Specification: CWD 1-22

COTUIT WATER DEPARTMENT

4300 FALMOUTH ROAD, P.O. BOX 451 COTUIT, MASS. 02635

SPECIFICATIONS FOR THE INSTALLATION OF WATER SERVICE CONNECTIONS TO SIDELINE, CONNECTIONS FROM SIDELINE TO BUILDING, AND EMERGENCY REPAIRS

SECTION 1: SCOPE OF CONTRACT

- A. Contractor shall perform all services requested by the Cotuit Water Department for installation of water services and emergency repairs for a period of one year beginning July 17, 2021 and ending July 16, 2022.
- B. The estimated scope of the services to be performed are as follows:

Installation of Services to Sideline:

Open trench 1"-2"	190	feet
Hole hog shot 1"-2"	260	feet
Service taps 1"-2"	10	

Installation of Services Sideline to Building:

Hole hog shot New construction 1"-2" pipe	7	05 feet
Open trench	1,0	62 feet
Existing construction 1"-2" pipe		
Open trench	1,3	20 feet
Hardening for Soft Trench	10	cu. yd.
Sand Fill:	10	cu. yd.
Gravel Fill:	20	cu. Yd.
Loam Fill:	24	cu. yd.
Grass Seed Spread:		sq. yd.
Bituminous Concrete:		sq. ft.
Emergency repairs/Straight time:	30	hours
Overtime:	1.6	hours
Holiday Pay:	8	hours

- C. Award of the contract will be based on overall cost and the established ability of the contractor to perform the work satisfactorily.
- D. At present there are no known changes to affect the annual workload. The Cotuit Water Department cannot forecast the total amount of services required in during the contract period, or the ratio of the individual services performed.

SECTION 2: WAGE RATES

A. The contractor shall be in compliance with Massachusetts Law, Chapter 149, Section 26 to 27D inclusive, classifications of Labor and Minimum Wage Rates which, have been established by the Department of Labor and Industries of the Commonwealth of Massachusetts.

SECTION 3: PERSONNEL

- A. Contractor shall provide all labor and supervision necessary to do the work outlined in this specification including a minimum of a three (3) man crew to do service connection work.
- B. The Contractor shall also have a minimum of three (3) man crew available at all times including nights, Saturdays, Sundays & Holidays, to make emergency repairs when requested by the department. The Contractor shall provide ample telephone numbers where emergency repair crews may be reached nights, Saturdays, Sundays, and Holidays. The Contractor shall see that the response time to the work site does not exceed one (1) hour from the time of the emergency call out by the Water Department. A penalty may be assessed to the Contractor equal to one (1) hour charge for every hour the Contractor is late arriving at the job site after the first hour after being notified by the Water Department.
- C. No more than one (1) person in a three (3) man crew shall be in a Beginners/Apprentice category. Pipe Fitters/Pipe Layers shall have a minimum of three (3) years on-the-job experience.

D. Equipment operators shall possess and maintain a valid Commonwealth of Massachusetts license for the piece of equipment operated as required by the Massachusetts Department of Public Safety.

SECTION 4: EQUIPMENT

- A. The Contractor shall furnish all equipment and tools necessary to perform the work outlined in this specification.
- B. The Contractor shall have available at least the following equipment:
 - 1. Rubber tire backhoe, front-end loader
 - 2. Compressor and compressor tools
 - 3. Power operated tamper/compactor
 - 4. Trucks and trailers
 - 5. De-watering pumps
 - 6. Self-propelled mole/hole hog or similar device
 - 7. Hand tools for pipe fitting and wheelbarrow, rakes, shovels, and any other tools or equipment necessary to complete the job
 - 8. All signs, traffic cones, signals, etc. needed to conform to the uniform traffic safety code.
 - 9. Emergency night lighting
 - 10. Box finders and Electronic pipe locator equipment
- C. The Contractor shall provide his own storage facility and shall not store any of his equipment on Water Department property.

SECTION 5: MATERIALS

A. Piping Materials

- 1. All materials necessary to make the service installations and perform emergency repairs will be supplied by the Water Department.
- 2. Piping materials for service installations shall be picked up by the Contractor from the Water Department between 8:00 A.M. and 8:30 A.M., Monday through Friday. No pickup of materials on Holidays except as authorized by the Water Department.
- 3. The Contractor shall examine materials picked up for any defects and give his receipt for these materials. He shall be responsible for their protection against loss or damage. Any materials lost or damaged after being accepted by the Contractor shall be replaced at his expense. The Contractor shall move the materials to such locations as needed, and upon completion of the work shall return all surplus items to the Water Department storage yard as directed.

B. Earthwork and Trenching Materials

1. The Contractor shall furnish all material to refill and resurface excavations for water service and emergency work, including selected material for backfilling, bituminous concrete for paving and loam and seed as directed by the Water Department.

SECTION 6: SITE WORK

A. Water Service Site Work Planning

- 1. The Water Department will:
 - a. Prepare a sketch showing the location of the curb cock and routing of the service line to the building.

- b. Notify Dig-Safe as required by Massachusetts General Laws. (Dig-Safe 1-888-344-7233)
- c. Determine that the proposed installation is not in conflict with Title 5 of the Massachusetts Sanitary Code, i.e., sewage systems, etc.
- 2. The Contractor shall view each and every site prior to starting any installation work. It is his responsibility to understand the scope and details of the installation and to confirm that Dig-Safe has been notified. The Contractor shall not trespass on property which is not relative to the site.
- 3. Contractor shall provide a contract price for each sideline to building installation. The Water Department Superintendent, or representative thereof, will accompany the Contractor to the site for estimating purposes. Once a contract is submitted, no change or variation shall be made unless authorized by the Cotuit Water Department.

B. Site Work

- 1. All site work shall be done by the Contractor in a careful manner incorporating recognized industry standards. The following are specific site requirements, however they in no way limit the responsibility of the Contractor.
 - a. Protection of Work, Property and Persons
 - 1. Contractor will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work. Contractor shall take all necessary precautions and will provide the necessary protection to ensure the safety of all employees on the job and other persons who may be affected thereby. Contractor shall take all necessary precautions and provide the necessary protection to prevent damage, injury or loss to all the work and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavement, roadways, structures and utilities not designed for removal, relocation or

replacement in the course of construction. Any damage or injury to the work shall be repaired by the Contractor.

2. The Contractor shall be responsible for all loss or damage to materials and property, whether such are to be incorporated in the work or are adjacent thereto. The Contractor shall also replace or restore to original condition every public or private way, conduit, catch basin, tree, fence or other thing injured or interfered with by the Contractor out carrying on the contract.

b. Trenching

- 1. The Water Department shall apply to the Department of Public works for all permits before commencing trenching. No paving is to be cut unless the Water Department has written permission from the Department of Public Works. Where service is in hard surfaced roadways, the Contractor shall cut the surfaced roadways with special saw or power operated spade to prevent lifting or damage to the adjoining pavement.
- 2. The Contractor will be furnished line and grade and shall preserve all marks so given. No water service connection shall have less than five feet (5') of cover from the finish grade, unless authorized by the Water Department in writing.
- 3. The Contractor shall install service pipe beneath paved surfaces of all streets, driveways, established lawns, shrubs and fences, using an underground boring device. Where services are installed under paved surfaces, the Contractor may be required to install the service pipe below the water main and back tap the water main to avoid cutting bituminous concrete pavement.
 - 4. If unsuitable soil conditions exist within the trench, the Contractor shall notify the Water Department. The Water Department will then determine if the Contractor shall remove and replace soil with suitable material. Refill material to be bank run gravel, screened gravel or gravel stone, the size and type to be selected by

the Contractor, who will be held wholly responsible for any subsequent settlements or other problems that may be experienced in this area.

5. The excavations are to be kept free from water, and pumps are to be used when necessary and shifted frequently to avoid draining from too long a distance. All water pumped or bailed from the excavation is to be conveyed to a suitable point of discharge in a manner acceptable to the Water Department. Pump wells in proper locations and sufficiently removed from the line of work and at proper depths shall be constructed and maintained as required. Wells to be securely refilled upon completion of the work. No pipe or masonry is to be laid in water, and water is not to be allowed to rise upon or flow over or through any pipe or masonry or other new construction unless so directed by the Water Department.

c. Back-filling

- 1. Prior to back-filling, the Contractor shall flush all new or repaired service installations with sufficient velocity and volume to clean the service pipe of all sand, debris, etc. After flushing has been completed the installation shall be pressure tested by the Contractor and inspected by the Water Department.
- 2. The greatest care is to be taken in backfilling, with only the suitable materials taken from the excavations to be used. Good sand or other fine material entirely free from stones shall be deposited in six (6) inch layers, thoroughly compacted to the density required by railroad irons, hand or mechanical tampers until the pipe has at least twelve (12) inches of cover over the top of the pipe and around other structures with special care being taken not to injure the alignment of the structure. If required, the Contractor shall furnish and place in trench the required clean run-of-the-bank sand and/or gravel backfill material, free from stones larger than four (4) inches in diameter and with a preponderance of sand, to be used for backfilling trenches at locations where suitable material for refilling the trench is not available.

- 3. The remainder of the trench shall be carefully back-filled and consolidated to the density required as follows. Fill may be placed by hand or machine in layers not exceeding one (1) foot in thickness (before tamping). EACH LAYER OF FILL SHALL BE THOROUGHLY COMPACTED BY MEANS OF APPROVED MECHANICAL TAMPERS OR EQUIPMENT. Only suitable material taken from the excavation or approved common borrow and/or gravel hauled in for the purpose shall be used. No mud, frozen earth, stones larger than four (4) inches, or other objectionable material is to be used for refilling. All trenches shall be compacted throughout their depth so that the relative compaction in the back-fill shall be at least 90%. The Contractor shall provide and install hardening as required.
- 4. Pipe laying shall be suspended if, in the opinion of the Water Department, the aforementioned work does not conform with the specifications, and this suspension shall remain in effect until such time as sufficient manpower and equipment is employed by the Contractor to properly comply with the requirements of this section.

d. Resurfacing

- 1. Contractor shall furnish all the necessary labor, equipment, and materials, including cutback asphalt or emulsifier seal (between old and new pavement) for building or rebuilding bituminous concrete roadways, driveways, sidewalks, etc., in accordance with the standard specifications of the Public Works, and all work shall be done to the satisfaction of the Water Department and the Department of Public Works.
- 2. Cross trench pavement shall be constructed in two courses upon a six (6) inch concrete base. The concrete base shall be placed on the compacted trench back-fill and shall overlap (or exceed) the trench width by six (6) inches on each side. Concrete shall be 3,000-pound Class A Concrete Type C-1 (M4.02.00).

e. Police Officers

1. Any Police Officers, Reserves, Specials or otherwise, employed by the Department for Traffic Control shall be paid by the Water Department. The Contractor shall be liable for any monies due Police Officer (s) if the Contractor cancels a scheduled job without proper notice as required by the Police Department.

f. Clean-up

- 1. Clean-up shall be done on a daily basis.

 At the end of each working day, the

 Contractor shall completely back-fill the

 trenches and remove all equipment from

 travelled ways and replace and restore to

 good condition any property or structure

 or improvements, public or private

 interfered with by the Contractor.
- 2. Upon completion of construction, the Contractor shall leave the work, roadways and premises in a clean, neat and workman-like condition satisfactory to the Department of Public Works and the Water Department.

g. Workday

- 1. Normal workday is from 8:00 A.M. to 4:30 P.M. Monday through Friday.
- 2. No night, Saturday, Sunday or Holiday work will be permitted unless authorized by the Water Department.

h. Drawings & Diagrams

1. Contractor shall provide a record diagram of the completed service installation including a bill of materials. Said drawing shall be neat and legible, showing location of water service and ties to curb cock and any other fittings. Service installation shall be deemed incomplete until such diagram is submitted and no incomplete service connection will be accepted or paid for by the Department.

i. Installation Time-Frame

1. All regular service installations will be done within fifteen (15) business days of notification.

SECTION 7: GENERAL REQUIREMENTS

A. Statutory Requirements

- 1. The Contractor shall keep himself fully informed of all existing and future State and National Laws and Municipal Ordinances and Regulations in any manner affecting those engaged or employed in the work, or the materials used or employed in the work, or in any way affecting the conduct of the work, and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same and of all provisions required by law to be made a part of this contract, all of which provisions are hereby incorporated by reference and made a part thereof. If any discrepancy or inconsistency is discovered in the drawings or specifications or contract for this work in relation to any such law, ordinance, regulation, order or decree, the Contractor shall forthwith report the same to the Superintendent in writing. He shall at all times himself observe and comply with, and shall cause all his agents and employees to observe and comply with all such existing and future laws ordinances, regulations, orders and decrees; and shall protect and indemnify the Water Department and the Superintendent and all of its and their officers, agents and servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by himself or his employees or sub-contractors.
- 2. All materials furnished and work done are to comply with all State, Federal and Town laws and regulations.

B. Indemnification

1. The Contractor shall secure and maintain insurance to cover the Indemnification as noted herein. These provisions shall be recited in full on the reverse side of the certificate evidencing such insurance. "The

Contractor agrees to defend, indemnify and to hold harmless, the Cotuit Fire District, Town and Property Owners and their respective officers, agents, and employees from and against any and all damages, claims, demands, suits, judgements, and costs, including reasonable attorney's fees and expenses, for or on account of damage to property and death of or bodily or other personal injury to any person or persons, directly or indirectly arising put of or caused or claimed to have been caused by or in connection with the performance of or failure to perform any work provided hereunder by the Contractor, his subcontractors or the Contractor's servants, agents or employees."

C. Insurance

1. The Contractor shall carry insurance in the amount of \$500,000 Public Liability and \$500,000 Property Damage. The Contractor's Public Liability Insurance shall provide, by any necessary removal of exclusions or by separate policies of the same limits, coverage for all hazards inherent in the work of the contract. Without limiting the foregoing statement, the insurance shall cover any of the following hazards which may be present in the contract: Explosion, collapse and underground damage; damage to property in the Contractor's care, custody or control; rigging and hoisting.

D. Guarantee

1. The Contractor shall guarantee all accepted materials and work performed for a period of one (1) year from the date of installation. The Contractor warrants and guarantees for a period of one (1) year from the date of installation that the completed system is free from all defects due to faulty materials or workmanship and the Contractor shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the system resulting from such defects. The Department will give notice of observed defects with reasonable promptness. In the event that the Contractor should fail to make such repairs, adjustments or other work that may be made necessary by such defects, the Department may do so and charge the Contractor the cost hereby incurred.

E. References

1. The contractor must provide three (3) letters of reference (within last 5 years) that state similar projects, contact persons and telephone numbers.

F. Terms of Payment

- 1. Water connections to sideline and emergency repairs
 - a. Payment will be made in full within thirty (30) days of receipt of invoice and approval of work done.
- 2. Water connections from sideline to building.
 - a. One hundred percent (100%) of contract price to be received by the Water Department in advance and held until service has been installed and accepted, whereupon the payment will be turned over to the Contractor.

G. Termination of Contract

1. The Board of Water Commissioners will reserve the right to terminate this contract whenever the Board deems that the Contractor is in violation of State Laws, Local Regulations, or any provision of this contract.

Bid Form: Specification CWD 1-22

INSTALLATION OF SERVICE TO SIDELINE

ITEM NO.	ESTIMATED QUANTITY	BRIEF DESCRIPTION OF ITEM	UNIT BID	AMOUNT
1(a)	190 	1"- 2" Service pipe Open Trench		
1 (b)	260 10	Hole Hog Shot Incl. Pipe Installation		
1(c)		Service Tap 1"- 2"		
		SUB-TOTAL		

INSTALLATION OF SERVICES SIDELINE TO BUILDING

2(a)	705 	Hole Hog Shot Incl. Pipe Installation		
2 (b)	1,062	New construction 1"- 2" Service Pipe Open Trench		
2(c)	1,320	Existing Construction 1"- 2" Service Pipe Open Trench		
		SUB-TOTAL		

NOTE: THE MINIMUM CHARGE FOR INSTALLATION OF SERVICES TO SIDELINE TO BUILDING IS \$300.00

Bid Form (continued)

MATERIALS

ITEM NO.	ESTIMATED QUANTITY	BRIEF DESCRIPTION OF ITEM	UNIT BI	D AMOUNT
3 (a)	10 cu. yd.	Hardening for Soft Trench Installed		
3 (b)		Sand Fill Installed		
3 (c)	20 cu. yd.	Gravel Fill Installed		
3 (d)	24 cu. yd.	Loam Fill Installed		-
3 (e)	50 sq. yd.	Grass Seed Spread		
3(f)	200 sq. ft.	Bituminous Concrete Installed		
		SUB-TOTAL		
EMERGENCY	SERVICE THRE	E (3) MAN CREW		
4 (a)	30	Straight Time		
4 (b)	16 	Overtime		
4 (c)	8	Holiday Pay		
		SUB-TOTAL		

Bid Form (continued)

SUMMARY OF BID AMOUNTS

ITEM	(1)	a-c			\$
ITEM	(2)	a-c			\$
ITEM	(3)	a-f			\$
ITEM	(4)	a-c			\$
			TOTAL BID		\$ FIGURES
					WORDS
SUBMI	TTEI	O THIS_		_DAY	OF, 2021
					NAME OF BIDDER
				ВУ	SIGNATURE AND TITLE OF AUTHORIZED REPRESENTATIVE
					BUSINESS ADDRESS
					CITY, STATE

CERTIFICATE OF NON-COLLUSION

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

(Name	of	person	signing	bid	or	proposal)
		(Name	e of bus:	ines	3)	
			(Date)			