment of fifty percent (50%) of the contract lump sum price for Mobilization or 2.5 percent of the adjusted contract price, whichever is less, will be made not later than payment of the first application for payment following the completion of five percent (5%) of the total contract price.
 - b. Second payment of twenty five percent (25%) of the contract lump sum price for Mobilization or 1.2 percent of the adjusted contract price, whichever is less, will be made not later than payment of the first application for payment following the completion of fifty percent (50%) of the total contract price.
 - c. Upon substantial completion of all work on the project, payment of the remainder of the contract lump sum price for Mobilization will be paid.

Item No. 2 – Demolition of Roof and Interior with Disposal

- **A.** Measurement for payment shall be lump sum removed or disassembled and disposed of. Measurement shall be proportional to the completed work.
- **B.** Payment for controlled demolition of the existing PRV building. Payment shall be full compensation for roof removal (rafters/structural members to remain), facia board and related soffit items removal, interior wall cover removal, removal of insulating material, concrete demolition/cutting, disconnection of internal and external mounted panels, fixtures, all other mounted, hung, or attached items that interfere with future building upgrade efforts, disposal of all removed items that are to be discarded and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 3 – Construction of Roof, Fascia, Soffit

- **A.** Measurement shall be lump sum for all exterior roofing, fascia, soffit, and required structural material furnished and installed.
- **B.** Payment for furnishing and installing all materials required to construction a new standing seam roof, fascia, and soffit per plan and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 4 – Electrical Upgrades

- **A.** Measurement shall be lump sum for all electrical upgrades furnished and installed.
- **B.** Payment for furnishing and installing communication hardware and software, panels, electrical meters, heaters, outlets and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

<u>Item No. 5 – Interior Upgrades</u>

- **B.** Measurement shall be lump sum for all interior upgrades furnished and installed.
- **A.** Payment for furnishing and installing interior wall and ceiling cover, insulation materials, doors, framing, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 6 - Exterior Watermain Piping

- **A.** Measurement shall be lump sum for all exterior watermain piping, fittings, and appurtenances furnished and installed.
- **B.** Payment for furnishing and installing watermain piping, valves, reducers, tees, caps, joint restraints, thrust blocks, excavation, earth materials specified in the trench section detail, pipe cutting, pipe disposal, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

<u>Item No. 7 – Interior Plumbing and PRV</u>

- **A.** Measurement shall be lump sum for all interior piping furnished and installed.
- **B.** Payment for furnishing and installing watermain piping, meters, valves, reducers, tees, bends, pipe stands, appurtenances and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 8 – Basement Fill and Concrete Floor

- **A.** Measurement shall be lump sum for all flowable fill and concrete furnished and installed.
- **B.** Payment for furnishing and installing flowable fill, concrete, rebar as shown on the plan, adhesives and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 9 – Ten Inch HDPE DR13.5 Pipe

- **A.** Measurement for payment shall be per the actual length in feet of water main furnished and installed. Measurement shall be made along the centerline of the pipe. No measurement deductions shall be made for water main valves or fittings.
- **B.** Payment for furnishing and installing pipe of the size specified shall be made for the quantity installed at the unit bid price per linear foot as stated in the Bid. Payment shall be full compensation for directional boring, clearing/tree branch trimming, holding utility poles, excavation (except rock excavation), sheeting and bracing, dewatering, trench dams, pipe, polyethylene wrap if required, fittings, bedding, jointing, connections to existing, select backfill around and over pipe, joint restraint, thrust blocks, warning tape, tracer wire (for PVC pipe), in-kind soil backfilling, compaction, restoring the trench surface to grade, in kind gravel backfill, testing, chlorination, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items. Payment will be made for ninety (90) percent of the price upon completion of installation; the remaining ten (10) percent upon completing satisfactory testing subject to other retainages set forth in the Contract Documents. Payment for this item may be withheld if the Record Drawings do not reflect the work for which payment is requested.

<u>Item No. 10 – Ten Inch Gate Valve</u>

- **A.** Measurement shall be per the actual number of gate valves furnished and installed.
- **B.** Payment for furnishing and installing gate valves shall be made for the quantity installed at the unit bid price per each as stated in the Bid. Payment shall be full compensation for holding utility poles, excavation (except rock excavation), sheeting and bracing, dewatering, materials included in specific item, bedding, jointing, select backfill, joint restraint, thrust blocks, warning tape, in-kind soil backfilling, compaction, restoring the trench surface to grade, in kind gravel backfill at surface, testing, chlorination, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 11 – Eight Inch Gate Valve

- A. Measurement shall be per the actual number of gate valves furnished and installed.
- **B.** Payment for furnishing and installing gate valves shall be made for the quantity installed at the unit bid price per each as stated in the Bid. Payment shall be full compensation for holding utility poles, excavation (except rock excavation), sheeting and bracing, dewatering, materials included in specific item, bedding, jointing, select backfill, joint restraint, thrust blocks, warning tape, in-kind soil backfilling, compaction, restoring the trench surface to grade, in kind gravel backfill at surface, testing, chlorination, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

<u>Item No. 12 – Short Side (Non-Bored) Water Service Connection</u>

- **A.** Measurement shall be per the actual number non-bored water service connections furnished and installed which include the following: corporation stops, saddles, 1" or 2" CTS pipe as needed, curb stops and boxes to grade furnished and installed. Services located on water main side of street, non-bored.
- **B.** Payment for furnishing and installing items shall be made for the quantity installed at the unit bid price per each as stated in the Bid. Payment shall be full compensation for holding utility poles, excavation (except rock excavation), sheeting and bracing, dewatering, materials included in specific item, bedding, jointing, connections to existing, select backfill, warning tape, in-kind soil backfilling, compaction, restoring the trench surface to grade, in kind gravel backfill at surface, testing, chlorination, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

<u>Item No. 13 – Long Side (Bored) Water Service Connection</u>

- **A.** Measurement shall be per the actual number bored water service connections furnished and installed which include the following: corporation stops, saddles, 1" CTS pipe as needed, curb stops and boxes to grade furnished and installed. Services are located on non-water main side of street.
- **B.** Payment for furnishing and installing items shall be made for the quantity installed at the unit bid price per each as stated in the Bid. Payment shall be full compensation for holding utility poles, excavation (except rock excavation), sheeting and bracing, dewatering, materials included in specific item, bedding, jointing, connections to existing, select backfill, warning tape, in-kind soil backfilling, compaction, restoring the trench surface to grade, in kind gravel backfill at surface, testing, chlorination, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

<u>Item No. 14 – 7' Hydrant Assembly</u>

- **A.** Measurement shall be per the actual number of fire hydrants with anchor tees, transition couplings and six-inch gate valves furnished and installed with a 7' vertical height.
- **B.** Payment for installing fire hydrants shall be made for the quantity installed at the unit bid

price per each as stated in the Bid. Payment shall be full compensation for holding utility poles, excavation (except rock excavation), sheeting and bracing, dewatering, materials included in specific item, hydrant extension if needed, bedding, jointing, select backfill, joint restraint, thrust blocks, warning tape, in-kind soil backfilling, compaction, restoring the trench surface to grade, in kind gravel backfill at surface, testing, chlorination, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 15- River View Road (8") Connection, Horizontal Bore and Sleeved

- **A.** Measurement shall be lump sum furnished and installed. Measurement shall be proportional to the completed work. The limits of this work and connection specifics are as shown on the plans.
- **B.** Payment for furnishing and installing the eight-inch DR 13.5 HDPE and fourteen-inch HDPE sleeve horizontal bore shall be made for the quantity installed at the lump sum price as stated in the Bid. Payment shall be full compensation for mobilization and demobilization, set up, pit excavation (except rock excavation), sheeting and bracing, barricading, dewatering, boring and reaming, 14" HDPE sleeve installed, DR 13.5 pipe installed, mechanical adapters, jointing, in-kind soil backfilling, compaction, restoring the surface to grade, testing, chlorination, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 16 - Brook View Road (8") Connection, Horizontal Bore and Sleeved

- **A.** Measurement shall be lump sum furnished and installed. Measurement shall be proportional to the completed work. The limits of this work and connection specifics are as shown on the plans.
- **B.** Payment for furnishing and installing the eight-inch DR 13.5 HDPE and fourteen-inch HDPE sleeve horizontal bore shall be made for the quantity installed at the lump sum price as stated in the Bid. Payment shall be full compensation for mobilization and demobilization, set up, pit excavation (except rock excavation), sheeting and bracing, barricading, dewatering, boring and reaming, 14" HDPE sleeve installed, DR 13.5 pipe installed, mechanical adapters, jointing, in-kind soil backfilling, compaction, restoring the surface to grade, testing, chlorination, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 17 – Lorraine Street (6") Connection, Horizontal Bore and Sleeved

- **A.** Measurement shall be lump sum furnished and installed. Measurement shall be proportional to the completed work. The limits of this work and connection specifics are as shown on the plans.
- **B.** Payment for furnishing and installing the six-inch DR 13.5 HDPE and fourteen-inch HDPE sleeve horizontal bore shall be made for the quantity installed at the lump sum price as stated in the Bid. Payment shall be full compensation for mobilization and demobilization, set up, pit excavation (except rock excavation), sheeting and bracing, barricading, dewatering, boring and reaming, 14" HDPE sleeve installed, DR 13.5 pipe

installed, mechanical adapters, jointing, in-kind soil backfilling, compaction, restoring the surface to grade, testing, chlorination, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 18 – William Street (6") Connection, Horizontal Bore and Sleeved

- **A.** Measurement shall be lump sum furnished and installed. Measurement shall be proportional to the completed work. The limits of this work and connection specifics are as shown on the plans.
- **B.** Payment for furnishing and installing the six-inch DR 13.5 HDPE and fourteen-inch HDPE sleeve horizontal bore shall be made for the quantity installed at the lump sum price as stated in the Bid. Payment shall be full compensation for mobilization and demobilization, set up, pit excavation (except rock excavation), sheeting and bracing, barricading, dewatering, boring and reaming, 14" HDPE sleeve installed, DR 13.5 pipe installed, mechanical adapters, jointing, in-kind soil backfilling, compaction, restoring the surface to grade, testing, chlorination, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

<u>Item No. 19 – Beverly Street (6") Connection, Open Cut and Sleeved</u>

- **A.** Measurement shall be lump sum furnished and installed. Measurement shall be proportional to the completed work. The limits of this work and connection specifics are as shown on the plans, sheet C4.3.
- **B.** Payment for furnishing and installing the six-inch DR 13.5 HDPE and fourteen-inch HDPE sleeve shall be made for the quantity installed at the lump sum price as stated in the Bid. Payment shall be full compensation for mobilization and demobilization, set up, pit excavation (except rock excavation), sheeting and bracing, barricading, dewatering, boring and reaming, 14" HDPE sleeve installed, DR 13.5 pipe installed, mechanical adapters, jointing, in-kind soil backfilling, compaction, restoring the surface to grade, testing, chlorination, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 20 – Interconnection to Existing Mains on Unity Road (6", 8", 10")

- **A.** Measurement shall be lump sum furnished, installed, and connected. Measurement shall be proportional to the completed work. The limits of this work are as shown on the plans, sheet C-3.7.
- **B.** Payment for furnishing, installing components and establishing connection shall be made for the lump sum price of the item stated in the Bid. Payment shall be full compensation for holding utility poles, excavation (except rock excavation), sheeting and bracing, dewatering, materials included in specific item, bedding, jointing, select backfill, joint restraint, thrust blocks, warning tape, in-kind soil backfilling, compaction, restoring the trench surface to grade, in kind gravel backfill at surface, testing, chlorination, capping of existing water mains, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 21 – STA 24+00 Wall Repair/Replacement

- **A.** Measurement shall be lump sum furnished and installed. Measurement shall be proportional to the completed work for which was disturbed or removed during construction.
- **B.** Payment for furnishing and installing and or repairing the existing stone wall shall be made for the lump sum price as stated in the Bid. Payment shall be full compensation for, excavation (except rock excavation), sheeting and bracing, dewatering, tree clearing, grubbing, select backfill and bedding for wall repair, in-kind soil backfilling, compaction, restoring the surface to grade, in kind gravel backfill and all work incidental to the satisfactory completion of the item for which payment is not provided under other items. Payment for this item may be withheld if the reconstructed wall does not match or exceed existing abutting wall segments standards.

<u>Item No. 22 – Bituminous Pavement Trench Patch for Roadways and Driveways (Machine Method Pavement and or Hand Method Pavement)</u>

- **A.** Measurement shall be the actual number of tons in place as determined by actual measurement and yield per ton. Weight slips shall be used for comparison only. The average depth of the pavement shall be 3 inches.
- **B.** Payment for furnishing and installing double course pavement shall be at the unit price per ton as stated in the Bid. Payment shall be full compensation for removing existing pavement, furnishing and installing bituminous concrete materials, fine subgrade grading, existing pavement preparation, tack coat, compaction, pavement striping, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 23 – 15" HDPE Culvert Replacement

- **A.** Measurement for payment shall be per the actual length in feet of culvert furnished and installed. Measurement shall be made along the centerline of the pipe.
- **B.** Payment for furnishing and installing pipe of the size specified shall be made for the quantity installed at the unit bid price per linear foot as stated in the Bid. Payment shall be full compensation for directional boring, tree clearing, grubbing, holding utility poles, excavation (except rock excavation), sheeting and bracing, dewatering, trench dams, pipe, polyethylene wrap if required, select backfill around and over pipe, in-kind soil backfilling, compaction, restoring the trench surface to grade, in kind gravel backfill, associated pavement disturbance repair, select gravels replacement to match existing and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 24 – 4-Inch Temporary Water

A. Measurement for payment shall be lump sum furnished, installed, and connected. Measurement shall be proportional to the completed work.

B. Payment for furnishing, installing components and establishing connection shall be made for the lump sum price of the item stated in the Bid. Payment shall be full compensation for excavation (except rock excavation), sheeting and bracing, dewatering, materials included in specific item, bedding, jointing, select backfill, joint restraint, thrust blocks, warning tape, in-kind soil backfilling, compaction, restoring the trench surface to grade, in kind gravel backfill at surface, testing, chlorination, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 25 – Unsuitable Material

- **A.** Measurement shall be the in-place volume in cubic yards of unsuitable material removed, disposed, and refilled with Select Fill as directed by the Engineer, to the payment limits shown on the plans. Material that is found to be unsuitable due to saturated moisture conditions only shall be stockpiled until sufficiently dewatered to allow its reuse. Material of this nature will not be considered unsuitable.
- **B.** Payment for removing and disposing of unsuitable material and material refill shall be at the unit price per cubic yard as stated in the Bid. Payment shall be full compensation for removal, disposal, directed refill, compaction and all other work incidental to the satisfactory completion of the item for which payment is not provided under other items.

<u>Item No. 26 – Rock Excavation</u>

A. Method of Measurement:

- 1. The quantity to be measured for payment shall be the actual in place volume, in cubic yards, of ledge removed within the stipulated pay limits. The width used to compute the volume of ledge for payment shall be the width, as shown of the Drawings. The depth used to compute the volume of ledge removed shall be determined from the actual ledge surface elevation and shall extend 6 inches below the bottom of the pipe or structure.
- 2. Measurements for computing volumes shall be determined by one of the following methods as selected by the Engineer:
 - a. By field measurement of the depth and width of ledge excavation as determined by the Engineer.
 - b. From actual ledge profile taken of exposed ledge before proceeding with the ledge excavation.
- 3. Rocks or boulders greater than two (2) cubic yards in volume shall be considered as ledge excavation only if blasting or power drilling is required to remove the rock. Volume of rocks and boulders shall be determined from their average length, width and depth as determined by the Engineer.
- 4. Loose rock which can be removed without blasting or power drilling will not be paid for under this item.
- **B.** Payment shall be made at the unit price per cubic yard as stated in the Bid which shall be

full compensation for removing rock and replacement with suitable fill and for all labor, materials, tools and equipment, and for all work and expenses incidental thereto for which payment is not provided under other items.

<u>Item No. 27 – Restoration of Surfaces</u>

- **A.** Measurement shall be lump sum.
- **B.** Payment for restoration of surfaces shall be made for the quantity installed at the lump sum price as stated in the Bid. Payment shall be full compensation for removal and replacement of signage, fencing, mailboxes, boulder walls, grading and compaction of shoulders and lawn areas, crushed shoulder gravel as required, landscaping restoration, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 28 - Erosion Control

- **A.** Measurement shall be lump sum.
- **B.** Payment for furnishing, installing, and maintaining erosion controls measures adequate for control shall be made for the quantity installed at the lump sum price as stated in the Bid. Payment shall be full compensation for all required erosion and sedimentation measures necessary and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 29 – Loam and Seeding

- **A.** Measurement shall be lump sum.
- **B.** Payment for furnishing and installing loam, seed, fertilizer, and mulch shall be made for the quantity installed at the lump sum price as stated in the Bid. Payment shall be full compensation for all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 30 - Traffic Control

- **A.** Measurement shall be lump sum.
- **B.** Payment for furnishing traffic control plans and traffic controls (signage, lights, cones, etc.) as needed, as required for safe management of traffic and prosecution of the work, and as required by the Owner and/or NHDOT. Payment shall be made for the quantity provided at the lump sum price as stated in the Bid. Payment shall be full compensation for all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

Item No. 31 - Flaggers

- **A.** Measurement shall be for the total man hours of traffic control as stated in the bid schedule.
- **B.** Payment shall be per the actual number of man hours of furnishing traffic control personnel (uniformed officers and vehicles, flaggers, etc.) as needed and as required for safe management of traffic and prosecution of the work, and as required by the Owner and/or NHDOT. Payment shall be made for the quantity of man hours as provided in the Bid Schedule. Payment shall be full compensation for all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

<u>Item No. AA1-19 (Alternate Only) – Beverly Street (6") Connection, Horizontal Bore and Sleeved</u>

- **A.** Measurement shall be lump sum furnished and installed. Measurement shall be proportional to the completed work. The limits of this work and connection specifics are as shown on the plans, sheet C-4.4. This item shall replace item 19 in the base bid upon award of the alternate bid.
- **B.** Payment for furnishing and installing the six-inch DR 13.5 HDPE and fourteen-inch HDPE sleeve horizontal bore shall be made for the quantity installed at the lump sum price as stated in the Bid. Payment shall be full compensation for mobilization and demobilization, set up, pit excavation (except rock excavation), sheeting and bracing, barricading, dewatering, boring and reaming, 14" HDPE sleeve installed, DR 13.5 pipe installed, mechanical adapters, jointing, in-kind soil backfilling, compaction, restoring the surface to grade, testing, chlorination, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.

<u>Item No. AA1-32 (Alternate Only) – Elaine Street (6") Connection, Horizontal Bore and Sleeved</u>

- **A.** Measurement shall be lump sum furnished and installed. Measurement shall be proportional to the completed work. The limits of this work and connection specifics are as shown on the plans.
- **B.** Payment for furnishing and installing the six-inch DR 13.5 HDPE and fourteen-inch HDPE sleeve horizontal bore shall be made for the quantity installed at the lump sum price as stated in the Bid. Payment shall be full compensation for mobilization and demobilization, set up, pit excavation (except rock excavation), sheeting and bracing, barricading, dewatering, boring and reaming, 14" HDPE sleeve installed, DR 13.5 pipe installed, mechanical adapters, jointing, in-kind soil backfilling, compaction, restoring the surface to grade, testing, chlorination, and all work incidental to the satisfactory completion of the item for which payment is not provided under other items.