



PASSAIC VALLEY WATER COMMISSION

RESOLUTION #20-134

RESOLUTION OF PASSAIC VALLEY WATER COMMISSION

DATE OF ADOPTION: NOVEMBER 12, 2020

Factual Contents certified to by Louis Amodio, Administrative Secretary. Approved as to Form and Legality on basis of facts set forth by George T. Hanley, General Counsel. Entering Executive Closed Session in accordance with Open Public Meetings Act, R.S. 10:4-6 et seq. Pursuant to the Open Public Meetings Act,

COMMISSIONER: VANNOY offers the following Resolution for adoption:

WHEREAS, Section 8 of the Open Public Meetings Act, c. 231, P.L. 1975, permits the exclusion of the public from a meeting in certain circumstances; and

WHEREAS, the public body is of the opinion that such circumstances presently exist:

NOW, THEREFORE, BE IT RESOLVED, by the Commissioners of Passaic Valley Water Commission:

1. The public shall be excluded from discussion of the hereinafter-specified subject Matters; the general nature of the subject matters being; Financial, Insurance, Personnel, Contracts, Negotiations, Security, Law: other matters as may be discussed *in camera*.
2. It is anticipated at this time that the above-stated subject matters will be ratified During public meeting following or as soon thereafter as the reason for discussion no Longer exists.
3. This Resolution shall take effect immediately.

Second by COMMISSIONER: COTTON Time: 10:12 a.m.

RECORD OF COMMISSION VOTE ON FINAL PASSAGE

	AYE	NAY	ABSTAIN	ABSENT
FRIEND, G.	X	—	—	—
VANNOY, R.	X	—	—	—
LEVINE, J.	X	—	—	—
SANCHEZ, R.	X	—	—	—
VAN RENSA LIER, R.	X	—	—	—
COTTON, R.	X	—	—	—
KOŁODZIEJ, J.	X	—	—	—

Adopted at a meeting of Passaic Valley Water Commission.

Joseph Kolodziej
President

[Signature]
Secretary

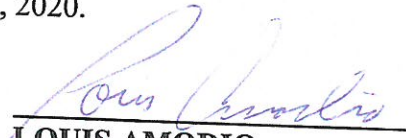


PASSAIC VALLEY WATER COMMISSION

This Resolution, when adopted, must remain in the custody of the Administrative Secretary.

CERTIFICATION

I, LOUIS AMODIO, Administrative Secretary of the Passaic Valley Water Commission in the County of Passaic, and the State of New Jersey do hereby certify that the foregoing Resolution is a true copy of a legal quorum of the Original Resolution duly passed and adopted by a majority of the full membership of the Passaic Valley Water Commission at its meeting of November 12, 2020.



LOUIS AMODIO
Administrative Secretary

RESOLUTION: 20-135
RESOLUTION OF PASSAIC VALLEY WATER COMMISSION
DATE OF ADOPTION: NOVEMBER 12, 2020

Approved as to form and legality by Law Department on basis of facts set forth by Executive Director, Purchasing, Engineering and Finance Departments.

Introduced by Commissioner: **VAN RENSA L I E R**

Seconded by Commissioner: **V A N N O Y**

WHEREAS, the Passaic Valley Water Commission ("PVWC") solicited bids for Contract No. 20-B-36 "Furnish and Deliver Next Generation Sequencing Equipment" ("the Contract") on three occasions without receiving any responsible bids; and

WHEREAS, the Commissioners resolved on September 9, 2020 (Resolution No.: 20-124) to negotiate a contract for goods and/or services with Vendor of this type of equipment in lieu of further public bidding pursuant to Local Public Contracts Law, N.J.S.A. § 40A:11-5(3); and

WHEREAS, the PVWC contacted four vendors: QIAGEN, Illumina Inc., ThermoFisher Scientific, and Pacific Biosciences of California Inc.; and

WHEREAS, the PVWC received proposals and quotes from three of the above vendors; and

WHEREAS, Suzanne DeLorenzo, PhD, prepared a Memo in which she analyzed the choices and recommended that the PVWC select the Illumina MiSeq benchtop solution for an all-inclusive price of \$104,933.59 (a copy of Dr. DeLorenzo's Memo is attached hereto as **Exhibit A** and made a part hereof); and

WHEREAS, the PVWC and Illumina Inc. negotiated terms and conditions, and arrived at a final agreement on all terms, in principle, subject to the vote of the Commissioners (a copy of the proposed Contract between the PVWC and Illumina for the purchase of the

MiSeq “next generation sequencing instrument” for \$104,933.59 is attached hereto as **Exhibit B** and made a part hereof); and

WHEREAS, the PVWC satisfied the pre-requisites to negotiation in lieu of public bidding; and

WHEREAS, the negotiated price is equal to the lowest bid received by the PVWC in prior bid attempts thereby satisfying the pre-requisites to using negotiation in lieu of public bidding set forth in N.J.S.A. § 40A:11-5(3)(i)–(iii); and

WHEREAS, a reasonable effort has been made to determine whether PVWC could acquire the instrument in question from other sources including other local government agencies, and it was clear that a contract with Illumina Inc was the only way to secure a new, unused next generation sequencing instrument with full warranties as required; and

WHEREAS, under N.J.S.A. § 40A:11-5(3), the vote to award a negotiated contract such as the one presented in lieu of public bidding must be approved by “two-thirds affirmative vote of the authorized membership of the governing body authorizing the contract”; and

WHEREAS, the PVWC’s Comptroller has certified, with respect hereto, that funds are currently available for said purpose and said certificate is attached hereto in above-referenced (see Certification attached hereto as Exhibit C and made a part hereof);

NOW, THEREFORE, BE IT RESOLVED, by Passaic Valley Water Commission, in the County of Passaic, New Jersey:

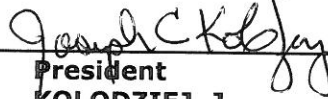
1. That the Commissioners hereby resolve to award the Contract, in the form attached hereto as Exhibit B, to Illumina Inc. in the amount of \$104,933.59 for the purchase of the MiSeq solution.
2. That appropriate officials and employees of the PVWC be and are hereby directed to execute the Contract in

accordance with these findings and applicable law, and to perform such acts and execute such documents as are necessary to implement the terms and intentions of this Resolution as set forth hereinabove.

RECORD OF COMMISSION VOTE ON FINAL PASSAGE

	AYE	NAY	ABSTAIN	ABSENT
FRIEND, G.	<u>X</u>	___	___	___
VANNOY, R.	<u>X</u>	___	___	___
LEVINE, J.	<u>X</u>	___	___	___
SANCHEZ, R.	___	___	___	<u>X</u>
VAN RENSA LIER, R.	<u>X</u>	___	___	___
COTTON, R.	<u>X</u>	___	___	___
KOLODZIEJ, J.	<u>X</u>	___	___	___

Adopted at a meeting of Passaic Valley Water Commission.



 President
KOLODZIEJ, J.

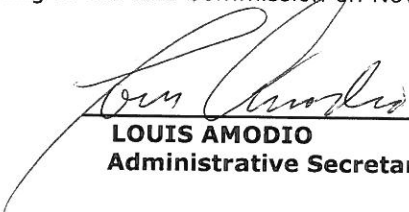


 Secretary
GERALD FRIEND

This Resolution, when adopted, must remain in the custody of the Administrative Secretary.

CERTIFICATION

I, LOUIS AMODIO, Administrative Secretary of the Passaic Valley Water Commission in the County of Passaic, and the State of New Jersey do hereby certify that the foregoing Resolution is a true copy thereof of the foregoing Resolution duly passed and adopted by a majority of a legal quorum of the full membership of the Passaic Valley Water Commission at its duly noticed and convened meeting of the said Commission on November 12, 2020.



LOUIS AMODIO
 Administrative Secretary

PASSAIC VALLEY WATER COMMISSION

**Memo by Suzanne DeLorenzo, PhD to James Duprey, PE
dated October 6, 2020**

Exhibit A

memo

Passaic Valley Water Commission

To: Jim Duprey
From: DeLorenzo, Suzanne
CC: Guido Weber
Date: 10/06/2020
Re: Procurement of Next Generation Sequencing Equipment for PVWC

Comments:

The Laboratory is seeking to acquire Next Generation Sequencing (NGS) equipment to monitor microbial populations in the open finished water reservoirs. Access to this equipment will allow for potential pathogen detection in the reservoirs as well as the distribution system. NGS will also be used to bring speciation of positive coliform samples in house. Performing testing in house results in faster turn-around time and lower cost over time, both of which build strength to our system, keeping our drinking water safe for our customers.

Metagenomic studies are commonly performed by analyzing the prokaryotic 16S ribosomal RNA gene (16S rRNA), which is approximately 1,500 bp long and contains nine variable regions interspersed between conserved regions. Variable regions of 16S rRNA are frequently used in phylogenetic classifications such as genus or species in diverse microbial populations. To identify and classify endemic, seasonal, and potentially pathogenic bacteria the Laboratory will target the V3 region of 16S rRNA.

Three equipment manufactures were evaluated to determine the best fit for PVWC's laboratory: PacificBio, Thermo Scientific, and Illumina. Each manufacturers NGS system has the capability to sequence the V3 region.

Of the 3 manufactures the Illumina benchtop MiSeq system was determined to be the best fit for PVWC's laboratory. The MiSeq's small footprint gives it a leg up over PacBio's sequel system which stands at 5 ft tall and 3 feet wide, versus the 2 ft x 2 ft MiSeq. The laboratory does not have the space to accommodate a PacBio NGS system. Additionally, at a cost of \$190,000 for a refurbished unit (\$385,000 new) an additional \$35,000 for support services, \$12,500 for training with a cost per sample of \$39.50 the PacBio unit comes in at a distant 3rd.

Thermo Scientific also offers a benchtop NGS unit. The Ion GeneStudio S5 is considerably cheaper at \$51,075, however it requires the purchase of auxiliary equipment that is integrated into the NGS workflow. The additional equipment was quoted at \$43,200. Maintenance plans are required on each piece of equipment totaling \$14,900. With shipping the quote totals \$110,442.50, but does not take into account sales tax. The requirement of an additional instrument to complete workflow raises concerns of system compatibility should one of the two required components be discontinued. All units require the use of proprietary reagents and consumables. This quote does not include any consumables or reagents.

The Illumina MiSeq System costs \$84,150, with additional support services of \$11,717, \$4,250 for training. The quote also includes the MiSeq Software Suite, installation kits and standards and reagents for startup totaling \$3,072. The total quote comes to \$111,603.88, which includes tax and shipping. The terms and conditions provided by the manufacturer are acceptable for the intended use of the equipment. The level

of training offered with the MiSeq is a definitive plus as the lab seeks to integrate molecular analysis into its regular processes and protocols.

Based on the above, and subject to review and approval by the Law Department, it is recommended that PVWC procure the Illumina MiSeq System in the amount of \$84,150 and include training, service, and reagents for a total of \$111,603.88.

PASSAIC VALLEY WATER COMMISSION
Contract between PVWC and Illumina Inc.
for \$104,933.59 for the MiSeq Solution

Exhibit B

Passaic Valley MiSeq Terms and Conditions

This Agreement is between the Passaic Valley Water Commission ("PVWC" or "Purchaser") and Illumina Inc. ("Seller"). Purchaser agrees to purchase, and Seller agrees to sell to Purchaser, the following subject to the "Terms and Conditions for Sale – Research Use Products" below:

Catalog Number	Item	Units	Price
SY-410-1003	MiSeq® System. MiSeq System Integrated system for automated generation of DNA clonal clusters by bridge amplification, sequencing, primary and secondary analysis. System includes embedded touchscreen monitor and on-instrument computer, dual surface imaging capability, MiSeq Software Suite, installation kits and standards, installation and training, and 12 months warranty (including parts and labor).	1	\$ 84,150.00
20019983	MiSeq Silver Support Plan. Includes full coverage for parts, labor, and travel; Reagent replacement upon HW failures; 1 PM; Remote Technical Support 18x5; 2 business day on-site response target; control SW and HW updates; on-site applications support; discounts on advanced training; remote monitoring available. Contract Term: 12 months.	1	\$ 11,717.25
TR-204-0009	Nextera XT - Customer Site. Hands-on training of the complete Nextera XT DNA workflow. Covers quantification and quality control of input DNA and output libraries, bead-based normalization, best practices and troubleshooting tips.	1	\$ 4,250.00
MS-102-3003	MiSeq Reagent Kit v3 (600-cycle). Provides kitted reagents for up to 625 cycles of sequencing on the MiSeq System. Includes: Paired-End Reagent plate (600-cycles), MiSeq Flow Cell, and Wash Buffer.	1	\$ 2,845.80
FC-131-1001	Nextera XT Index Kit (24 indexes, 96 samples). Each Nextera XT Index Kit includes 24 unique indexes for sequencing library preparation of up to 96 samples.	1	\$ 226.10
	Shipping & related insurance (DAP)	1	\$ 1,744.44
	TOTAL		\$104,933.59

Terms and Conditions of Sale -- Research Use Products

1. Definitions

"Consumable(s)" means Seller branded reagents and consumable items that are intended by Seller to be consumed through the use of Hardware. "Documentation" means Seller's user manual, package insert, and similar technical documentation, for the Product in effect on the date that the Product ships from Seller. Documentation may be provided with the Product at time of shipment or provided electronically from Seller. "Hardware" means Seller branded instruments, accessories, or peripherals. "Product(s)" means the item(s) acquired hereunder. Products may be Hardware, Consumables, or Software. Software may be embedded in or installed on Hardware or provided separately. "Purchaser" means the person or entity acquiring the Product with the intent to use the Product, from (i) Seller or (ii) Seller's authorized distributor or reseller. "Seller" means the Illumina entity selling the Product. The Seller is identified on the quotation, order acknowledgment or similar communication, or Seller website if the order is being placed electronically at Seller's website. "Software" means Seller branded software made available on the Hardware acquired hereunder (e.g., Hardware operating software and related installers). "Specifications" means Seller's written technical specifications for the Product in effect on the date that the Product ships from Seller.

2. Rights to Products upon Purchase

Subject to these terms and conditions, Purchaser is granted only a non-exclusive, non-transferable, personal, right under Seller's Core IP to use the Product in Purchaser's facility in accordance with the Product's Specifications and Documentation, specifically excluding the following "Excluded Uses": any use that (a) is a use of the Product to perform non-invasive pre-natal testing, (b) is a use of the Product as, or as a component of, an in vitro diagnostic device, (c) is a use of the Product to perform testing of human samples and specimens where results are reported, directly or indirectly, to a patient or healthcare practitioner, or (d) is a use of the Product (or information generated from the use of the Product) that is either prohibited by applicable law or regulation, or contrary to ethical guidelines promulgated by established national and international ethical bodies. Additionally, Purchaser is granted a non-exclusive, non-transferable, personal, non-sublicensable license under Seller's Core IP to install and use Software made available by Seller with the Product, solely in accordance with the Product's Specifications and Documentation, specifically excluding the Excluded Uses; this license will terminate upon Purchaser's failure to comply with these terms and conditions, or by Purchaser discontinuing use of the Software and destroying or removing all copies thereof. All Software, whether provided separately, installed on, or embedded in a Product, is licensed to Purchaser, not sold. Except as expressly stated in this Section no right or license under any intellectual property rights of Seller or Seller's affiliates is or are granted, expressly, by implication, or by estoppel, to Purchaser, and any such rights are expressly reserved to Seller and its affiliates. Purchaser agrees that the contents of and methods of operation of the Product are proprietary to Seller and the Product contains or embodies trade secrets of Seller. "Core IP" means the intellectual property owned or controlled by Seller and Seller's wholly-owned affiliates, as of the date the Product ships, that pertain to or cover aspects or features of the Product (or use thereof) that are common to the Product in all applications and all fields of use but does not include intellectual property that pertain to or cover aspects or features of the Product (and use thereof) only with regard to specific field(s) or specific application(s).

Purchaser is solely responsible for determining whether Purchaser has all intellectual property rights that are necessary for Purchaser's intended uses of the Product.

3. Product Restrictions

The conditions and restrictions found in these terms and conditions are bargained for conditions of sale and therefore control the sale of and use of the Products by Purchaser.

- a. **Unauthorized Uses of Products.** Purchaser agrees: (i) to only use the Product in accordance with the Product's Documentation and Specifications and not to, nor authorize any third party to, use the Products as described in any Excluded Uses, (ii) to use each Consumable only one time, and (iii) to use only Seller Consumables with Seller Hardware. The limitations in (ii)-(iii) do not apply if the Documentation or Specifications for the Product expressly state otherwise.
- b. **Unauthorized Transfer of Products.** Licenses to the Software are not transferable. Purchaser agrees to not sell, rent, lease, loan, transfer or assign or otherwise dispose of any Hardware or component thereof containing Software to any third party unless Purchaser first erases or removes the Software.
- c. **Software License Restrictions.** Purchaser acknowledges that certain Software may be subject to additional terms and conditions. Purchaser may not use, copy, modify, create derivative works of, reverse engineer, decompile, disassemble, distribute, sell, assign, pledge, sublicense, lease, loan, rent, timeshare or otherwise transfer the Software, nor permit any other party to do any of the foregoing. Purchaser may not remove from the Software, or alter, any of the trademarks, trade names, logos, patent or copyright notices or markings, or add any other notices or markings to the Software. Purchaser may not (and may not attempt to) defeat, avoid, by-pass, remove, deactivate or otherwise circumvent any protection mechanisms in the Software including without limitation any such mechanism used to restrict or control the functionality of the Software.
- d. **Third Party Code.** Purchaser acknowledges that certain Software may be subject to additional terms and conditions. To the extent third party code is included in Software and any term or condition of a third party license applicable to such third party code directly conflicts with the terms and conditions set forth herein, the applicable term(s) or condition(s) of that third party license will be applicable only to that third party code and only to the extent necessary to remove the conflict.

4. Regulatory

The Product is labeled with a For Research Use Only or similar labeling statement and is not for use in diagnostic procedures. Purchaser acknowledges that (i) the Product has not been approved, cleared, or licensed by the United States Food and Drug Administration or any other regulatory entity whether foreign or domestic for any specific intended use, whether research, commercial, diagnostic, or otherwise, and (ii) Purchaser must ensure it has any regulatory approvals that are necessary for Purchaser's intended uses of the Product.

Illumina intends that its products be used only in a lawful and ethical manner. Purchaser agrees to comply with all applicable laws, regulations, and ethical guidelines promulgated by established national and international ethical bodies when using, maintaining, and disposing of the Product and the information generated from the use of the Product.

5. Limited Liability

TO THE EXTENT PERMITTED BY LAW, IN NO EVENT SHALL SELLER OR ITS SUPPLIERS BE LIABLE TO PURCHASER OR ANY THIRD PARTY FOR COSTS OF PROCUREMENT OF SUBSTITUTE PRODUCTS OR SERVICES, LOST PROFITS, DATA OR BUSINESS, OR FOR ANY INDIRECT, SPECIAL, INCIDENTAL, EXEMPLARY, CONSEQUENTIAL, OR PUNITIVE DAMAGES OF ANY KIND ARISING OUT OF OR IN CONNECTION WITH, WITHOUT LIMITATION, THE SALE OF THE PRODUCT, ITS USE, SELLER'S PERFORMANCE OR ANY OF THESE TERMS AND CONDITIONS, HOWEVER ARISING OR CAUSED AND ON ANY THEORY OF LIABILITY (WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE).

TO THE EXTENT PERMITTED BY LAW, SELLER'S TOTAL AND CUMULATIVE LIABILITY TO PURCHASER OR ANY THIRD PARTY ARISING OUT OF OR IN CONNECTION WITH THESE TERMS AND CONDITIONS, INCLUDING WITHOUT LIMITATION, THE PRODUCT (INCLUDING USE THEREOF) AND SELLER'S PERFORMANCE, WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE, SHALL IN NO EVENT EXCEED THE AMOUNT PAID TO SELLER FOR THE PARTICULAR PRODUCT CONTAINED IN THE PARTICULAR ORDER THAT DIRECTLY CAUSED THE LIABILITY.

6. Limitations on Warranties

TO THE EXTENT PERMITTED BY LAW AND SUBJECT TO THE EXPRESS PRODUCT WARRANTY MADE IN THESE TERMS AND CONDITIONS SELLER MAKES NO (AND EXPRESSLY DISCLAIMS ALL) WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, WITH RESPECT TO THE PRODUCT, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT, OR ARISING FROM COURSE OF PERFORMANCE, DEALING, USAGE OR TRADE. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, SELLER MAKES NO CLAIM, REPRESENTATION, OR WARRANTY OF ANY KIND AS TO THE

UTILITY OF THE PRODUCT FOR PURCHASER'S INTENDED USES.

7. **Product Warranty**

All warranties are personal to the Purchaser and may not be transferred or assigned to a third-party, including an affiliate of Purchaser. All warranties are facility specific and do not transfer if the Product is moved to another facility of Purchaser, unless Seller conducts such move. The warranties described in these terms and conditions exclude any stand-alone third-party goods that may be acquired or used with the Products.

- a. **Warranty for Consumables.** Seller warrants that Consumables, other than custom Consumables, will conform to their Specifications until the later of (i) 3 months from the date of shipment from Seller, or (ii) any expiration date or the end of the shelf-life pre-printed on such Consumable by Seller, but in either event, no later than 12 months from the date of shipment. With respect to custom Consumables (i.e., Consumables made to specifications or designs made by Purchaser or provided to Seller by, or on behalf of, Purchaser), Seller only warrants that the custom Consumables will be made and tested in accordance with Seller's standard manufacturing and quality control processes. Seller makes no warranty that custom Consumables will work as intended by Purchaser or for Purchaser's intended uses.
- b. **Warranty for Hardware.** Seller warrants that Hardware, other than Upgraded Components, will conform to its Specifications for a period of 12 months after its shipment date from Seller unless the Hardware includes Seller provided installation in which case the warranty period begins on the date of installation or 30 days after the date the Hardware was delivered, whichever occurs first ("**Base Hardware Warranty**"). "**Upgraded Components**" means Seller provided components, modifications, or enhancements to Hardware provided pursuant to the Base Hardware Warranty. Seller warrants that Upgraded Components will conform to their Specifications for a period of 90 days from the date the Upgraded Components are provided by Seller. Upgraded Components do not extend the Base Hardware Warranty unless the upgrade was conducted by Seller at Seller's facilities in which case the upgraded Hardware shipped to Purchaser comes with a new Base Hardware Warranty.
- c. **Exclusions from Warranty Coverage.** The foregoing warranties do not apply to the extent a non-conformance is due to (i) abuse, misuse, neglect, negligence, accident, improper storage, or use contrary to the Documentation or Specifications, (ii) use that is an Excluded Use, (iii) improper handling, installation, maintenance, or repair (other than if performed by Seller's personnel), (iv) unauthorized alterations, (v) Force Majeure events, or (vi) use with a third party's good (unless the Product's Documentation or Specifications expressly state such third party's good is for use with the Product).
- d. **Procedure for Warranty Coverage.** In order to be eligible for repair or replacement under this warranty Purchaser must (i) promptly contact Seller's support department to report the non-conformance, (ii) cooperate with Seller in confirming or diagnosing the non-conformance, and (iii) return the Product, transportation charges prepaid to Seller following Seller's instructions or, if agreed by Seller and Purchaser, grant Seller's authorized repair personnel access to the Product in order to confirm the non-conformance and make repairs.
- e. **Sole Remedy under Warranty.** Seller will, at its option, repair or replace non-conforming Product that is covered by this warranty, provided that Seller can reasonably identify and confirm such nonconformance. The warranty period for repaired or replaced Consumables is 90 days from the date of shipment, or the remaining period on the original Consumables warranty, whichever is later. Hardware may be repaired or replaced with functionally equivalent, reconditioned, or new Hardware or components (if only a component of Hardware is non-conforming). If the Hardware is replaced in its entirety, the warranty period for the replacement is 90 days from the date of shipment or the remaining period on the original Hardware warranty, whichever is later. If only a component is being repaired or replaced, the warranty period for such component is 90 days from the date of shipment or the remaining period on the original Hardware warranty, whichever ends later. The preceding states Purchaser's sole remedy and Seller's sole obligations under the warranty.

8. **Indemnification**

- a. **Indemnification by Seller.** Subject to these terms and conditions, including without limitation, the Exclusions to Seller's Indemnification Obligations (Section 8(b) below), the Conditions to Indemnification Obligations (Section 8(d) below), Seller shall (i) defend, indemnify and hold harmless Purchaser against any third-party claim or action alleging that the Product when used in accordance with these terms and conditions infringes the valid and enforceable intellectual property rights of a third party, and (ii) pay all settlements entered into, and all final judgments and costs (including reasonable attorneys' fees) awarded against Purchaser in connection with such infringement claim. If the Product or any part thereof, becomes, or in Seller's opinion may become, the subject of an infringement claim, Seller shall have the right, at its option, to (A) procure for Purchaser the right to continue using the Product, (B) modify or replace the Product with a substantially equivalent non-infringing substitute, or (C) require the return of the Product and terminate the rights, license, and any other permissions provided to Purchaser with respect to the Product and refund to Purchaser the depreciated value (as shown in Purchaser's official records) of

the returned Product at the time of such return; provided that, no refund will be given for used-up or expired Consumables. This Section states the entire liability of Seller for any infringement of third-party intellectual property rights.

- b. **Exclusions to Seller Indemnification Obligations.** For the avoidance of doubt, Seller has no obligation to defend, indemnify or hold harmless Purchaser for any infringement claim to the extent such infringement arises from: (i) use of the Product in any manner or for any Excluded Use, (ii) use of the Product in any manner not in accordance with the rights expressly granted to Purchaser under these terms and conditions, (iii) use of the Product in combination with any third party products, materials, or services (unless the Product's Documentation or Specifications expressly state such third party's good is for use with the Product), (iv) use of the Product to perform any assay or other process not supplied by Seller, (v) Seller's compliance with specifications or instructions for such Product furnished by, or on behalf of, Purchaser, or (vi) Purchaser's breach of any of these terms and conditions, (vii) use of stand-alone third party goods that may be acquired or used with the Products (each of (i) – (vii), is referred to as an "Excluded Claim").
 - c. **Indemnification by Purchaser.** [OMITTED]
 - d. **Conditions to Indemnification Obligations.** The parties' indemnification obligations are conditioned upon the party seeking indemnification (i) promptly notifying the other party in writing of such claim or action, (ii) giving the other party exclusive control and authority over the defense and settlement of such claim or action, (iii) not admitting infringement of any intellectual property right without prior written consent of the other party, (iv) not entering into any settlement or compromise of any such claim or action without the other party's prior written consent, and (v) providing reasonable assistance to the other party in the defense of the claim or action; provided that, the indemnifying party reimburses the indemnified party for its reasonable out-of-pocket expenses incurred in providing such assistance.
9. **Payment Terms**
- Seller will invoice upon shipment. Subject to Seller's credit review of Purchaser (following which Seller shall inform Purchaser of applicable payment terms), all payments are due within 30 days of the date of the invoice except that payments in Japan are due within 60 days of the date of the invoice. All amounts due shall be paid in the currency found on the invoice. If payment is made by wire or other electronic funds transfer, Purchaser is solely responsible for any bank or other fees charged and will reimburse Seller for any such fees. If any payment is not made by the due date Seller may exercise all rights and remedies available by law. Purchaser shall pay for all costs (including reasonable attorneys' fees) incurred by Seller in connection with the collection of late payments. Each purchase order is a separate, independent transaction, and Purchaser has no right of set-off against other purchase orders or other transactions with Seller. Seller will determine payment terms on a per-order basis and may modify credit terms in its discretion. Any amounts not paid when due will accrue interest at the rate of 1.5% per month, or the maximum amount allowed by law, if lower.
10. **Shipping Terms; Title and Risk of Loss**
- Unless otherwise set forth in writing by Seller or otherwise agreed between the parties, all shipments are made DAP (Incoterms 2010) at the address designated by Purchaser at the time of ordering and Purchaser is responsible for freight and insurance which will be added to the invoice and paid by Purchaser, except that all shipments to member countries of the E.U. are made DDP (Incoterms 2010) at the address designated by Purchaser at the time of ordering. In all cases, title (except for Software and third-party software) and risk of loss transfers to Purchaser when Product is made available at such address.
11. **Taxes**
- The PVWC, as a public entity, is exempt from having to collect and/or remit taxes. No tax shall be charged to the PVWC in connection with this transaction
12. **General**
- a. **Applicability of Terms and Conditions.** These terms and conditions exclusively govern the ordering, purchase, supply, and use of Product, and override any conflicting, amending and/or additional terms contained in any purchase orders, invoices, or similar documents all of which are hereby rejected and are null and void. Seller's failure to object to any such terms shall not constitute a waiver by Seller, nor constitute acceptance by Seller of such terms and conditions. Third party products may be subject to additional terms and conditions.
 - b. **Order Changes/Cancellations.** Orders for Products may not be changed or cancelled once placed.
 - c. **Governing Law.** These terms and conditions, their interpretation, and the performance of the parties shall be governed by the laws of (i) the State of California, U.S.A., if Purchaser is located in the United States, (ii) the Province of British Columbia and the federal laws of Canada applicable in the Province of British Columbia, if Purchaser is located in Canada, or (iii) the laws of the country where the Seller entity is located, if Purchaser is not located in the United States or Canada. Seller and Purchaser agree that the United Nations Convention on Contracts for the International Sale of Goods shall not apply to these terms and conditions, including any terms in the Documentation. Any legal action brought by either Party against the other arising under this Contract shall be venued exclusively in the Superior Court of New Jersey, Passaic County, unless a Party wishes to bring, and can satisfy the jurisdictional requirements for maintaining, an action in the United States District Court for the District of New Jersey ("DNJ"), in which case the federal action shall be venued exclusively in the Newark Vicinage of the DNJ. Any alternative dispute resolution proceeding allowed or required by the Contract or by the law must be venued in Passaic County, New Jersey or in another location acceptable to the Parties
 - d. **Arbitration.**
 - i. [OMITTED]
 - e. **Representations and Warranties.** Purchaser is not an authorized dealer, representative, reseller, or distributor of any of Seller's, or its affiliates', products or services. Purchaser represents and warrants that it (i) is not purchasing the Product on behalf of a third party, (ii) is not purchasing the Product in order to resell or distribute the Product to a third party, (iii) is not purchasing the Product in order to export the Product from the country in which Seller shipped the Product pursuant to the ship-to address designated by Purchaser at the time of ordering ("Ship-To Country"), and (iv) will not export the Product out of the Ship-To Country.
 - f. **Remedies for Breach.** In addition to any remedies specified elsewhere under these terms and conditions, and any remedies available to Seller under law or in equity, in the event Purchaser breaches these terms and conditions, Seller may do any, all, or any combination of the following: (i) cease performance, including without limitation, cease further shipments of Product, (ii) terminate the rights granted to Purchaser pursuant to Section 2 (Rights to Product Upon Purchase), (iii) terminate any service contracts then in effect for affected Product, (iv) terminate any remaining product warranty for the affected Product, or

- (v) require Purchaser to immediately pay any unpaid invoices.
- g. **Service Contracts.** If a Seller extended service contract for Hardware is being provided, then Seller's standard terms and conditions for such service contract shall exclusively govern such extended service contract.
- h. **Future Products.** Any future products and/or services ("**Unreleased Products**") are subject to new part numbers, pricing, and specifications and the acquisition of Product hereunder is not in reliance on the availability of any Unreleased Products.
- i. **Seller Affiliates.** Any actions or rights that may be performed or exercised by Seller may be performed or exercised by Seller itself or by any of its affiliates. By way of non-limiting example, Seller's affiliates may carry out shipment, servicing, invoicing and receipt of payment.
- j. **Force Majeure.** Seller is not responsible for any failure to perform or delay attributable in whole or in part to any cause beyond its reasonable control, including but not limited to acts of God, fire, flood, tornado, earthquake, hurricane, lightning, government actions, actual or threatened acts of war, terrorism, civil disturbance or insurrection, sabotage, labor shortages or disputes, failure or delay in delivery by Seller's suppliers or subcontractors, transportation difficulties, shortage of energy, raw materials or equipment, or Purchaser's fault or negligence. In the event of any such delay the delivery date shall be deferred for a period equal to the time lost by reason of the delay.
- k. **Notices.** Any notice required or permitted shall be in writing and shall be deemed received when (i) delivered personally; (ii) 5 days after having been sent by registered or certified mail, return receipt requested, postage prepaid (or 10 days for international mail); or (iii) 1 day after deposit with a commercial express courier that provides written verification of receipt.
- l. **Seller Information.** Seller may maintain and use a database of orders and account information pertaining to Purchaser for purposes of order processing, maintaining records, assisting with future orders of Purchaser, and compliance with applicable laws and regulations. Purchaser may not disclose any financial terms of this transaction to any third party without the prior written consent of the Seller, except as (and only to the extent) required by securities or other applicable law. Purchaser grants to Seller a non-exclusive, fully paid-up, royalty-free, worldwide, irrevocable, perpetual right and license, with the right to sublicense, to use and commercialize in any manner suggestions, ideas or comments provided by Purchaser to Seller related to the Products.
- m. **Export Compliance.** The Products, any related technology, or information provided to Purchaser may be subject to restrictions and controls imposed by the United States Export Administration Act and the regulations thereunder (or the export regulations and laws of another country). Notwithstanding anything to the contrary in these terms and conditions, Purchaser agrees not to use the Products in, or export or re-export the Products, any related technology, or information provided to Purchaser into, any country or to any person or entity, or in any manner, in violation of such controls or any other laws, rules or regulations of any country, state or jurisdiction.
- n. **Healthcare Law Compliance.** Purchaser acknowledges and agrees that as a healthcare company, Seller, and Seller's affiliates, may be required by applicable law and regulation ("Healthcare Laws") to disclose the existence of these terms and conditions, the terms herein including financial terms, and the subject matter (e.g., the U.S. Sunshine Act, and state and foreign equivalents). Seller agrees it, and its affiliates, will disclose the least amount of information as possible in order to comply with such Healthcare Laws.
- o. **Publicity.** Purchaser agrees that it shall not issue any press release or make any public statement regarding acquisition of the Products, without prior written approval from Seller, which approval shall not be unreasonably withheld or delayed.
- p. **Miscellaneous.** Except as expressly stated in these terms and conditions, no right or license under any of Seller, or Seller's affiliates, intellectual property rights is or are granted expressly, by implication, or by estoppel. All references to days mean calendar days unless specifically stated otherwise. Seller may cease performance (including cancellation of any order outstanding) immediately without liability to Purchaser if Purchaser becomes the subject of a voluntary or involuntary petition in bankruptcy or any proceeding relating to insolvency, receivership, liquidation or composition for the benefit of creditors. These terms and conditions represent the entire agreement between the parties regarding the subject matter hereof and supersede all prior discussions, communications, agreements, and understandings of any kind between the parties. No amendment to these terms or waiver of any right, condition, or breach will be effective unless made in a writing signed by both parties. If any provision is held invalid or unenforceable, such provision shall be enforced to the maximum extent permissible so as to give effect to the intent of the parties, and the remaining terms will continue in full force and effect. The failure of either party to exercise any right granted herein or to require any performance of any term or the waiver by either party of any breach shall not prevent a subsequent exercise or enforcement of, or be deemed a waiver of any subsequent breach of, the same or any other term. Nothing herein shall constitute or create a joint venture, partnership, or any other similar arrangement between the parties. There are no third-party beneficiaries to these terms and conditions.
- q. **Insurance.** Illumina shall purchase and maintain the following insurance coverages at its sole cost and expense during the term of the Agreement: Workers Compensation (as per applicable law), Employer's Liability (\$1 million coverage minimum), Comprehensive General Liability Insurance (including premises operation liability, personal liability, products liability, with all coverage on "occurrence form", a minimum coverage of \$1 million per occurrence / \$2 million in aggregate), auto insurance (covering claims for bodily injury and property damage, \$1 million combined single limit). All insurance policies that Illumina is required to purchase and maintain shall: (i) name as an additional insured the "Passaic Valley Water Commission, its Commissioners, and Officers", (ii) be primary and without a right of contribution from the PVWC's insurance, (iii) expressly cover contractually assumed liabilities consistent with the indemnification provisions in the Agreement, (iv) contain a provision or an endorsement that the insurer(s) waive any right of subrogation against the PVWC, and (v) contain an endorsement requiring the carrier to provide at least thirty (30) day prior written notice to the PVWC of any cancellation, intent not to renew, or material change in coverage.
- r. Within seven (7) days of the award of this Agreement by the Commissioners of the PVWC, Illumina shall furnish to the PVWC endorsements, not mere certifications of insurance, showing that it has complied with all of the insurance requirements above.
- s. **Effective Date.** The Effective Date of this Agreement shall be the date on which this Agreement is fully executed by, and delivered to, all Parties hereto and the PVWC's governing body has duly authorized the PVWC to execute, deliver, and be bound by the terms of this Agreement. Unless and until the PVWC's governing body has duly authorized or ratified this Agreement, this Agreement shall have no force and effect and shall be null and void.

By: _____
James Duprey, PE, Business Administrator

Date: _____



illumina Inc.

By: _____
Mark Van Oene – Senior VP and Chief Commerical Officer

Date: October 30, 2020

illumina, Inc
5200 Illumina Way
San Diego CA 92122-4616
USA
Hereinafter referred to as "illumina"

CUSTOMER INFORMATION

Company Name	Passaic Valley Water Commission 1525 Main Ave Clifton, New Jersey, USA 07011
Account Number	4000039202
Contact	Suzanne DeLorenzo sdelorenzo@pvwc.com
Billing Entity	Passaic Valley Water Commission
Ship To	Passaic Valley Water Commission 1525 Main Ave Clifton, New Jersey, USA 07011
Ultimate Consignee	Passaic Valley Water Commission USA

HOW TO ORDER

For all consumable orders please submit your order
online through
Myillumina (<http://my.illumina.com>).

For all other orders please submit your institutional
Purchase Order and a complete copy of this quotation to the
attention of:

illumina Customer Service
customerservice@illumina.com
Toll Free: +1.800.809.ILMN (4566)

illumina Sales Representative:

Paige Burres
+1 (858) 736.3094
pburres@illumina.com

PRODUCT AND PRICING

Catalog Number	Item Description	List Price (USD)	Discount	Discounted Price (USD)	Units	Term (Years)	Subtotal (USD)
SY-410-1003	<p>MiSeq System The MiSeq System is an Integrated system for automated generation of DNA clonal clusters by bridge amplification, sequencing, primary and secondary analysis. System includes embedded touchscreen monitor and on-instrument computer, dual surface imaging capability, MiSeq Software Suite, installation kits and standards, installation and training, and 12 months warranty (including parts and labor).</p>	99,000.00	14,850.00 (15.00%)	84,150.00	1	0.00	84,150.00
20019983	<p>MiSeq Silver Support Plan Includes full coverage for parts, labor, and travel; Reagent replacement upon HW failures; 1 PM; Remote Technical Support 18x5; 2 business day on-site response target*; control SW and IHW updates; on-site applications support; discounts on advanced training; remote monitoring available. This is the most popular full-service plan balancing performance, productivity, and cost to deliver confidence and peace of mind. *select geographies. Contract Term: 12.00 months Billing Frequency: In-Full Advance Invoicing</p>	13,785.00	2,067.75 (15.00%)	11,717.25	1	1.00	11,717.25
TR-201-0009	<p>Nextera XT - Customer Site Hands-on training of the complete Nextera XT DNA workflow. Covers</p>	5,000.00	750.00 (15.00%)	4,250.00	1	0.00	4,250.00

	quantification and quality control of input DNA and output libraries, bead-based normalization, best practices and troubleshooting tips.						
MS-102-3003	MiSeq Reagent Kit v3 (600-cycle) Provides kitted reagents for up to 625 cycles of sequencing on the MiSeq System. Includes: Paired-End Reagent plate (600-cycles), MiSeq Flow Cell, and Wash Buffer.	1,674.00	251.10 (15.00%)	1,422.90	2	0.00	2,845.80
FC-131-1001	Nextera XT Index Kit (24 indexes, 96 samples) Each Nextera XT Index Kit includes 24 unique indexes for sequencing library preparation of up to 96 samples.	266.00	39.90 (15.00%)	226.10	1	0.00	226.10
Subtotal							103,189.15
Shipping & Insurance / Handling Fee							1,744.44
Final Investment (USD)							104,933.59

All pricing and terms reflected in this Quotation are for informational purposes only and subject to change after final customer review and approval by Illumina.

Tax is an estimate and is subject to change upon invoicing based upon the appropriate tax regulations.

Payment Terms: Net 30 Days
INCO Terms: DAP: Delivered At Place

POST PRICING MESSAGE

Illumina/Passaic Valley Water Commission negotiated Terms and Conditions as agreed upon in "Passaic Valley MiSeq Terms and Conditions" shall govern this purchase.

SHIP HOLD POLICY

In cases where this Quotation does not include a pre-defined ship schedule, the following ship hold terms shall apply:

- All orders must have a defined ship schedule. The initial ship date must be no later than three (3) months from the date the purchase order is received by Illumina (as provided in the Order Confirmation) and the entire order must be shipped complete within twelve (12) months from Illumina's receipt of the purchase order.
- Any exceptions to these ship hold terms must be agreed to in writing by Illumina and the Customer must pre-pay at least fifty percent (50%) of the purchase order amount of the affected shipments.
- Customers may request two (2) shipment delays for any single purchase order. The total months of delayed shipment for shipments associated with a single purchase order shall not exceed six (6) months.
- If Customer has requested a delayed shipment, Illumina reserves the right to change the lead time necessary to initiate Customer's first shipment (which may be longer than the lead time quoted at the time of the order placement).
- If Customer cannot take shipment in accordance with these terms, Illumina reserves the right to cancel the order in its entirety without any liability to the Customer.

Illumina does not supply plastics such as microplates or pipette tips for use in the listed assays and these are not included in the consumables pricing provided; however, as a result of the highly multiplexed nature of all assays, plastics alone contribute minimally to the final cost.

Terms & Conditions

The offer contained in this document is automatically revoked by Illumina if not executed by Customer and a purchase order received by Illumina before 5:00 pm (based on the location of the Illumina quoting entity) on the expiration date shown on page 1 of this Quotation.

By this Quotation, Illumina conditionally offers to Customer the Illumina products and/or services described above. This offer is conditional on, and may only be accepted by, Customer's agreement that Illumina's terms and conditions listed below or otherwise included with the product or service, as applicable to the specific product or service quoted ("Terms and Conditions"), is the sole and exclusive agreement between Customer and Illumina with respect to the particular product or service.

For the avoidance of doubt, any terms and conditions applicable to "Test Specific Products" that have a specific intended use in such products' documentation, as set forth in such terms and conditions, are applicable only to in vitro diagnostic products.

Additionally, notwithstanding the Illumina entity that is listed on the cover page of this Quotation, the parties understand and agree that in the event an Illumina affiliate provides products or services to Customer, such Illumina affiliate is the relevant quoting and contracting entity for such products or services under this Quotation and the relevant Terms and Conditions.

By submitting an order, Customer accepts and agrees that the Terms and Conditions referenced in this Quotation is the sole and exclusive agreement between Customer and Illumina with respect to the products and/or services as described above and accepts all other terms of this quotation. NOTWITHSTANDING THE FOREGOING, IF ILLUMINA AND CUSTOMER HAVE ENTERED INTO A VALID AND ENFORCEABLE SIGNED AGREEMENT GOVERNING THE ILLUMINA PRODUCTS AND/OR SERVICES DESCRIBED ABOVE, THE ORDER OF PRECEDENCE BETWEEN THE AGREEMENT AND THE TERMS AND CONDITIONS SHALL BE AS FOLLOWS: IN THE EVENT OF A CONFLICT BETWEEN THE TERMS OF THE AGREEMENT AND THE TERMS AND CONDITIONS, OR IF THE AGREEMENT INCLUDES ADDITIONAL TERMS NOT ADDRESSED IN THE TERMS AND CONDITIONS, THE AGREEMENT SHALL GOVERN WITH RESPECT TO SUCH TERMS.

<https://www.illumina.com/company/legal/terms-and-conditions.html>

PASSAIC VALLEY WATER COMMISSION

**Certification of Availability of Funds
from the Office of the Comptroller, PVWC**

Exhibit C

OFFICE OF THE COMPTROLLER

CERTIFICATION OF AVAILABILITY OF FUNDS

It is hereby certified that subject to Commission approval of future Budgets, with respect to multi-budget year contracts, there are or will be sufficient available funds for expenditures to be incurred as result of any contract or commitment to be entered into by Passaic Valley Water Commission as follows:

Description of Project or Contract: **20-B-36 - Illumina Inc.**

Amount of Project or Contract: \$ 104,933.59

1. Acct: # 001-0901-419-95-26 Capital / Lab Equipment

Specific Appropriation to which expenditures will be charged: Capital Budget 2020

Other comments: Furnish and Deliver Next Generation Sequencing Equipment

Date of Certification: 11/3/2020 Certified: \$ 104,933.59



Yitzhak Weiss
Comptroller and Chief Financial Officer

YW:yw

RESOLUTION: 20-136
RESOLUTION OF PASSAIC VALLEY WATER COMMISSION
DATE OF ADOPTION: NOVEMBER 12, 2020

Approved as to form and legality by Law Department on basis of facts set forth by Executive Director, Purchasing, Engineering and Finance Departments.

Introduced by Commissioner: **VAN RENSALIER**

Seconded by Commissioner: **VANNOY**

WHEREAS, on October 22, 2020 two (2) bids were received by Passaic Valley Water Commission ("PVWC") for Contract No. 20-B-46 "Chain Link Fence Maintenance and Installation"; and

WHEREAS, the bids have been reviewed by the Executive Director, Director of Engineering, Director of Purchasing, (and Counsel as to form and legality); and

WHEREAS, the Local Public Contracts Law provides for award of the Contract upon receipt of bids and qualifications of bidders therefor; and

WHEREAS, the lowest responsible responsive bid submitted for this contract that of Fox Fence Enterprises, Inc. of Clifton, New Jersey (the "Awardee") with respect to said bid in the amount of \$76,536.00; and

WHEREAS, PVWC's Comptroller has certified, with respect hereto, that funds are currently available for said purpose and a copy of the said certification is attached hereto and made a part hereof;

NOW, THEREFORE, BE IT RESOLVED, by Passaic Valley Water Commission, in the County of Passaic, New Jersey:


1. That Contract No. 20-B-46 "Chain Link Fence Maintenance and Installation" in the total amount of \$76,536.00 in connection with the above described goods and services is hereby awarded to the Awardee.
2. That the appropriate officers of the Commission are hereby authorized to execute the Contract; and implement the terms of said Contract in accordance with this Resolution and the

submissions provided in connection therewith, with respect to solicitation for bids made in connection with Contract 20-B-46 as set forth hereinabove.

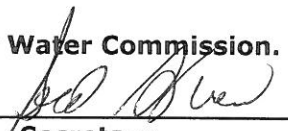
RECORD OF COMMISSION VOTE ON FINAL PASSAGE

	AYE	NAY	ABSTAIN	ABSENT
COTTON, R.	<u>X</u>	___	___	___
FRIEND, G.	<u>X</u>	___	___	___
VANNOY, R.	<u>X</u>	___	___	___
LEVINE, J.	<u>X</u>	___	___	___
SANCHEZ, R.	___	___	___	<u>X</u>
VAN RENSA LIER, R.	<u>X</u>	___	___	___
KOLODZIEJ, J.	<u>X</u>	___	___	___

Adopted at a meeting of Passaic Valley Water Commission.



President
KOLODZIEJ, J.

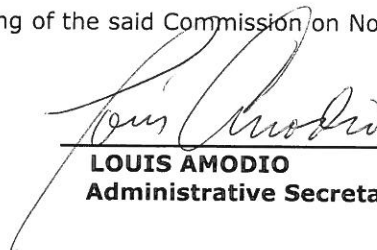


Secretary
GERALD FRIEND

This Resolution, when adopted, must remain in the custody of the Administrative Secretary.

CERTIFICATION

I, LOUIS AMODIO, Administrative Secretary of the Passaic Valley Water Commission in the County of Passaic, and the State of New Jersey do hereby certify that the foregoing Resolution is a true copy thereof of the foregoing Resolution duly passed and adopted by a majority of a legal quorum of the full membership of the Passaic Valley Water Commission at its duly noticed and convened meeting of the said Commission on November 12, 2020.



LOUIS AMODIO
Administrative Secretary

PASSAIC VALLEY WATER COMMISSION

INTER-OFFICE MEMO

DATE: November 28, 2020

FROM: Purchasing Department

TO: Joseph A. Bella
George T. Hanley
Yitzchak Weiss

RE: **Contract # 20-B-46**
Chain Link Fence Maintenance and Installation

The Purchasing Department has reviewed the above stated Contract for required documents, affirmative action requirements, and the Contract proposal tabulations. The Finance Department has certified the availability of funds (see attached).

Of the two (2) bids received, the lowest responsive and responsible proposal was submitted by **Fox Fence Enterprises, Inc.**, of Clifton, New Jersey, in the amount of **\$76,536.00**.

Respectfully submitted,

Gregg B. Lucianin
Buyer

cc: L. Amodio
J. Duprey

OFFICE OF THE COMPTROLLER

CERTIFICATION OF AVAILABILITY OF FUNDS

It is hereby certified that subject to Commission approval of future Budgets, with respect to multi-budget year contracts, there are or will be sufficient available funds for expenditures to be incurred as result of any contract or commitment to be entered into by Passaic Valley Water Commission as follows:

Description of Project or Contract: **20-B-46 – Fox Fence Enterprises Inc.**

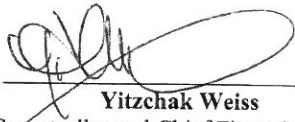
Amount of Project or Contract: \$76,536.00

1. Acct: # 001-0901-419-95- Capital / Fencing

Specific Appropriation to which expenditures will be charged: Budget 2020/2021/2022

Other comments: Two (2) Year Contract Commencing: November 2020
Chain Link Fence Maintenance & Installation

Date of Certification: 10/28/2020 Certified: \$76,536.00



Yitzchak Weiss
Comptroller and Chief Financial Officer

YW:gbl

CONTRACT # 20-B-46

DATE: 10/22/2020

CONTRACT NAME: Chain Link Fence Maintenance & Installation

BIDDERS	BID DEPOSIT	TOTAL AMOUNT OF CONTRACT	REMARKS
Fox Fence Maintenance Installation 417 Crooks Ave Clifton, NJ 07011 wlapia@foxfenceenterprisesinc.com	CC- Certified Check CA- Cashier's Check BB- Bid Bond Certified Check Cashier's Check Bid Bond Not to Exceed 10% \$20,000.00	\$76,536.00	X Business Registration Cert. X PVWC Consent of Surety X Other Consent of Surety X Public Works Cont. Cert. EEO
Compralli Equipment & Services 5D Great Meadow Lane East Hanover, NJ 07936 sales@cestance.com	Certified Check Company Check Bid Bond Not to Exceed \$20,000.00	\$274,176.00	X Business Registration Cert. X PVWC Consent of Surety X Other Consent of Surety X Public Works Cont. Cert. EEO
	Certified Check Cashier's Check Bid Bond Not to Exceed		Business Registration Cert. PVWC Consent of Surety Other Consent of Surety Public Works Cont. Cert. EEO
	Certified Check Cashier's Check Bid Bond Not to Exceed		Business Registration Cert. PVWC Consent of Surety Other Consent of Surety Public Works Cont. Cert. EEO
	Certified Check Cashier's Check Bid Bond Not to Exceed		Business Registration Cert. PVWC Consent of Surety Other Consent of Surety Public Works Cont. Cert. EEO
	Certified Check Cashier's Check Bid Bond Not to Exceed		Business Registration Cert. PVWC Consent of Surety Other Consent of Surety Public Works Cont. Cert. EEO



CONTRACT # 20-B-46

TITLE: CHAIN LINK FENCE MAINT & INSTALL

	FOX FENCE	COMPREH EQUIP.				
INVITATION TO BID (2)						
10% BID BOND	✓	check				
PURCHASING CHECKED MATH	✓	✓				
SURETY CO. CERT.	✓	✓				
AFFIRMATIVE ACTION	✓					
QUESTIONNAIRE (IF APPLICABLE)	✓	✓				
CORPORATE RESOLUTION	✓	✓				
STOCKHOLDER LIST	✓	✓				
DEBARMENT STATEMENT	✓	✓				
BIDDERS CERT. (BC)	✓	✓				
PURCHASING MEMO ISSUED	MBY					
LAW DEPT. APPROVAL						
AWARD LETTER BY JAB						
PRESENTATION TO COMMISSION						
WINNER / LOSER LETTERS PREPARED						
LOSER LETTERS MAILED						
COLLATE WINNER BOOKS						
CERTIFICATION OF FUNDS CHIEF FINANCIAL OFFICER						
BUSINESS REGISTRATION CERTIFICATE	✓	✓				
PUBLIC WORKS CONTRACTORS CERTIFICATE	✓	✓				
SUBCONTRACTOR LIST						
ACKNOWLEDGMENT OF ADDENDA						

*PROPOSAL CONTAINS QUALIFICATIONS

RESOLUTION: 20-137
RESOLUTION OF PASSAIC VALLEY WATER COMMISSION
STATE CONTRACT #19-TELE-00656
PROCUREMENT OF COMPUTER EQUIPMENT

DATE OF ADOPTION: NOVEMBER 12, 2020

Approved as to form and legality by Law Department on basis of facts set forth by Executive Director, Purchasing, Engineering and Finance Departments.

Introduced by Commissioner: **VAN RENSA LIER**

Seconded by Commissioner: **VANNOY**

WHEREAS, PVWC requires the procurement of computer equipment for upgrades and replacement of obsolete computer equipment that are nearing or at the end of their useful life; and

WHEREAS, in accordance with N.J.S.A. 40A:11-12, PVWC may purchase goods or services under contracts entered into on behalf of the State by the Division of Purchase and Property in the Department of the Treasury; and

WHEREAS, PVWC has elected to procure the said computer equipment in the total amount of \$79,706.94 from Dell Marketing, L.P. of Round Rock, Texas (the "Awardee") under State Contract # 19-TELE-00656 (herein the "State Contract"), and a copy of a memorandum dated October 30, 2020 from PVWC's Director of Purchasing, along with other relevant information, is attached hereto and made a part hereof as Exhibit A; and

WHEREAS, N.J.S.A. 40A:11-12 of the Local Public Contracts Law provides for the awarding of said contract to the Awardee; and

WHEREAS, the Executive Director and the Director of Engineering have reviewed the above-referenced memorandum and concur with the Director of Purchasing's recommendations, (and the General Counsel has reviewed the proposed purchase as to form and legality); and

WHEREAS, PVWC's Comptroller has certified, with respect hereto, that funds are currently available for said purpose and said certificate is attached hereto and made a part hereof in above-referenced Exhibit A;

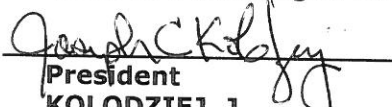
NOW, THEREFORE, BE IT RESOLVED, by Passaic Valley Water Commission, in the County of Passaic, New Jersey;

1. That the purchase of the above-referenced replacement servers under the State Contract is hereby awarded to the Awardee in the total amount of \$79,706.94; and
2. That the appropriate officers and employees of PVWC are hereby authorized and directed to perform such acts and execute such documents as are consistent herewith, with respect to said procurement under the State Contract as set forth hereinabove.

RECORD OF COMMISSION VOTE ON FINAL PASSAGE

	AYE	NAY	ABSTAIN	ABSENT
COTTON, R	<u>X</u>	___	___	___
FRIEND, G.	<u>X</u>	___	___	___
VANNOY, R.	<u>X</u>	___	___	___
LEVINE, J.	<u>X</u>	___	___	___
SANCHEZ, R.	___	___	___	<u>X</u>
VAN RENSA LIER, R.	<u>X</u>	___	___	___
KO LODZIEJ, J.	<u>X</u>	___	___	___

Adopted at a meeting of Passaic Valley Water Commission.


 President
KO LODZIEJ, J.


 Secretary
GERALD FRIEND

This Resolution, when adopted, must remain in the custody of the Administrative Secretary.

CERTIFICATION

I, LOUIS AMODIO, Administrative Secretary of the Passaic Valley Water Commission in the County of Passaic, and the State of New Jersey do hereby certify that the foregoing Resolution is a true copy thereof of the foregoing Resolution duly passed and adopted by a majority of a legal quorum of the full membership of the Passaic Valley Water Commission at its duly noticed and convened meeting of the said Commission on November 12, 2020.



LOUIS AMODIO
Administrative Secretary

PASSAIC VALLEY WATER COMMISSION

PROCUREMENT OF COMPUTER EQUIPMENT

**PVWC'S PURCHASING DEPARTMENT
MEMORANDUM DATED OCTOBER 30, 2020
PVWC's FINANCIAL CERTIFICATION SHEET
AND OTHER RELEVANT INFORMATION**

EXHIBIT A

PASSAIC VALLEY WATER COMMISSION

INTER-OFFICE MEMO

DATE: October 30, 2020

FROM: Purchasing Department

TO: Joseph A. Bella
George T. Hanley
Yitzchak Weiss

RE: **State Contract Purchase – Contract # – 19-TELE-00656
Computer Equipment**

The IT Dept. is requesting permission to purchase computer equipment.

Various items are needed (see attached lists) for upgrades and replacement of old computers and equipment.

The State Contract purchase will be from Dell Marketing LP., of Round Rock, Texas in the amount of \$79,706.94. Funds for this purchase have been budgeted under our 2020 Capital Expenditures. The Finance Department has "Certified the Availability of Funds" (attached).

Respectfully submitted,

Gregg B. Lucianin
Buyer

cc: L. Amodio
J. Duprey



Advanced Search

Search for: Bids Contracts/Blankets

Search Using: ALL of the criteria

Search Fields: Contract/Blanket #

Contract/Blanket Description

Vendor Name dell

Type Code

Catalog

Expiration Date (MM/DD/YYYY): From: [calendar icon] To: [calendar icon]

Item Description

Organization

Department

NIGP Class

NIGP Class Item

Commodity Code

Include Expired

PO Type

Buyer

Bid #

Find It Clear

Results

Contract/Blankets 1#	Bid #	Description	Vendor Name	Type Code	Begin Date	End Date
89850		M0003 - SOFTWARE LICENSE & RELATED SERVICES	Dell Marketing L.P.	19	09/01/2015	12/31/2020
88796		M7000 - DATA COMMUNICATIONS EQUIPMENT	Dell Marketing L.P.	18	09/01/2014	05/31/2021
19-TELE-00656		M0483 - COMPUTER EQUIPMENT, PERIPHERALS & RELATED SERVICES	Dell Marketing L.P.	18	10/01/2015	07/31/2021

Exit

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SONJ_SONJ_AWS_PROD_BUYSPPEED_2_bso

OFFICE OF THE COMPTROLLER

CERTIFICATION OF AVAILABILITY OF FUNDS

It is hereby certified that subject to Commission approval of future Budgets, with respect to multi-budget year contracts, there are or will be sufficient available funds for expenditures to be incurred as result of any contract or commitment to be entered into by Passaic Valley Water Commission as follows:


Description of Project or Contract: **State Contract Purchase 19-TELE-00656
Dell Marketing, L.P.**

Amount of Project or Contract: \$79,706.94
1. Acct: # 001-0901-419-95-07 Capital/Computer & Software

Specific Appropriation to which expenditures will be charged: Capital Budget 2020

Other comments: Single Purchase: November 2020
COMPUTER EQUIPMENT

Date of Certification: 10/30/2020 Certified: \$79,706.94



Vitzchak Weiss
Comptroller and Chief Financial Officer

YW:gbl

RESOLUTION: 20-138
RESOLUTION OF PASSAIC VALLEY WATER COMMISSION
AUTHORIZING A SHARED SERVICES AGREEMENT (21LJJFA29)
WITH USGS

DATE OF ADOPTION: NOVEMBER 12, 2020

Approved as to form and legality by the Law Department on the basis of facts and circumstances set forth by the Executive Director and Director of Engineering, Purchasing and Finance Departments.

Introduced by Commissioner: **VAN RENSA LIER**

Seconded by Commissioner: **VANNOY**

WHEREAS, the United States Department of the Interior, U.S. Geological Survey ("USGS") has submitted correspondence dated September 30, 2020 with referenced attachments (the "Correspondence"), along with a Shared Services Agreement (the "Agreement") with Passaic Valley Water Commission ("PVWC") for USGS to continue water resources investigations for the various parameters set forth in the Correspondence, for the period continuing through September 30, 2021, and PVWC wishes to continue said cooperative effort with the USGS; and a copy of the Correspondence and Agreement is attached hereto and made a part hereof as Exhibit A; and

WHEREAS, monitoring and data collection includes utilization of a continuous-record discharge gauging station with data collection platform (for the Passaic River at Little Falls, New Jersey); continuous-record annual peak stage only with data collection platform (for Passaic River above Beatties Dam at Little Falls, New Jersey) to monitor minimum passing flow; and continuous-record 6-parameter water-quality monitor with data collection platform water temperature, specific conductance, dissolved oxygen, percent saturation, pH, and turbidity (for tap water at Main Avenue at Clifton, New Jersey); and

WHEREAS, monitoring and data collection for the water quality parameters set forth in the Correspondence and Agreement will assist PVWC in identifying and appropriately reacting to upstream changes in water quality, which, in turn, helps enhance the robustness of the treatment processes while optimizing chemical dosages and minimizing overall treatment costs; and

WHEREAS, PVWC's total financial contribution for USGS to perform the tasks outlined in the Agreement for the above-referenced duration of the Agreement shall be in an amount not to exceed \$61,055.00; and

WHEREAS, the Agreement has been reviewed by the Executive Director, Director of Engineering, Director of Purchasing; (and General Counsel as to form and legality), all of whom have recommended the Agreement for acceptance in their respective capacities; and

WHEREAS, the Commission has determined that the public health, safety, and welfare of its Customers can best be protected by entering into said Agreement, as authorized under the Uniform Shared Services and Consolidation Act, of the Laws of 2007, Chapter 63, effective April 3, 2007 (the "Act") N.J.S.A. 40A:65-1 through 40A:65-35, as amended, to provide the Services; and

WHEREAS, N.J.S.A. 40A:11-5(2) provides an exception under the Local Public Contracts Law for contracts entered into with the United States of America, the State of New Jersey, County or municipality, or any board, body, office, agency or authority thereof, or any subdivisions thereof; and

WHEREAS, the USGS, located in Lawrenceville, New Jersey, and PVWC are such entities; and

WHEREAS, PVWC's Comptroller has certified, with respect hereto, that funds are currently available for said purpose and said certificate is attached hereto as Exhibit B;

NOW, THEREFORE, BE IT RESOLVED, by Passaic Valley Water Commission, in the County of Passaic, New Jersey:


1. That PVWC hereby authorizes and awards the Shared Services Agreement (20LJJFA29) with USGS for the period continuing through September 30, 2021; all in accordance with the defined scope of services set forth in the Agreement and PVWC's not-to-exceed contribution amount of \$61,055.00 as set forth hereinabove; and

2. That the appropriate officers and employees of PVWC are hereby authorized to perform such acts and execute such documents as are consistent herewith, in order to implement the terms of this Resolution and the Agreement as set forth hereinabove.

RECORD OF COMMISSION VOTE ON FINAL PASSAGE

	AYE	NAY	ABSTAIN	ABSENT
FRIEND, G.	<u> X </u>	<u> </u>	<u> </u>	<u> </u>
VANNOY, R.	<u> X </u>	<u> </u>	<u> </u>	<u> </u>
LEVINE, J.	<u> X </u>	<u> </u>	<u> </u>	<u> </u>
SANCHEZ, R.	<u> </u>	<u> </u>	<u> </u>	<u> X </u>
VAN RENSA LIER, R.	<u> X </u>	<u> </u>	<u> </u>	<u> </u>
COTTON, R.	<u> X </u>	<u> </u>	<u> </u>	<u> </u>
KO LODZIEJ, J.	<u> X </u>	<u> </u>	<u> </u>	<u> </u>

Adopted at a meeting of Passaic Valley Water Commission.



President
KO LODZIEJ, J.

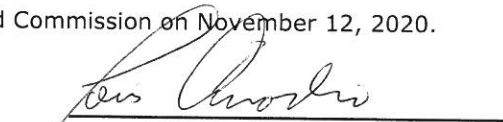


Secretary
GERALD FRIEND

This Resolution, when adopted, must remain in the custody of the Administrative Secretary.

CERTIFICATION

I, LOUIS AMODIO, Administrative Secretary of the Passaic Valley Water Commission in the County of Passaic, and the State of New Jersey do hereby certify that the foregoing Resolution is a true copy thereof of the foregoing Resolution duly passed and adopted by a majority of a legal quorum of the full membership of the Passaic Valley Water Commission at its duly noticed and convened meeting of the said Commission on November 12, 2020.



LOUIS AMODIO
Administrative Secretary

PASSAIC VALLEY WATER COMMISSION

**USGS CORRESPONDENCE DATED SEPTEMBER 30, 2020
AND SHARED SERVICES AGREEMENT (21LJJFA29)
WITH USGS**

EXHIBIT A



United States Department of the Interior

U.S. GEOLOGICAL SURVEY
New Jersey Water Science Center
3450 Princeton Pike, Suite 110
Lawrenceville, NJ 08648

September 30, 2020

Mr. James Duprey
Chief Engineer
Passaic Valley Water Commission
1525 Main Avenue PO Box 230
Clifton, NJ 07011

Dear Mr. Duprey:

Enclosed are two signed originals of our standard joint-funding agreement for the project(s) New Jersey Water Science Center Water Resources Investigations, during the period October 1, 2020 through September 30, 2021 in the amount of \$61,055 from your agency. U.S. Geological Survey contributions for this agreement are \$5,800 for a combined total of \$66,855. Please sign and return one fully-executed original to Jamie L. Lowndes at the address above.

Federal law requires that we have a signed agreement before we start or continue work. If, for any reason, the agreement cannot be signed and returned, please contact Heidi Hoppe by phone number (609) 771-3980 or email hhoppe@usgs.gov to make alternative arrangements.

This is a fixed cost agreement to be billed quarterly via Down Payment Request (automated Form DI-1040). Please allow 30-days from the end of the billing period for issuance of the bill. If you experience any problems with your invoice(s), please contact Nancy Gibbs at phone number (609) 771-3910 or email at ngibbs@usgs.gov.

The results of all work performed under this agreement will be available for publication by the U.S. Geological Survey. We look forward to continuing this and future cooperative efforts in these mutually beneficial water resources studies.

Sincerely,

Richard H. Kropp
Director, New Jersey Water Science Center

Enclosure
21LJFA29 (2)

Fixed Cost Agreement YES[X] NO[]

THIS AGREEMENT is entered into as of the October 1, 2020, by the U.S. GEOLOGICAL SURVEY, New Jersey Water Science Center, UNITED STATES DEPARTMENT OF THE INTERIOR, party of the first part, and the Passaic Valley Water Commission party of the second part.

1. The parties hereto agree that subject to the availability of appropriations and in accordance with their respective authorities there shall be maintained in cooperation Water Resource Investigations (per attachment), herein called the program. The USGS legal authority is 43 USC 36C; 43 USC 50, and 43 USC 50b.

2. The following amounts shall be contributed to cover all of the cost of the necessary field and analytical work directly related to this program. 2(b) include In-Kind-Services in the amount of \$0.00

(a) \$5,800 by the party of the first part during the period
October 1, 2020 to September 30, 2021

(b) \$61,055 by the party of the second part during the period
October 1, 2020 to September 30, 2021

(c) Contributions are provided by the party of the first part through other USGS regional or national programs, in the amount of: \$0

Description of the USGS regional/national program:

(d) Additional or reduced amounts by each party during the above period or succeeding periods as may be determined by mutual agreement and set forth in an exchange of letters between the parties.

(e) The performance period may be changed by mutual agreement and set forth in an exchange of letters between the parties.

3. The costs of this program may be paid by either party in conformity with the laws and regulations respectively governing each party.

4. The field and analytical work pertaining to this program shall be under the direction of or subject to periodic review by an authorized representative of the party of the first part.

5. The areas to be included in the program shall be determined by mutual agreement between the parties hereto or their authorized representatives. The methods employed in the field and office shall be those adopted by the party of the first part to insure the required standards of accuracy subject to modification by mutual agreement.

6. During the course of this program, all field and analytical work of either party pertaining to this program shall be open to the inspection of the other party, and if the work is not being carried on in a mutually satisfactory manner, either party may terminate this agreement upon 60 days written notice to the other party.

7. The original records resulting from this program will be deposited in the office of origin of those records. Upon request, copies of the original records will be provided to the office of the other party.

8. The maps, records or reports resulting from this program shall be made available to the public as promptly as possible. The maps, records or reports normally will be published by the party of the first part. However, the party of the second part reserves the right to publish the results of this program, and if already published by the party of the first part shall, upon request, be furnished by the party of the first part, at cost, impressions suitable for purposes of reproduction similar to that for which the original copy was prepared. The maps, records or reports published by either party shall contain a statement of the cooperative relations between the parties. The Parties acknowledge that scientific information and data developed as a result of the Scope of Work (SOW) are subject to applicable USGS review, approval, and release requirements, which are available on the USGS Fundamental Science Practices website (<https://www.usgs.gov/about/organization/science-support/science-quality-and-integrity/fundamental-science-practices>).

9. Billing for this agreement will be rendered quarterly. Invoices not paid within 60 days from the billing date will bear Interest, Penalties, and Administrative cost at the annual rate pursuant the Debt Collection Act of 1982, (codified at 31 U.S.C. § 3717) established by the U.S. Treasury.

USGS Technical Point of Contact

Name: Heidi Hoppe
Associate Director of Data
Address: 3450 Princeton Pike Suite 110
Lawrenceville, NJ 08648
Telephone: (609) 771-3980
Fax: (609) 771-3915
Email: hhoppe@usgs.gov

Customer Technical Point of Contact

Name: James Duprey
Chief Engineer
Address: 1525 Main Avenue PO Box 230
Clifton, NJ 07011
Telephone: (973) 340-4306
Fax:
Email: jgduprey@pvwc.com

USGS Billing Point of Contact

Name: Nancy Gibbs
Administrative Officer
Address: 3450 Princeton Pike Suite 110
Lawrenceville, NJ 08648
Telephone: (609) 771-3910
Fax: (609) 771-3915
Email: ngibbs@usgs.gov

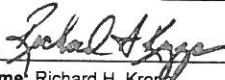
Customer Billing Point of Contact

Name: Gregg Lucianin
Director of Purchasing
Address: 1525 Main Avenue PO Box 230
Clifton, NJ 07011
Telephone: (973) 340-4316
Fax: (973) 340-5584
Email: glucianin@pvwc.com

U.S. Geological Survey
United States
Department of Interior

Passaic Valley Water Commission

Signature

By  Date: 09/30/2020
Name: Richard H. Kropp
Title: Director, New Jersey Water Science Center

Signatures

By _____ Date: _____
Name:
Title:

By _____ Date: _____
Name:
Title:

By _____ Date: _____
Name:
Title:

FISCAL YEAR 2021 WORKPLAN

PASSAIC VALLEY WATER COMMISSION
 IN COOPERATION WITH THE
 US GEOLOGICAL SURVEY NEW JERSEY WATER SCIENCE CENTER

Operation and Maintenance

The United States Geological Survey (USGS) New Jersey Water Science Center will continue to operate and maintain the following gages as detailed in the table below for the Passaic Valley Water Commission (PVWC).

Continuous-Record Discharge Gaging Station with Data Collection Platform (DCP)

Station Number	Station Name	Total Cost	USGS Match	PVWC
01389500	Passaic River at Little Falls NJ *DCP funded by Passaic Flood Warning System (USACE-NY)	\$14,100	\$5,800	\$8,300
Total		\$14,100	\$5,800	\$8,300

Continuous-Record Annual Peak Stage Only with Data Collection Platform (DCP)

Station Number	Station Name	Total Cost	USGS Match	PVWC
01389492	Passaic River above Beatties Dam, at Little Falls NJ (w/ 2 discharge measurements/year to monitor min passing flow *DCP funded by NJDEP)	\$6,605	\$0	\$6,605
Total		\$6,605	\$0	\$6,605

Continuous-Record 6-Parameter Water-Quality Monitor with Data Collection Platform (DCP)
Water Temp, Specific Conductance, Dissolved Oxygen, Percent Saturation, pH, Turbidity

Station Number	Station Name	Total Cost	USGS Match	PVWC
405307074090201	Tap Water at Main Avenue at Clifton NJ *Data only available to cooperator, not to general public	\$46,150	\$0	\$46,150
Total		\$46,150	\$0	\$46,150

PROJECT TOTAL	\$ 66,855
Funding Breakdown:	
USGS Matching Funds	\$ 5,800
PVWC	\$ 61,055

PROJECT EXPENSES	
Labor	\$24,255
Supplies, Equipment, Travel, Other	\$1,330
Lab (NWQL)	\$0
Instrumentation (HIF)	\$14,685
Total Direct Cost	\$40,270
Total Indirect Cost (Overhead)	\$26,585
TOTAL	\$66,855

Data Availability

Data are transmitted hourly via the GOES satellite to the New Jersey Water Science Center's website at <http://nj.usgs.gov>. Data are quality assured and stored in the USGS National Water Information System (NWIS) database. These provisional data will be available to the general public from the NWISWeb site at <http://waterdata.usgs.gov/nj/nwis/sw>. The provisional data will be analyzed, quality-assured and approved for publication to the USGS NWISWeb at <http://waterdata.usgs.gov/nj/nwis/>.

The USGS has an automated notification service available to users of our real-time data network. USGS WaterAlert is a mobile notification system that sends email or text message updates for any of the sites where the USGS collects real-time data. Daily and hourly updates are sent when the current conditions at the gage meet or surpass a threshold of concern that is set by the user. To use the service go to <http://water.usgs.gov/wateralert>. It may be useful for your agency to use this system to be notified when the stage, discharge, or water-quality parameter at a USGS streamgage of interest reaches or exceeds a preset threshold.

**PASSAIC VALLEY WATER COMMISSION
SHARED SERVICES AGREEMENT (21LJJFA29)
WITH USGS
PVWC'S FINANCIAL CERTIFICATION SHEET
EXHIBIT B**

RESOLUTION: 20-139
RESOLUTION OF PASSAIC VALLEY WATER COMMISSION
AUTHORIZING A SHARED SERVICES AGREEMENT (21LJJFA30)
WITH USGS

DATE OF ADOPTION: NOVEMBER 12, 2020

Approved as to form and legality by the Law Department on the
basis of facts and circumstances set forth by the Executive Director

OFFICE OF THE COMPTROLLER

CERTIFICATION OF AVAILABILITY OF FUNDS

It is hereby certified that, subject to Commission approval of future budgets, there are or will be sufficient funds for expenditures to be incurred as a result of any contract or commitment to be entered by Passaic Valley Water Commission as follows:

Description of Project or Contract: Water Resources Investigations for Various
Parameters (USGS) for the period continuing through September 30, 2020

Amount of Project or Contract: \$61,055.00

Budget 2020 Acct #: 001-3501-425-72-21 Contractor-Lab Service

Other Comments:

The contract takes effect in 2020 but payments will first be made in 2021.

Date of Certification: October 30, 2020



Yitzchak Weiss, CPA
Comptroller and Chief Financial Officer
Passaic Valley Water Commission

YW:yw

WHEREAS, monitoring, data collection, and testing for the water quality parameters set forth in the Correspondence and Agreement would assist PVWC in identifying and appropriately reacting to upstream changes in water quality, which, in turn, helps enhance the robustness of the treatment processes while optimizing chemical dosages and minimizing overall treatment costs; and

WHEREAS, PVWC's total financial contribution for USGS to perform the tasks outlined in the Agreement for the above-referenced duration of the Agreement shall be in an amount not to exceed \$48,975.00; and

WHEREAS, the Agreement has been reviewed by the Executive Director, Director of Engineering, Director of Purchasing; (and General Counsel as to form and legality), all of whom have recommended the Agreement for acceptance in their respective capacities; and

WHEREAS, the Commission has determined that the public health, safety, and welfare of its Customers can best be protected by entering into said Agreement, as authorized under the Uniform Shared Services and Consolidation Act, of the Laws of 2007, Chapter 63, effective April 3, 2007 (the "Act") N.J.S.A. 40A:65-1 through 40A:65-35, as amended, to provide the Services; and

WHEREAS, N.J.S.A. 40A:11-5(2) provides an exception under the Local Public Contracts Law for contracts entered into with the United States of America, the State of New Jersey, County or municipality, or any board, body, office, agency or authority thereof, or any subdivisions thereof; and

WHEREAS, the USGS, located in Lawrenceville, New Jersey, and PVWC are such entities; and

WHEREAS, PVWC's Comptroller has certified, with respect hereto, that funds are currently available for said purpose and said certificate is attached hereto as Exhibit B;

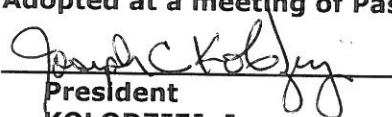
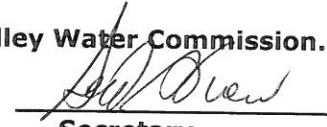
NOW, THEREFORE, BE IT RESOLVED, by Passaic Valley Water Commission, in the County of Passaic, New Jersey:

1. That PVWC hereby authorizes and awards the Shared Services Agreement (20LJFA30) with USGS for the period continuing through September 30, 2021; all in accordance with the defined scope of services set forth in the Agreement and PVWC's not-to-exceed contribution amount of \$48,975.00 as set forth hereinabove; and
2. That the appropriate officers and employees of PVWC are hereby authorized to perform such acts and execute such documents as are consistent herewith, in order to implement the terms of this Resolution and the Agreement as set forth hereinabove.

RECORD OF COMMISSION VOTE ON FINAL PASSAGE

	AYE	NAY	ABSTAIN	ABSENT
FRIEND, G.	<u>X</u>	___	___	___
VANNOY, R.	<u>X</u>	___	___	___
LEVINE, J.	<u>X</u>	___	___	___
SANCHEZ, R.	___	___	___	<u>X</u>
VAN RENSA LIER, R.	<u>X</u>	___	___	___
COTTON, R.	<u>X</u>	___	___	___
KOLODZIEJ, J.	<u>X</u>	___	___	___

Adopted at a meeting of Passaic Valley Water Commission.

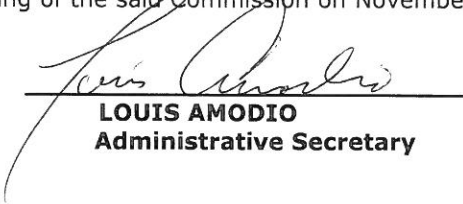
 _____ President KOLODZIEJ, J.	 _____ Secretary GERALD FRIEND
--	--

This Resolution, when adopted, must remain in the custody of the Administrative Secretary.

CERTIFICATION

I, LOUIS AMODIO, Administrative Secretary of the Passaic Valley Water Commission in the County of Passaic, and the State of New Jersey do hereby certify that the foregoing Resolution is a true copy thereof of the foregoing Resolution duly passed and adopted by a majority of a legal quorum of the full membership of the Passaic Valley Water Commission at its

duly noticed and convened meeting of the said Commission on November 12, 2020.



LOUIS AMODIO
Administrative Secretary

**PASSAIC VALLEY WATER COMMISSION
USGS CORRESPONDENCE DATED SEPTEMBER 30, 2020
AND SHARED SERVICES AGREEMENT (21LJJFA30)
WITH USGS**

EXHIBIT A



United States Department of the Interior

U.S. GEOLOGICAL SURVEY
New Jersey Water Science Center
3450 Princeton Pike, Suite 110
Lawrenceville, NJ 08648

September 30, 2020

Mr. James Duprey
Chief Engineer
Passaic Valley Water Commission
1525 Main Avenue PO Box 230
Clifton, NJ 07011

Dear Mr. Duprey:

Enclosed are two signed originals of our standard joint-funding agreement for the project(s) New Jersey Water Science Center Water Resources Investigations, during the period October 1, 2020 through September 30, 2021 in the amount of \$48,975 from your agency. U.S. Geological Survey contributions for this agreement are \$5,800 for a combined total of \$54,775. Please sign and return one fully-executed original to Jamie L. Lowndes at the address above.

Federal law requires that we have a signed agreement before we start or continue work. If, for any reason, the agreement cannot be signed and returned, please contact Heidi Hoppe by phone number (609) 771-3980 or email hhoppe@usgs.gov to make alternative arrangements.

This is a fixed cost agreement to be billed quarterly via Down Payment Request (automated Form DI-1040). Please allow 30-days from the end of the billing period for issuance of the bill. If you experience any problems with your invoice(s), please contact Nancy Gibbs at phone number (609) 771-3910 or email at ngibbs@usgs.gov.

The results of all work performed under this agreement will be available for publication by the U.S. Geological Survey. We look forward to continuing this and future cooperative efforts in these mutually beneficial water resources studies.

Sincerely,

Richard H. Kropp
Director, New Jersey Water Science Center

Enclosure
21LJFA30 (2)

Fixed Cost Agreement YES[X] NO[]

THIS AGREEMENT is entered into as of the October 1, 2020, by the U.S. GEOLOGICAL SURVEY, New Jersey Water Science Center, UNITED STATES DEPARTMENT OF THE INTERIOR, party of the first part, and the Passaic Valley Water Commission party of the second part.

1. The parties hereto agree that subject to the availability of appropriations and in accordance with their respective authorities there shall be maintained in cooperation Water Resource Investigations (per attachment), herein called the program. The USGS legal authority is 43 USC 36C; 43 USC 50, and 43 USC 50b.

2. The following amounts shall be contributed to cover all of the cost of the necessary field and analytical work directly related to this program. 2(b) include In-Kind-Services in the amount of \$0.00

(a) \$5,800 by the party of the first part during the period
October 1, 2020 to September 30, 2021

(b) \$48,975 by the party of the second part during the period
October 1, 2020 to September 30, 2021

(c) Contributions are provided by the party of the first part through other USGS regional or national programs, in the amount of: \$0

Description of the USGS regional/national program:

(d) Additional or reduced amounts by each party during the above period or succeeding periods as may be determined by mutual agreement and set forth in an exchange of letters between the parties.

(e) The performance period may be changed by mutual agreement and set forth in an exchange of letters between the parties.

3. The costs of this program may be paid by either party in conformity with the laws and regulations respectively governing each party.

4. The field and analytical work pertaining to this program shall be under the direction of or subject to periodic review by an authorized representative of the party of the first part.

5. The areas to be included in the program shall be determined by mutual agreement between the parties hereto or their authorized representatives. The methods employed in the field and office shall be those adopted by the party of the first part to insure the required standards of accuracy subject to modification by mutual agreement.

6. During the course of this program, all field and analytical work of either party pertaining to this program shall be open to the inspection of the other party, and if the work is not being carried on in a mutually satisfactory manner, either party may terminate this agreement upon 60 days written notice to the other party.

7. The original records resulting from this program will be deposited in the office of origin of those records. Upon request, copies of the original records will be provided to the office of the other party.

8. The maps, records or reports resulting from this program shall be made available to the public as promptly as possible. The maps, records or reports normally will be published by the party of the first part. However, the party of the second part reserves the right to publish the results of this program, and if already published by the party of the first part shall, upon request, be furnished by the party of the first part, at cost, impressions suitable for purposes of reproduction similar to that for which the original copy was prepared. The maps, records or reports published by either party shall contain a statement of the cooperative relations between the parties. The Parties acknowledge that scientific information and data developed as a result of the Scope of Work (SOW) are subject to applicable USGS review, approval, and release requirements, which are available on the USGS Fundamental Science Practices website (<https://www.usgs.gov/about/organization/science-support/science-quality-and-integrity/fundamental-science-practices>).

Form 9-1366
(May 2018)

U.S. Department of the Interior
U.S. Geological Survey
Joint Funding Agreement
FOR

Customer #: 600000103
Agreement #: 21LJFA30
Project #: GC21LJ000030000
TIN #: 22-6002470

Water Resource Investigations

9. Billing for this agreement will be rendered quarterly. Invoices not paid within 60 days from the billing date will bear interest, Penalties, and Administrative cost at the annual rate pursuant the Debt Collection Act of 1982, (codified at 31 U.S.C. § 3717) established by the U.S. Treasury.

USGS Technical Point of Contact

Name: Heidi Hoppe
Associate Director of Data
Address: 3450 Princeton Pike Suite 110
Lawrenceville, NJ 08648
Telephone: (609) 771-3980
Fax: (609) 771-3915
Email: hhoppe@usgs.gov

Customer Technical Point of Contact

Name: James Duprey
Chief Engineer
Address: 1525 Main Avenue PO Box 230
Clifton, NJ 07011
Telephone: (973) 340-4306
Fax:
Email: jgduprey@pwwc.com

USGS Billing Point of Contact

Name: Nancy Gibbs
Administrative Officer
Address: 3450 Princeton Pike Suite 110
Lawrenceville, NJ 08648
Telephone: (609) 771-3910
Fax: (609) 771-3915
Email: ngibbs@usgs.gov


Customer Billing Point of Contact

Name: Gregg Lucianin
Director of Purchasing
Address: 1525 Main Avenue PO Box 230
Clifton, NJ 07011
Telephone: (973) 340-4316
Fax: (973) 340-5584
Email: glucianin@pwwc.com

U.S. Geological Survey
United States
Department of Interior

Passaic Valley Water Commission

Signature

By  Date: 09/30/2020
Name: Richard H. Kropp
Title: Director, New Jersey Water Science Center

Signatures

By _____ Date: _____
Name:
Title:

By _____ Date: _____
Name:
Title:

By _____ Date: _____
Name:
Title:

FISCAL YEAR 2021 WORKPLAN

PASSAIC VALLEY WATER COMMISSION
IN COOPERATION WITH THE
US GEOLOGICAL SURVEY NEW JERSEY WATER SCIENCE CENTER

CONTINUOUS MONITORING FOR TOTAL CHLOROPHYLL-a AND TURBIDITY AT
PASSAIC RIVER BELOW TWO BRIDGES, NEW JERSEY

Problem

Demands on water resources in New Jersey require the availability of high quality water for multiple uses. Numerous sources of pollution have deteriorated the quality of water resources within the State. Water resources planning must address these and other problems to ensure a water supply of high quality to meet future water needs. To assist in the management of these resources, continuous monitoring of water-quality conditions provides the necessary information on the quality of water resources. Continuous monitoring of turbidity and chlorophyll-a in combination with existing continuous monitoring of dissolved oxygen and pH improve the identification of algal blooms, which, in turn, lead to degraded water quality downstream of the monitoring location. When the algal biomass is too great, the health of other aquatic biota may be adversely affected. Excessive algae concentrations of certain classes, such as blue-green, also create taste, odor, and water clarity issues for the production of drinking water. Water resource managers, when made aware of incipient algal blooms, may change or blend the source waters to obtain optimal water quality for water treatment.

Objective and Scope

To provide a continuous record of turbidity and Chlorophyll-a concentrations in the Passaic River downstream from the confluence with the Pompton River at Two Bridges, New Jersey. The status of turbidity and Chlorophyll-a concentration will be monitored for the purpose of planning and managing water resources in the Passaic River. Chlorophyll-a is a measure of phytoplankton biomass. Turbidity is a measure of the clarity.

Approach

Concentrations of turbidity and total Chlorophyll-a will be measured hourly on the Passaic River downstream from the confluence with the Pompton River using the monitoring station at Two Bridges, New Jersey. Both turbidity and Chlorophyll-a monitors will be operated at the existing monitoring station. The monitors will be operated and maintained to record Chlorophyll-a concentrations hourly from two locations and turbidity at 3 locations along a cross section of the river for the period October 1, 2020 through September 30, 2021.

Water samples will be collected during every routine inspection and as well as up to an additional 10 time per year depending on conditions. The samples will be sent to the USGS National Water Quality Laboratory for analysis of total Chlorophyll-a and total Pheophytin-a. The laboratory analyses will be compared to the continuous monitor data to see if the chlorophyll measurements from the Total Algae Sensor correlate with the lab analyses. The equipment will be calibrated as needed to minimize the difference between the laboratory results and the monitor readings.

Operation and Maintenance

The United States Geological Survey (USGS) New Jersey Water Science Center will continue to operate and maintain the following gages as detailed in the table below for the Passaic Valley Water Commission (PVWC).

Continuous-Record Turbidity (at 3 intakes) at the USGS Two Bridges Water-Quality Monitor

Station Number	Station Name	Total Cost	USGS Match	PVWC
01389005	Passaic River below Pompton River at Two Bridges, NJ	\$15,400	\$0	\$15,400
Total		\$15,400	\$0	\$15,400

Continuous-Record Chlorophyll (at 2 intakes) at the USGS Two Bridges Water-Quality Monitor

Station Number	Station Name	Total Cost	USGS Match	PVWC
01389005	Passaic River below Pompton River at Two Bridges, NJ	\$39,375	\$5,800	\$33,575
Total		\$39,375	\$5,800	\$33,575

Task 2 Total	\$ 54,775
USGS matching funds	\$ 5,800
Total Cost to NJWSA for Task 2—Water-Quality Monitoring	\$ 48,975

PROJECT EXPENSES	
Labor	\$22,940
Supplies, Equipment, Travel, Other	\$335
Lab (NWQL)	\$2,575
Instrumentation (HIF)	\$5,400
Total Direct Cost	\$31,250
Total Indirect Cost (Overhead)	\$23,525
TOTAL	\$54,775

Data Availability

Data are transmitted hourly via the GOES satellite to the New Jersey Water Science Center's website at <http://nj.usgs.gov>. Data are quality assured and stored in the USGS National Water Information System (NWIS) database. These provisional data will be available to the general public from the NWISWeb site at http://waterdata.usgs.gov/nj/nwis/uv/?site_no=01389005. The provisional data will be analyzed, quality-assured and approved for publication to the USGS NWISWeb at <http://waterdata.usgs.gov/nj/nwis/>.

The USGS has an automated notification service available to users of our real-time data network. USGS WaterAlert is a mobile notification system that sends email or text message updates for any of the sites where the USGS collects real-time data. Daily and hourly updates are sent when the current conditions at the gage meet or surpass a threshold of concern that is set by the user. To use the service go to <http://water.usgs.gov/wateralert>. It may be useful for your agency to use this system to be notified when the stage, discharge, or water-quality parameter at a USGS streamgage of interest reaches or exceeds a preset threshold.

**PASSAIC VALLEY WATER COMMISSION
SHARED SERVICES AGREEMENT (21LJJFA30)
WITH USGS
PVWC'S FINANCIAL CERTIFICATION SHEET
EXHIBIT B**

OFFICE OF THE COMPTROLLER

CERTIFICATION OF AVAILABILITY OF FUNDS

It is hereby certified that, subject to Commission approval of future budgets, there are or will be sufficient funds for expenditures to be incurred as a result of any contract or commitment to be entered by Passaic Valley Water Commission as follows:

Description of Project or Contract: Record of Turbidity and Chlorophyll-A Concentrations in the Passaic River at Two Bridges (USGS) for the period continuing through September 30, 2020

Amount of Project or Contract: \$48,975.00

Budget 2020 Acct #: 001-3501-425-72-21 Contractor-Lab Service

Other Comments:

The contract takes effect in 2020 but payments will first be made in 2021.

Date of Certification: October 30, 2020



Yitzchak Weiss, CPA
Comptroller and Chief Financial Officer
Passaic Valley Water Commission

YW:yw

RESOLUTION: 20-140
RESOLUTION OF PASSAIC VALLEY WATER COMMISSION

**AMENDMENT TO THE AGREEMENT FOR PROJECT
15-P-41 "PROFESSIONAL SERVICES FOR REHABILITATION
OF PVWC'S HYDROELECTRIC GENERATORS"**

DATE OF ADOPTION: NOVEMBER 12, 2020

Approved as to form and legality by Law Department on basis of facts set forth by Executive Director, Purchasing, Engineering and Finance Departments.

Introduced by Commissioner: **VAN RENSALIER**

Seconded by Commissioner: **VANNOY**

WHEREAS, Project No. 15-P-41 "Professional Services for Rehabilitation of PVWC's Hydroelectric Generators" (the "Project") was awarded to HDR Engineering, Inc. ("HDR Engineering") of Mahwah, New Jersey at PVWC's Commission Meeting of January 20, 2016 with reimbursement to be on a Take-and-Pay, Time-and-Materials basis, not to exceed \$1,236,322.00 for services related to the Project, all as set forth in the previously approved agreement for the Project (the Agreement"); and

WHEREAS, although the Project concept originally contemplated replacement of buried turbine shutoff valves to facilitate dewatering and access to submerged portions of the turbine generators for their future rehabilitation, it was determined that this approach would create potential risk in that yard excavation required to remove and replace the existing turbine shutoff valves could undermine or damage the adjacent high pressure buried potable water transmission piping resulting in an unacceptable potable water interruption; and

WHEREAS, due to this potential risk, PVWC directed HDR Engineering to move forward with a feasibility assessment of designing automated slide gates to be installed at the existing penstock intake structure stop log slots (in lieu of replacement of the buried turbine shutoff valves), which assessment then identified that, in addition to avoiding potential risks to existing critical buried water piping, the installation of automated slide gates is anticipated to result in a

reduction of approximately \$1.6 million in the construction cost of the Phase 1 portion of the Project; and

WHEREAS, PVWC then directed HDR Engineering to proceed with design and permitting based on the automated slide gate option in lieu of the turbine shutoff valve option, and to investigate the existing penstock intake structure to identify any potential problems with regard to compliance with regulatory requirements; and

WHEREAS, during this investigation it was determined that PVWC's existing penstock intake structure does not meet current FERC stability criteria under certain loading conditions, and that additional professional services are required to ensure that the intake canal structure modifications will be designed to have sufficient resiliency and protection against flooding, to meet these stringent regulatory requirements, and to develop operational modifications and improvements to existing canal facilities including the canal gatehouse, canal side spillway, and the penstock intake structure; and

WHEREAS, due to the magnitude of these additional efforts and additional costs related to FERC compliance, PVWC has elected to solicit for a portion of those additional professional services under the Fair and Open Process separate and apart from Project 15-P-41; and

WHEREAS, there are other additional professional services not included as part of the separate future project described above, and not included in HDR Engineering's original proposal, that need to be addressed under Project 15-P-41; and

WHEREAS, these other professional services include design work to change from turbine shutoff valves to penstock intake gates under the Phase 1 portion of the project (anticipated to result in the estimated \$1.6 million in savings in construction costs set forth above), along with an escalation in labor fees for professional services due to the extended time required to investigate this anticipated net cost-saving change; and

WHEREAS, in response to PVWC's request, HDR Engineering has submitted a Proposal dated October 19, 2020 (the "Proposal"), to provide those additional professional services related to the above under Project 15-P-41, and a copy of the Proposal is attached hereto and made a part hereof as an attachment to the Amendment to the Agreement included in Exhibit B referenced below; and

WHEREAS, a copy of the form of Amendment to the Agreement for Professional Services (Project 15-P-41) (the "Amendment") followed by a copy of the Proposal, including a breakdown of the scope and additional costs related thereto, is attached hereto and hereby made a part hereof as Exhibit B referenced below; and

WHEREAS, the Director of Engineering has reviewed HDR Engineering's Proposal for the additional Work as set forth hereinabove and finds it to be reasonable, considering the nature and scope of additional Work involved, and has recommended that the said modifications to the Project, and additional costs related thereto, be approved; and

WHEREAS, a copy of the Director of Engineering's memorandum dated October 21, 2020 recommending approval of the said changes to the Project is attached hereto and made a part hereof as Exhibit A; and

WHEREAS, the Executive Director; and the General Counsel, (as to form and legality); have reviewed the above-referenced memorandum and concur with the Director of Engineering's recommendations; and

WHEREAS, the previously approved not-to-exceed total price of \$1,236,322.00 is hereby increased by the additional amount of \$466,000.95 for the Amendment as set forth herein, for a revised not-to-exceed total price of \$1,702,322.95 for the Project (which equates to an overall net increase of approximately 37.7% to the Project); and

WHEREAS, the said modifications will be incorporated into the Amendment, the form of which (along with the Proposal) is attached hereto and made a part hereof as Exhibit B; and

WHEREAS, the additional services to be rendered pursuant hereto constitute professional services (or extraordinary unspecifiable services) within the meaning and intent of the Local Public Contracts Law; and

WHEREAS, PVWC's Comptroller has certified, with respect hereto, that funds are currently available for said purpose and said certificate is attached hereto as Exhibit C;

NOW, THEREFORE, BE IT RESOLVED, by Passaic Valley Water Commission, in the County of Passaic, New Jersey;

1. That PVWC hereby approves the Amendment to the Agreement for Professional Services for the Project; all as set forth hereinabove; and
2. That the appropriate officials of PVWC, and such other officers, employees and officials of PVWC, on behalf of PVWC, are hereby authorized to execute and enter into the Amendment to the Agreement for the Project, and to perform such other acts and execute such documents as are necessary to implement the terms and intentions of this Resolution; and
3. That this matter shall be advertised as required by New Jersey law, in accordance with an appropriate form of notice, and a copy of this Resolution and Agreement shall be placed on file and made available for inspection at the office of the Administrative Secretary of Passaic Valley Water Commission.

RECORD OF COMMISSION VOTE ON FINAL PASSAGE

	AYE	NAY	ABSTAIN	ABSENT
COTTON, R	<u>X</u>	---	---	---
FRIEND, G.	<u>X</u>	---	---	---
VANNOY, R.	<u>X</u>	---	---	---
LEVINE, J.	<u>X</u>	---	---	---
SANCHEZ, R.	---	---	---	<u>X</u>
VAN RENSALIER, R.	<u>X</u>	---	---	---
KOLODZIEJ, J.	<u>X</u>	---	---	---

Adopted at a meeting of Passaic Valley Water Commission.



President
KOLODZIEJ, J.




Secretary
GERALD FRIEND

This Resolution, when adopted, must remain in the custody of the Administrative Secretary.

CERTIFICATION

I, LOUIS AMODIO, Administrative Secretary of the Passaic Valley Water Commission in the County of Passaic, and the State of New Jersey do hereby certify that the foregoing Resolution is a true copy thereof of the foregoing Resolution duly passed and adopted by a majority of a legal quorum of the full membership of the Passaic Valley Water Commission at its duly noticed and convened meeting of the said Commission on November 12, 2020.



LOUIS AMODIO
Administrative Secretary

PASSAIC VALLEY WATER COMMISSION

**CHANGES IN SCOPE OF PROFESSIONAL SERVICES FOR
PROJECT 15-P-41 ENTITLED "PROFESSIONAL SERVICES FOR
REHABILITATION OF PVWC'S HYDROELECTRIC GENERATORS"**

**PROFESSIONAL SERVICES FOR
ADDITIONAL PROJECT MODIFICATIONS**

**PVWC DIRECTOR OF ENGINEERING'S
MEMORANDUM DATED OCTOBER 21, 2020**

EXHIBIT A

**PASSAIC VALLEY WATER COMMISSION
INTEROFFICE MEMORANDUM**

Date: October 21, 2020

To: Hon. Commissioners

From: J. Duprey

C: J. Bella
G. Hanley
L. Amodio
G. Lucianin

Re: Modifications to Professional Services for Project 15-P-41 "Professional Services for Rehabilitation of PVWC's Hydroelectric Generators"

Summary

It is recommended that, under Project 15-P-41, HDR Engineering, Inc. ("HDR Engineering") of Mahwah, New Jersey be awarded a negotiated increase of \$466,000.95 (increasing the total previously approved not-to-exceed amount for Project 15-P-41 from \$1,236,322.00 to \$1,702,322.95 to provide PVWC with additional professional services.

These recommended modifications under this proposed Amendment are set forth in more detail below.

Background

Project No. 15-P-41 "Professional Services for Rehabilitation of PVWC's Hydroelectric Generators" (the "Project") was awarded to HDR Engineering, Inc. ("HDR Engineering") of Mahwah, New Jersey at PVWC's Commission Meeting of January 20, 2016 with reimbursement to be on a Take-and-Pay, Time-and-Materials basis, not to exceed \$1,236,322.00 for services related to the Project, all as set forth in the previously approved agreement for the Project (the "Agreement").

Although the Project concept originally contemplated replacement of buried turbine shutoff valves to facilitate dewatering and access to submerged portions of the turbine generators for their future rehabilitation, it was determined that this approach would create potential risk in that yard excavation required to remove and replace the existing turbine shutoff valves could undermine or damage the adjacent high pressure buried potable water transmission piping resulting in an unacceptable potable water interruption.

Due to this potential risk, PVWC directed HDR Engineering to move forward with a feasibility assessment of designing automated slide gates to be installed at the existing penstock intake structure stop log slots (in lieu of replacement of the buried turbine shutoff valves), which assessment then identified that, in addition to avoiding potential risks to existing critical buried water piping, the installation of automated slide gates would be anticipated to result in a reduction of approximately \$1.6 million in the cost of the Phase 1 portion of the Project.

PVWC then directed HDR Engineering to proceed with design and permitting based on the automated slide gate option in lieu of the turbine shutoff valve option, and to investigate the existing penstock intake structure to identify any potential FERC regulatory compliance problems.

During this investigation it was determined that PVWC's existing penstock intake structure does not meet current FERC stability criteria under certain loading conditions, and that additional professional services are required to ensure that the intake canal structure modifications will be designed to have sufficient resiliency and protection against flooding, to meet these regulatory requirements, and to develop operational modifications and improvements to existing canal facilities including the canal gatehouse, canal side spillway, and the penstock intake structure.

Due to the magnitude of these additional efforts and additional costs related to FERC compliance, PVWC has elected to solicit for a portion of those additional professional services under the Fair and Open Process separate and apart from Project 15-P-41, and following solicitation, receipt, and evaluation of proposals received for that new project (20-P-91), a separate resolution will be submitted to the Commission for consideration.

There are other additional professional services not included as part of the separate project 20-P-91 described above, and not included in HDR Engineering's original proposal, that need to be addressed under Project 15-P-41.

These other professional services include design work to change from turbine shutoff valves to penstock intake gates under the Phase 1 portion of the project (anticipated to result in the estimated \$1.6 million in savings in construction costs set forth above), along with an escalation in labor fees for professional services due to the extended time required to investigate this anticipated net cost-saving change.

In response to PVWC's request, HDR Engineering has submitted a Proposal dated October 19, 2020 (the "Proposal"), to provide those additional professional services related to the above under Project 15-P-41, and a copy of the Proposal is attached hereto and made a part hereof as an attachment to the Amendment to the Agreement included in Exhibit B attached hereto.

A copy of a form of Amendment to the Agreement for Professional Services (Project 15-P-41) (the "Amendment") followed by a copy of the Proposal, including a breakdown of the scope and additional costs related thereto, is attached hereto as Exhibit B.

HDR Engineering's Proposal for the additional Work as set forth hereinabove has been reviewed and found to be reasonable, considering the nature and scope of additional Work involved, and it is recommended that the said modifications to the Project, and additional costs related thereto, be approved.

It is recommended that, under Project 15-P-41, HDR Engineering, Inc. ("HDR Engineering") of Mahwah, New Jersey be awarded an increase of \$466,000.95 (increasing the total previously approved not-to-exceed amount for Project 15-P-41 from \$1,236,322.00 to \$1,702,322.95 (which equates to an overall net increase of approximately 37.7% to the Project) to provide PVWC with additional professional services.

Subject to concurrence and approval by the Law Department as to form and legality, the said changes will be incorporated into "Amendment to Agreement for Professional services (Project 15-P-41)" the form of which is included in Exhibit B.

PASSAIC VALLEY WATER COMMISSION

**CHANGES IN SCOPE OF PROFESSIONAL SERVICES FOR
PROJECT 15-P-41 ENTITLED "PROFESSIONAL SERVICES FOR
REHABILITATION OF PVWC'S HYDROELECTRIC GENERATORS"**

**ADDITIONAL PROFESSIONAL SERVICES
FOR PROJECT MODIFICATIONS**

**FORM OF AMENDMENT TO AGREEMENT
AND HDR ENGINEERING'S PROPOSAL
DATED OCTOBER 19, 2020**

EXHIBIT B

**PASSAIC VALLEY WATER COMMISSION
AMENDMENT TO THE AGREEMENT FOR PROFESSIONAL
SERVICES FOR PROJECT 15-P-41 "PROFESSIONAL
SERVICES FOR REHABILITATION OF PVWC'S
HYDROELECTRIC GENERATORS"**

THIS AMENDMENT TO AGREEMENT FOR ADDITIONAL PROFESSIONAL SERVICES (the "AMENDMENT") made as of _____, 20__ between PASSAIC VALLEY WATER COMMISSION ("PVWC"), a Public Utility Company organized pursuant to its enabling statute (N.J.S.A. 40:62-108 et seq.), having its principal place of business at 1525 Main Avenue, Clifton, New Jersey 07011, and HDR Engineering, Inc. a professional firm (hereinafter "PROFESSIONAL" and/or "contractor") having a place of business at 1 International Boulevard, 10th Floor, Mahwah, New Jersey 07495.

WHEREAS, this AMENDMENT hereby modifies the previously signed and executed agreement (the "AGREEMENT") with PVWC and PROFESSIONAL that was awarded Project No. 15-P-41 entitled "Professional Services for Rehabilitation of PVWC's Hydroelectric Generators" (hereinafter the "PROJECT"); and

WHEREAS, at PVWC's request, PROFESSIONAL submitted a proposal dated October 19, 2020 (the "PROPOSAL") which PROPOSAL hereby modifies the AGREEMENT to include additional professional services as set forth in the PROPOSAL, and a copy of the PROPOSAL is attached hereto and made a part hereof as Attachment A; and

WHEREAS, the previously approved not-to-exceed total amount of \$1,236,322.00 for the Project is hereby increased by the additional amount of \$466,000.95 for the Contract Amendment as set forth herein, for a revised not-to-exceed total amount of \$1,702,322.95; and

All other provisions of the AGREEMENT shall remain in full force and effect.

HDR ENGINEERING, INC.

Witness or Attest

By: _____
Secretary

(Seal)

By: _____
Authorized Signatory

PASSAIC VALLEY WATER COMMISSION

By: _____
LOUIS AMODIO
Administrative Secretary

By: _____
JOSEPH KOLODZIEJ
President

PASSAIC VALLEY WATER COMMISSION

**CHANGES IN SCOPE OF PROFESSIONAL SERVICES FOR
PROJECT 15-P-41 ENTITLED "PROFESSIONAL SERVICES FOR
REHABILITATION OF PVWC'S HYDROELECTRIC GENERATORS"**

**ADDITIONAL PROFESSIONAL SERVICES
FOR PROJECT MODIFICATIONS**

PVWC'S FINANCIAL CERTIFICATION SHEET

EXHIBIT C



October 19, 2020

James G. Duprey P.E.
Business Administrator
Passaic Valley Water Commission
1525 Main Avenue
Clifton, NJ 07011

Subject: Rehabilitation of PVWC's Hydroelectric Generators, Project No. 15-P-41
HDR Request for Contract Amendment

Dear Jim,

This letter is in response to Passaic Valley Water Commission's (PVWC) request to provide a scope of work and estimated price for work to complete Project 1 of the subject Project No. 15-P-41 at the Little Falls Hydroelectric Station (Station) and Little Falls Water Treatment Plant (Plant).

Background

The Passaic Valley Water Commission (PVWC) owns and operates the Little Falls Hydroelectric Project located on the Passaic River located in Totowa, NJ. The hydroelectric project is located within the Little Falls Water Treatment plant facilities. The hydroelectric project is regulated by the Federal Energy Regulatory Commission (Little Falls FERC Project No. 9194) and subject to FERC dam safety requirements.

PVWC executed Contract 15-P-41 with HDR for engineering services for evaluations, design, permitting and engineering support during construction of rehabilitation of certain facilities of the hydroelectric project (PVWC Purchase Order No. 277644 executed February 15, 2016).

The original scope for Project 15-P-41 was limited to Project 1 for the rehabilitation of turbine shutoff valves and related improvements for control of water conveyance to the hydroelectric powerhouse ('pump house'), and Project 2 for repair/rehabilitation of the hydro-electric turbine generators and other station improvements. During design of Project 1, PVWC concurred with HDR's recommendation that slide gates installed at the existing penstock intake structure stop log slots would be more cost effective and a risk mitigation option to support unit dewatering (in lieu of replacement of the buried turbine shutoff valves). As a result, potential significant risks to existing critical buried water piping during construction associated with replacement of the turbine shutoff valves will be avoided, and the installation of slide gates instead of new turbine shutoff valves is anticipated to result in a significant reduction in construction costs while allowing penstock dewatering/mechanical rehabilitation in the short term and turbine isolation for future operation and maintenance.

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The penstock intake gates are designed to be installed and operated at the existing penstock intake structure. However, it was identified during design of the replacement gates that the existing penstock intake structure does not meet dam safety requirements for stability required by the Federal Energy Regulatory Commission (FERC). Additionally, the penstock intake structure is at risk of potential damage due to induced stresses along the base of the structure and internally within the structure under certain canal levels within the current operating range of the canal (HDR letter dated October 29, 2019).

The following table summarizes the current status of the four tasks included in Project 1 Penstock Intake Gates of Project 15-P-41 which included additional work approved by PVWC. Project 15-P-41 does not include the additional scope for design of stabilization of the penstock intake structure, and other potential improvements to the canal facilities that are project facilities of the Little Falls FERC Project No. 9194.

Summary of Current Status of Project 15-P-41 - Project 1 Penstock Intake Gates

Task	Status	Deliverable
Task 1 Feasibility Study	Complete	Feasibility Study Report issued September 28, 2017 defines the approved scope of work for construction of Project 1 and Project 2
Task 2 Design	95% Complete	Issue-for-Bid Documents (100% Complete) submitted for Client Review on April 1, 2019
	95% Complete	Draft Design Report 90% Complete)
Task 3 Permitting for Project 1 and Project 2 Scope of Work for Construction	Complete	New Jersey DEP New Jersey FWGP1 – Maintenance & Repair of Existing Feature, Water Quality Certificate Approval Date May 14, 2019 Expiration Date May 13, 2024
	Complete	SHPO – consultation for FWGP1
	Draft	USACE Nationwide Permit 3 – Maintenance Pre-construction Notification
Task 4 Services During Bidding and Construction	Not initiated	Engineering services during bidding and construction

PVWC plans to issue a separate contract for Project 20-P-91 for the design of stabilization of the penstock intake structure and potential improvements to other canal facilities to have appropriate



resiliency and protection against flooding and meet FERC requirements (Canal Improvements). PVWC desires that potential canal improvements address structural integrity of structures without dependence on operational control of canal water levels. The scope of work for Project 20-P-91 will also include other professional services required during bidding and construction, and preparation of documents to support future operation of Project 1.

Therefore Project 1 will be revised to include both Project 15-P-41 (Penstock Intake Gates) and Project 20-P-91 (Canal Improvements). The Penstock Intake Gates (Project 15-P-41) is integral with the Canal Improvements (Project 20-P-91); therefore, the proposed work for completion of Project 15-P-41 will be performed in coordination with Project 20-P-91, and managed by PVWC.

HDR assumes, for the purposes of this proposed work scope and price for completion of Project 15-P-41 for Project 1, that the entirety of Project 20-P-91 will be performed outside of HDR's present and proposed work under this amendment and by the "Consultant for Canal Improvements" ultimately selected.

The respective scopes of work for Project 15-P-41 (Penstock Intake Gates) and Project 20-P-91 (Canal Improvements) that comprise Project 1 are summarized below:

Project 15-P-41 (Penstock Intake Gates, to be performed by HDR under this amendment) - Scope of work to complete is limited to preparation of final design calculations, drawings, specifications, design report, and preparation of Issue-for-Bid (IFB) and Issue-for-Construction (IFC) documents for Construction Contract 20-B-44 for supply and installation of penstock intake gates system and stop logs, pump house draft tube stop logs for all four units, removal of the existing turbine shut-off gate valve discs, operators, and associated equipment for Units 1-4, and installation of Fiber Reinforced Polymer lining of the section of penstocks containing the valves to seal valve bodies against leakage. (See Specification 0110000 Project Scope Overview, HDR Issue-for-Bid Documents dated April 1, 2029 for detailed description of construction work scope).

Future work associated with obtaining permit amendments and agency consultations required for the expanded scope of construction for Project 1 will be driven by the scope of construction for canal improvements, and therefore will be performed by the Consultant for Canal Improvements. Future support for permitting is not included in HDR's additional scope of work for completion of Project 15-P-41.

Project 20-P-91 (Canal Improvements, to be performed outside of this amendment) - Scope of work includes design, drawings, specifications, design report, agency consultation and permit applications for obtaining required permits, and preparation of an Addendum Issue-for-Bid (IFB) and Issue-for-Construction (IFC) documents for Construction Contract 20-B-44 for improvements to the penstock intake structure and other canal facilities to have appropriate resiliency and protection against flooding and meet FERC requirements. The detailed scope of construction required for canal improvements will be developed in a Design Basis Report during execution of Project 20-P-91. The scope of work for Project 20-P-91 includes services provided during bidding and construction including overall construction administration for Construction Contract 20-B-44,

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engineering services during bid and construction of the Canal Improvements, and operation and maintenance documents and training for Project 1.

Scope of Additional Work for Project 15-P-41 – Penstock Intake Gates

HDR's additional scope of work to complete Project 15-P-41 Penstock Intake Gates is proposed to be performed under two existing Tasks:

- Task 2 – Design
Engineering services limited to work associated with Project 15-P-41 Penstock Intake Gates, and coordination with others for incorporation of Project 20-P-91 Canal Improvements Addendum for the following documents for Project 1:
 - Issue-for-Bid Documents for Construction Contract 20-B-44
 - Design Report
 - FERC Submittal Package
 - Issue-for-Construction Documents for Construction Contract 20-B-44
- Task 4 - Services During the Bidding and Construction Phases of Project 1
Engineering services during construction for Construction Contract 20-B-44 limited to work associated with Project 15-P-41 Penstock Intake Gates, including coordination with the Consultant for Project 20-P-91 Canal Improvements.

This additional scope of work assumes:

- The scope of work for Project 15-P-41 Penstock Intake Gates is clearly defined by and limited to HDR's Issue-for-Bid Documents submitted for Client Review on April 1, 2019.
- Project 20-P-91 Canal Improvements Addendum design shall incorporate the design of Project 15-P-41 Penstock Intake Gates such that no changes are required to the design of Penstock Intake Gates, and the associated technical requirements and scope of work for construction of the Penstock Intake Gates under Construction Contract 20-B-44 is not affected. Nominal modifications to Project 15-P-41 drawings and specifications may occur, but are limited to the following:
 - The Penstock Intake Gates will be installed in the dry during canal dewatering required for construction of canal improvements. Design for dewatering of the canal and any cofferdams and related permitting will be in the scope of work for Project 20-P-91. Therefore, the temporary bulkheads included in Project 15-P-41 for installation of penstock intake gates will not be required.
 - The Erosion and Sedimentation Control measures required for installation of the penstock intake gates (shown on HDR drawings OOC-03 and OOC-04) will be superseded by erosion and control measures required for canal improvements provided in Project 20-P-91 Addendum.
 - Addition of notes to clarify interface of work with Project 20-P-91 Addendum.

- All work required for amending the existing New Jersey DEP Freshwater Wetlands General Permit 1 for Maintenance & Repair of Existing Feature, Water Quality Certificate (obtained for Project 1 - Penstock Intake Gates and Project 2 – Rehabilitation of Hydroelectric Generators), including consultation with the State Historic Preservation Office required by the Canal Improvements will be performed by the Consultant for Canal Improvements. The Corps of Engineers Nationwide Permit PCN, and any other permits required for Project 1 shall be prepared by the Consultant for Canal Improvements.
- HDR communications and coordination with the Consultant for Canal Improvements (Project 20-P-91) for completion of work for Project 15-P-41 Penstock Intake Gates will be managed by PVWC.

HDR's scope and budget assumes and is predicated on the following milestone schedule for Project 1 for purposes of this proposal:

- PVWC Issue RFP for Project 20-P-91 – October 2020
- PVWC Award Contract Amendment 15-P-41 – November 11, 2020
- PVWC Award Project 20-P-91 – January 2021
- Consultant Project 20-P-91 completes design of Canal Improvements – September 2021
- Consultant Project 20-P-91 completes final permitting amendment/applications for Project 1– November 2021
- Design Submittal to FERC for Project 1 – November 2021
- FERC Approval and Issuance of Permits – May 2022
- PVWC Issue RFP for Construction Contract 20-B-44 (Issue-for-Bid Contract Documents) – May 2022
- PVWC Award Construction Contract 20-B-44 (Issue-for-Construction Contract Documents) – August 2022
- Start Construction – November 2022
- Complete Construction – May 2025

HDR assumes penstock intake gate installation will be performed during canal dewatering beginning October 2024; with wet testing performed upon re-watering the canal by April 2025 (6-month period).

Task 2 - Design of Penstock Intake Gates

HDR engineering services for completion of design of Project 15-P-41 Penstock Intake Gates, including coordination with Consultant for Canal Improvements for incorporation of Amendments for Project 1, will be performed in the following subtasks:

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2.1 Issue-for-Bid (IFB) Contract Documents for Construction Contract 20-B-44 with Addendum for Canal Improvements

Deliverables: Final IFB Contract Documents for Construction Contract 20-B-44 with Addendum for Canal Improvements (electronic format):

- Information and Instructions to Bidders
- Technical Specifications for Project 15-P-41 Penstock Intake Gates
- Contract Drawings for Project 15-P-41 Penstock Intake Gates
- Reference Information for Project 15-P-41 Penstock Intake Gates

The Addendum prepared by Consultant for Canal Improvements will be attached to the IFB Contract Documents:

- Form of Proposal for the scope of construction Canal Improvements
- Technical Specifications
- Contract Drawings
- Appendix A - Permits required for Canal Improvements
- Appendix B – Reference Drawings and Information

Schedule: January 2021 through issuance of RFP for Construction Contract 20-B-44 – May 2022

Scope of Work:

- Revise Project 15-P-41 Contract Drawings and Technical Specifications limited to delineation and identification of work covered by the Project 20-P-91 Addendum for Canal Improvements. The revisions will be performed upon receipt of the final Addendum for Canal Improvements. Revisions are anticipated to address (be limited to) changes in requirements associated with canal dewatering that will be in the scope of the Addendum for Canal Improvements.
- HDR will compile the IFB Document to include the Project 20-P-91 Addendum for Canal Improvements. Contract Drawings and Technical Specifications for the Addendum for Canal Improvements will be prepared by the Consultant for Canal Improvements as separate documents compatible with HDR Contract Drawings and Technical Specifications for Project 15-P-41 Penstock Intake Gates, which will comprise the comprehensive IFB Document for Construction Contract 20-B-44.
- Coordination with the Consultant for Canal Improvements including participation in telephone discussions and virtual meetings coordinated by PVWC for clarifications of delineation of the design and construction scope of work between Project 15-P-41 and Project 20-P-91. Assumes three 1-hour meetings with HDR Design Manager, and Project and Lead engineers.
- Review of Canal Improvements Addendum. HDR's review comments are limited to clarification of delineation and identification of the respective technical requirements

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and construction scope of work for Project 15-P-41 and Project 20-P-91. Assumes two rounds of review and comment.

- HDR will update the Information and Instructions to Bidders for the Canal Improvements Amendment based on current contract and bid documents provided by PVWC.
- Review and incorporate PVWC comments on final draft Issue for Bid Document for Construction Contract 20-B-44 (with Addendum). Consultant for Canal Improvements shall address PVWC comments on Canal Improvements. HDR assumes one round of review and consolidated comments and markups by PVWC.

2.2 Design Report

Deliverable: Final Design Report for Penstock Intake Gates with Addendum for Canal Improvements that summarizes the design basis for Project 15-P-41

- Summary of design basis
- Calculations and supporting technical information
- Reference Information

Schedule: Complete Design Project 15-P-41 – September 2021

Scope of Work:

Prepare a final draft of the Design Report for Project 15-P-41 Penstock Intake Gates, including supporting technical information and calculations in conformance with FERC regulations and content requirements. For clarification, the Design Report Project 20-P-91 Canal Improvements Addendum will be prepared by the Consultant for Canal Improvements as a separate document compatible with HDR Design Report for Penstock Intake Gates, which will comprise the comprehensive Design Report for Project 1.

- Coordination with the Consultant for Canal Improvements including participation in telephone discussions and virtual meetings coordinated by PVWC for clarifications of design basis and construction scope of work between Project 15-P-41 and Project 20-P-91. Assumes two 1-hour meetings with HDR Design Manager and Project/Lead Engineers, including associated internal coordination.
- Review and incorporate PVWC comments on the final Penstock Intake Gates Design Report (Consultant for Canal Improvements shall address PVWC comments on the Design Report Addendum).

2.3 FERC Submittal Package

The Federal Energy Regulatory Commission (FERC) is the entity who will approve construction of Project 1 prior to start of construction, and FERC's approval will be based on its review of the FERC Submittal Package.

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Deliverable: FERC Submittal Package for Project 1:

- Design Report (Addendum prepared by Consultant for Canal Improvements)
- Contract Drawings and Specifications (Addendum prepared by Consultant for Canal Improvements)
- Cofferdam conceptual design (prepared by Consultant for Canal Improvements)
- Quality Control Inspection Program (prepared by Consultant for Canal Improvements)
- Temporary Emergency Action Plan (prepared by Consultant for Canal Improvements)

Schedule: Design Submittal to FERC for Project 1 – November 2021

Scope of Work:

Compile an electronic file of the final design package for submittal by PVWC to FERC for their review and approval for construction of Project 1, including:

- Coordination with the Consultant for Canal Improvements including participation in telephone discussions for preparation of draft and final FERC Submittal Package.
- Prepare a final draft of the FERC Submittal Package for PVWC review.
- Review and incorporate PVWC comments for preparation of the final FERC Submittal Package (Consultant for Canal Improvements shall address comments on the Addendum).

Task 4 Engineering Services During Bidding and Construction

Engineering services during construction for Construction Contract 20-B-44 limited to work associated with Project 15-P-41 Penstock Intake Gates, including coordination with the Consultant for Project 20-P-91 Canal Improvements.

4.1 Engineering Assistance During Bidding

Deliverable: Assist PVWC during bidding for Construction Contract 20-B-44 limited to work associated with Project 15-P-41 Penstock Intake Gates.

Schedule: Issue RFP for Construction Contract 20-B-44 – May 2022
Award Construction Contract 20-B-44 – August 2022

Scope of Work:

The following scope of work is limited to the Construction Contract 20-B-44 work associated with Project 15-P-41 Penstock Intake Gates:

- Respond to Bidder's questions
- Preparation of one addenda for design changes and clarifications
- Participate in a Bidders virtual meeting
 - Design Manager, Structural Project Engineer and Structural, Mechanical and Electrical Engineers will participate
 - Assume a 4-hour meeting
 - Preparation of meeting notes
- Review and evaluate up to six bids for Construction Contract 20-B-44 and make a recommendation to PVWC concerning award of the Contract. The subtask will be limited to review of the Form of Proposal for the Penstock Intake Gates submitted with each bid, and comparison summary of pricing from all bids. HDR will also review any technical exceptions to the work submitted with each bid to assess that the bid meets requirements of the scope of work.
- Coordination with Consultant for Canal Improvements through PVWC, including compiling responses to bidder's questions, addenda, bid evaluation and recommendations for work associated with the Addendum.

4.2 Issue-for-Construction (IFC) Contract Documents for Construction Contract 20-B-44 work associated with Project 15-P-41 Penstock Intake Gates:

Deliverable: Final IFC Contract Documents with Addendum for Canal Improvements for Construction Contract 20-B-44 (electronic format):

- HDR will prepare the following IFC Contract Documents for Penstock Intake Gates:
 - Contract Documents
 - Technical Specifications
 - Contract Drawings
 - Reference Information
- Addendum for Canal Improvements (prepared by Consultant for Canal Improvements) will be appended to the IFC Contract Documents:
 - Contract Documents
 - Appendix A - Permits required for Canal Improvements
 - Appendix B – Reference Drawings
 - Technical Specifications
 - Contract Drawings
 - Reference Information

Schedule: Award Construction Contract 20-B-44 – August 2022

Scope of Work

- Revise Project 15-P-41 Contract Drawings and Technical Specifications to conform to the Addenda (limited to only nominal clarifications resulting from the bidding process). Revisions will be performed upon receipt of the final changes to the IFC Addendum for Canal Improvements.
- Coordination with the Consultant for Canal Improvements including participation in telephone discussions and virtual meetings coordinated through PVWC for design and scope changes and impacts on Project 15-P-41. Assumes two 2-hour meetings with HDR Design Manager and Structural Project Engineer and associated internal coordination.
- Review and comment on a final draft IFC Addendum Contract Drawings and Specifications prepared by Consultant for Canal Improvements. HDR's review comments are limited to clarification of delineation and identification of the respective technical requirements and construction scope of work for Project 15-P-41 and Project 20-P-91. Assumes two rounds of review and comment.
- The Consultant for Canal Improvements shall provide information for final Contract Documents, and the permits obtained for Canal Improvements, for the IFC Document.
- Review and incorporate PVWC comments on the 100 percent complete IFC Document (with Addendum) for Construction Contract 20-B-44. HDR assumes one round of review and consolidated comments and markups by PVWC.

4.3 Engineering Services During Construction

Deliverable: Engineering services during construction for Construction Contract 20-B-44 limited to work associated with Project 15-P-41 Penstock Intake Gates and coordination with Consultant for Canal Improvements.

Schedule: Assume penstock intake gate installation will be performed during canal dewatering beginning October 2024; through wet testing performed upon re-watering the canal by April 2025 (6-month period).

Scope of Work

The following scope of work for engineering services is limited to the construction work associated with Project 15-P-41 Penstock Intake Gates only:

- Review and resolution of a total of 15 shop drawings and other submittal packages required by the Penstock Intake Gates, including maintaining a shop drawing log.
- Participate in monthly progress meetings with PVWC staff and Consultant for Canal Improvements prior to each monthly construction meeting with the Contractor. Assumes two-hour duration; with participation by HDR Design Manager, Structural Project Engineer, and other staff engineers by telephone conference/virtual meeting.

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Assumes 6 monthly meetings during the 6-month period of construction of Penstock Intake Gates. An HDR engineer will attend the meetings in-person if the meeting occurs during monthly site visits.

- Participate in monthly construction telephone meetings with participation by HDR Design Manager, Structural Project Engineer and other staff engineers by telephone conference/virtual meeting. Assumes 6 monthly meetings assumed to last four hours each during the 6-month period of construction of Penstock Intake Gates. An HDR engineer will attend the meetings in-person if the meeting occurs during monthly site visits. HDR will also participate in three additional meetings as requested by PVWC.
- Respond to questions during construction including Requests for Information (RFI's) related to the Penstock Intake Gates. The RFI's will be forwarded to HDR from the On-site Inspector/Engineer provided by the Consultant for Canal Improvements under Project 20-P-91 as coordinated by PVWC.
- Visit the project site during construction to observe progress of the work associated with Penstock Intake Gates. Assumes one visit during each month of construction of the Penstock Intake Gates (6 visits), by the Structural Project Engineer and staff engineer, and an additional 12 visits by an engineer as appropriate. The site visits will be coordinated with monthly meetings with the Contractor, and to observe key installation and testing of the Penstock Intake Gates including the following:
 - Dry testing of the new intake gates.
 - Installation and testing of the new air vacuum valves.
 - Wet testing of the new intake stop logs and intake gates upon canal refilling.
 - Installation of an FRP lining of the penstocks in the areas of the existing gate valves.
 - Filling of the turbine shut off valve actuator manholes with flowable fill.
 - Checkout of electrical systems and controls.
 - Testing and Start-up of Penstock Intake Gates power and controls operating system.
 - Wet testing of the new intake gates under flow conditions approximately 1.5 years after installation.
- Design Changes (HDR assumes 9 total):
 - Respond to Field Requests for Engineering Change (FRECS).
 - Issue Engineering Change Notice (ECN's).
- The Structural Project Engineer will perform a final site visit for the purposes of preparing an opinion of completion of the project in conformance with the Contract Documents.
- Prepare Record Drawings based on one set of Contractor redlines for Penstock Intake Gates.

Assumptions:

- Contractor for Construction Contract 20-B-44 is responsible for safety during construction. HDR is not be responsible for preparation, implementation and/or enforcement of Contractor's health and safety plan.
- HDR's engineering services during construction will not direct the means and methods of Contractor for Construction Contract 20-B-44.

The Consultant for Canal Improvements is responsible for Construction Administration of Contract 20-B-44, including providing an On-site Resident Inspector/Engineer for a period of 30 months (5,200 hours) for day-to-day monitoring of all construction activities, checking that all work is being performed in accordance with the Contract Documents and the approved shop drawings and submittals. The Consultant for Canal Improvements is responsible for providing the certification that Project 1 was constructed in conformance with the Contract Documents.

For clarification, the Consultant for Canal Improvements are responsible for following scope items that pertain to the overall scope of Project 1 constructed under Construction Contract 20-B-44 (See Draft RFP for Project 20-P-91):

- Engineer's cost estimate for construction
- Permitting
- Daily observations of construction activities and updates of construction progress to PVWC
- Daily construction progress reports and documentation
- Monthly and Final Construction Reports submitted to FERC
- Implementation of the Quality Control and Inspection Program for monitoring the quality and progress of work as required by FERC
- Review and approval of Contractor's design of temporary cofferdams and dewatering systems for canal improvements
- Prepare the Temporary Emergency Action Plan for dewatering activities as required by FERC
- Review and negotiate Contractor's periodic payment requests
- Preparation of project closeout punch lists and final project punch list at the time of Substantial Completion
- Letter certifying the work was completed in conformance with the Contract Documents
- Operation and Training Manuals
- Training
- Record Drawings for Canal Improvements Project 20-P-91

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Project Team

HDR proposes changes in certain roles for completion of Project 15-P-41. These changes will provide for transition to meet the needs of the project through completion of construction. This Project Team would also support Project 20-P-91 if HDR is successful in response to the RFP.

Ray Wingert (formerly Project Manager) will continue supporting the project as Technical Director. Kristin Munoz (Mahwah, NJ) will support the project as Project Manager. Other new team members include Justin Niedzialek (Syracuse, NY) as Design Manager, and Jesse Jaeckel, Structural Project Engineer.

The remaining supporting staff will remain intact, with additional engineering support during construction to be provided locally from Mahwah, NJ.

Compensation

The estimated price for completion of additional engineering services to complete Project 1, of Project 15-P-41 in coordination with Project 20-P-91 is summarized by task in the tables presented below. The table presents HDR 2020 hourly labor rates. The Labor Total factors in an annual escalation of rates of 3.5 percent for the assumed project schedule.

Task 2 - Design

Staffing Level	2020 Hourly Rate (U.S. Dollars)	Project Hours	Labor Total	Out of Pocket Expenses	Total Cost
Project Manager	\$ 222	12	\$ 2,807		\$ 2,807
Project Director	\$ 244	2	\$ 514		\$ 514
Design Manager	\$ 192	22	\$ 4,413		\$ 4,413
Technical Director	\$ 265	28	\$ 7,765		\$ 7,765
Structural Project Engineer	\$ 281	14	\$ 4,106		\$ 4,106
Structural Engineer II	\$ 189	30	\$ 5,852		\$ 5,852
Structural Engineer I	\$ 127	94	\$ 9,650		\$ 9,650
Mechanical Engineer II	\$ 199	2	\$ 412		\$ 412
Engineering Technician III	\$ 135	10	\$ 1,410		\$ 1,410
Electrical Project Engineer	\$ 251	2	\$ 519		\$ 519
Electrical Engineer II	\$ 173	10	\$ 1,803		\$ 1,803
CAD Technician III	\$ 149	42	\$ 6,582		\$ 6,582
Project Controller	\$ 137	12	\$ 1,736		\$ 1,736
Administrative Assistant I	\$ 78	40	\$ 3,269		\$ 3,269
Task Totals		320	\$ 50,838	\$ 1,500	\$ 52,338

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**Task 4 - Engineering Services During Bidding and Construction 2022-2025 (3-month Bid; 6 month Construction)**

Staffing Level	Hourly Rate (U.S. Dollars)	Project Hours	Labor Total	Out of Pocket Expenses	Total Cost
Project Manager	\$ 222	16	\$ 4,012		\$ 4,012
Project Director	\$ 244	4	\$ 1,101		\$ 1,101
Design Manager	\$ 192	53	\$ 11,416		\$ 11,461
Technical Director	\$ 265	4	\$ 1,195		\$ 1,195
Structural Project Engineer	\$ 281	77	\$ 24,962		\$ 24,962
Structural Engineer II	\$ 189	50	\$ 10,370		\$ 10,370
Structural Engineer I	\$ 127	516	\$ 74,163		\$ 74,163
Mechanical Engineer II	\$ 199	7	\$ 1,568		\$ 1,568
Engineering Technician III	\$ 135	151	\$ 23,554		\$ 23,554
Electrical Project Engineer	\$ 251	66	\$ 19,245		\$ 19,245
Electrical Engineer II	\$ 173	45	\$ 8,673		\$ 8,673
CAD Technician III	\$ 149	40	\$ 6,956		\$ 6,956
Project Controller	\$ 137	18	\$ 2,791		\$ 2,791
Administrative Assistant I	\$ 78	124	\$ 11,183		\$ 11,183
Task Totals		1,171	\$ 201,190	\$ 4,100	\$ 205,290
Total Not-to-Exceed Cost		1,491	\$ 252,028	\$ 5,600	\$ 257,628

HDR's scope, schedule and budget is based on what is known at the time of this proposal. All work will be performed on a time-and-expense basis, and HDR will not exceed the estimated budget without prior authorization from PVWC. If additional tasks, unforeseen conditions, delays or project circumstances arise, additional budget may be needed. Such a request would be the subject of an addendum to this scope.

With respect to the budget, timing and execution of work described in this proposal in relation to the ongoing COVID-19 pandemic, PVWC and HDR will continually monitor and communicate regarding changing conditions and directives recognizing that re-evaluation of the scope, project approach, schedule and budget may be appropriate or required.

Request for Contract Amendment

HDR requests authorization for a contract amendment to proceed additional engineering services to complete Project 1 of Project 15-P-41 in coordination with Project 20-P-91.

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This contract amendment request results in a total contract price adjustment of \$466,000.95 factoring in the aggregate remaining contract amount (current balance of June 10, 2020) for both Project 1 and 2 of Project 15-P-41 as summarized in the following table. This results in an amended total contract price of \$1,702,322.95. The contract will also need to be amended for the extension of time for completion of HDR's services, which is estimated to be by December 31, 2026.

Contract Amendment PROJECT 15-P-41				
		Original Contract Amount	Requested Amendment	Amended Totals
Project 1	Penstock Intake Gates⁽¹⁾			
Task 1	Feasibility Study	\$ 103,609	\$ 0	\$ 103,609
Task 2	Design	\$ 236,732	\$ 357,152 ⁽²⁾	\$ 593,884
Task 3	Permitting	\$ 10,997	\$ 1,356	\$ 12,353
Task 4	C/A	\$ 236,606	(\$ 31,316) ⁽³⁾	\$ 205,290 ⁽³⁾
Subtotals		\$ 587,944	\$ 327,192	\$ 915,136
Project 2	Repair/Rehabilitate all 4 Hydroelectric Generators			
Task 1	Feasibility Study	\$ 66,082	\$ 0	\$ 66,082
Task 2	Design	\$ 55,375 ⁽⁴⁾	\$ 8,146 ⁽⁴⁾	\$ 63,521 ⁽⁴⁾
Task 3	Permitting	\$ 4,862	\$ 0	\$ 4,862
Task 4	C/A	\$ 472,059	\$ 130,663	\$ 602,722
Subtotals		\$ 598,378	\$ 138,809	\$ 737,187
Allowance		\$ 50,000	\$ 0	\$ 50,000
Totals		\$ 1,236,322	\$ 466,001	\$ 1,702,323

- Notes:
- (1) Replacement of turbine shutoff valves changed to penstock intake gates (\$1.6 million in anticipated construction cost savings to PVWC). PVWC's designated contract number for Project 1 is Contract 20-B-44.
 - (2) HDR shall complete Project 1 Task 2 design for \$52,338 (exclusive of the above allowance item) to address PVWC's review comments and prepare bid-ready documents, final design report (with final stability calculations for the penstock intake structure), FERC submittal, and including for coordination of bid process, design, permitting and C/A interface with new Project 20-P-91.
 - (3) Full-time on-site resident observation will be deleted from Project 1 of 15-P-41. Engineering services during Bidding and Construction Phase Services include office support and periodic site visits, and C/A interface with new Project 20-P-91. Refer to the RFP for new Project 20-P-91 which will provide HDR (and other potential responders) with the opportunity to propose on modified and expanded services on an equal footing basis.
 - (4) Labor rates for the current (6-10-20) balance available of \$49,927 are escalated (7 years at 3.5%) to \$63,521.

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HDR appreciates the opportunity to provide these services to PVWC. Please contact me if you have any questions.

Sincerely,
HDR

Ray Wingert, P.E. (MA, ME, MI, NH, PA)
Technical Director

Kristin Munoz, P.E. (NY)
Project Manager

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OFFICE OF THE COMPTROLLER

CERTIFICATION OF AVAILABILITY OF FUNDS

It is hereby certified that subject to Commission approval of future Budgets, with respect to multi-budget year contracts, there are or will be sufficient available funds for expenditures to be incurred as result of any contract or commitment to be entered into by Passaic Valley Water Commission as follows:

Description of Project or Contract:

Professional Engineering Services for Project # 15-P-41 – Professional Services for Rehab of PVWC's Hydroelectric Generators. (**HDR Engineering**).

Amount of Project or Contract not to exceed: **\$466,000.95**

Contract amendment

1. Acct #: 001-0901-419.95-13 **BUDGET 2021**

Other Comments: **Professional Services**

Date of Certification: October 30, 2020



Yitzchak Weiss, CPA
Comptroller and Chief Financial Officer
Passaic Valley Water Commission