Village Hall HVAC 2024

VILLAGE OF ELMSFORD WESTCHESTER COUNTY, NEW YORK

*Mayor*Robert Williams

Board of Trustees
Sydney Henry
Joseph Coffey
Matthey Evans
Nelson Lopez

Village Administrator/Clerk
Michael C. Mills

Village Engineer
Antonio V. Capicotto, P.E.

Village of Elmsford

15 South Stone Avenue Elmsford, New York 10523 (914) 592-6555

NOTICE TO BIDDERS

Village Hall HVAC 2024

Village Of Elmsford Westchester County, New York

NOTICE IS HEREBY GIVEN that sealed bids will be received by the Village of Elmsford until 10:00 a.m. on March 1, 2024, at the Office of the Village Clerk, 15 South Stone Avenue, Elmsford, New York 10523, at which time and place said sealed bids will be publicly opened and read aloud for the following work:

Installation and wiring of mini-split style HVAC units in the Village Courtroom and four offices. Plans and Bid Proposal Forms will be available on February 15, 2024 at the Office of the Village Clerk for the non-refundable sum of \$10.00. A bid bond, certified check or bank check in the amount of 5% of bid must accompany the bid proposal. All bids must be submitted in sealed envelopes plainly marked "Bid: Village Hall HVAC 2024".

The Board of Trustees of the Village of Elmsford reserves the right to accept or reject any or all bids and to waive any informality at their discretion, and to award contracts in a manner deemed to be in the best interests of the Village of Elmsford even if such award is to other than the lowest bidder.

All technical questions to Village Engineer, Antonio V. Capicotto, P.E. at (914) 345-1553.

Michael C. Mills Village Administrator/Clerk

Elmsford, New York Dated February 15, 2024

INFORMATION FOR BIDDERS

PROPOSALS are requested for the <u>Elmsford Village Hall HVAC 2024</u> and related work for the Village of Elmsford, New York, in accordance with specifications and other Contract Documents prepared by the Office of the Village Engineer (hereinafter Engineer).

Each Proposal shall be made on a form prepared by the Engineer and included as one of the Contract Documents; and shall be submitted in a sealed envelope bearing the title of work and name of the Bidder. The Contractor's Bid shall be submitted in the entire bound Specifications and Contract Documents booklet including all original forms, any deviation shall be grounds for disqualification of bid.

In case of a difference between the stipulated amount of the Proposal written in words and the stipulated amount written in figures, the stipulated amount stated in words shall govern.

Proposals shall not contain any recapitulations of the work to be done. Alternate proposals will not be considered unless called for. Oral proposals or modifications will not be considered.

Before submitting a Proposal, Bidders shall carefully read the Specifications and other contract Documents, shall visit the site, and shall fully inform themselves as to all existing conditions and limitations, and shall include in the Proposal a sum to cover the cost of all items included in the Contract Drawings and Documents.

Proposals shall be delivered by the time and to the place stipulated in the advertisement. It is the sole responsibility of the Bidder to see that his Proposal is received in proper time. Any Proposal received after the scheduled closing time for receipt of Proposals shall be returned to the Bidder unopened.

Any Bidder may withdraw his Proposal, either personally or by written request, at any time prior to the scheduled closing time for receipt of Proposals.

Proposals will be opened and publicly read aloud at the time and place set forth in the Notice to Bidders.

The contract will be awarded to the lowest and/or best qualified responsible Bidder who complies with these instructions and with the Legal Notice. The Village reserves the right to reject any or all Proposals or to waive any formality or technicality in any Proposal in the interest of the Village. No Bidder may withdraw his Proposal for a period of 45 days after the date of opening thereof.

If any person contemplating submitting a Proposal is in doubt to the true meaning of any part of the Drawings, Specifications or other Contract Documents, or finds discrepancies in, or omissions from, the Drawings or Specifications, he may submit to the Engineer a

written request for an interpretation or correction thereof, The person submitting the request will be responsible for its prompt delivery. Any interpretation or correction of the documents will be made only by Addendum duly issued and a copy of the Addendum will be mailed or delivered to each person receiving a set of the Contract Documents. The Village will be responsible for any other explanations or interpretations of the Contract Documents.

Any Addenda issued during the time of the bidding, or forming a part of the Contract Documents received by the Bidder for the preparation of a Bid shall be covered in the Proposal and shall be made a part of the Contract. Receipt of each Addendum shall be acknowledged in the Proposal.

No person, firm or corporation shall be allowed to make, file or be interested in more than one Proposal for the same Contact as the prime bidder. A person, firm or corporation who has submitted a sub-proposal to a Bidder, or who has quoted prices on materials to a Bidder, is <u>not</u> hereby disqualified from submitting a sub-proposal or quoting prices to other Bidders.

The work under this contract shall be completed within forty five (45) calendar days after signing of the contract, unless the Village waives adherence to this date in writing. The Contract will be required to pay as liquidated damages, the sum of one hundred dollars (\$100.00) for each calendar day beyond said time that is required to satisfactorily complete the work of this project.

The attention of persons intending to submit proposals is specifically called to the fact that no plea will be accepted in which a Contractor pleads misunderstanding or deception of estimates of quantities, character, scope of work, location or other conditions surrounding same. Permission will not be given to withdraw, modify or explain any proposal or bid after it has been deposited.

To be entitled to consideration, a Certified Check or Bond payable to the Village of Elmsford, New York shall accompany the sealed bid, for the sum equal to 5% of the bid price. The checks of the unsuccessful bidders shall be returned within 30 days of the bid opening.

The **Performance Bond** that the Contractor is to provide, shall be issued by a solvent insurance company authorized to do business in the State of New York and which will indemnify and insure the Village of Elmsford, New York, so that all work herein required to be performed and all material to be furnished, will be satisfactorily completed in accordance with this proposal. The amount of the bond shall be 100% of the amount of the contract price. The form of this bond is included herein.

The Contractor shall also pay for and furnish a separate Labor and Material Bond payment, guaranteeing prompt payment of monies due to all persons supplying the Contractor or any Sub-contractor with work, labor or materials employed and used in

carrying out the Contract. The amount of such bond shall be 100% of the amount of the contract price. The form of this bond is included herein.

In addition, at the time of final payment, a **Maintenance Bond** guaranteeing against defective materials and workmanship will be required in an amount equal to one hundred percent (100%) of the contract amount. The Maintenance Bond shall be in effect for a period of **two-year** from the date of final acceptance of the project. The form of this bond is included herein.

The Contractor shall comply with all local, state, and federal laws, rules and regulations applicable and with the New York State Labor Law. All costs and expenses for obtaining and providing required shop drawings, submittals, Insurances and Bonds shall be deemed included in all items of this contract and therefore no separate payment item is provided.

VILLAGE OF ELMSFORD

Village Hall HVAC 2024

BID PROPOSAL FORM

To:	Village Clerk – Village Hall Elmsford, New York	Bid Submitted by:	
		(Name)	
		(Address)	
		(Telephone No.)	

- 1. I/We do hereby declare that I/We have carefully examined the Notice to Bidders, the Summary of Work, and the Specifications relating to the above entitled matter and the work, and have also examined the site.
- 2. I/We do hereby offer and agree to furnish all materials, to fully and faithfully construct, perform and execute all work in the above titled matter in accordance with the Specifications relating thereto, and to furnish all labor, tools, implements, models, forms, transportations and materials necessary and proper for the purpose and the price/prices as given on the bid forms.
- 3. I/We do hereby declare that the prices so stated cover all expenses of every kind incidental to the completion of said work, and the contract therefor, including all claims that may arise through damages or any other cause whatsoever.
- 4. I/We do hereby agree that I/We will execute a contract therefore, containing all the terms, conditions, provisions and covenants necessary to complete the work according to the Specifications therefore within 10 business days after the award of the contract and if I/We fail to execute said contract within said period of time, that the Village Board shall have the power to rescind said award and also that the said Village Board shall retain the proceeds of the certified check, or require the payment of the sum of the bid bond. The Contract execution will serve as the official notification to commence work.
- 5. I/We do also declare and agree I/We will commence the work within five days after the Contract execution and will complete the work fully and in every respect on or before the time specified in said Contract and do authorize the said Board, in case of failure to complete the work within such specified time, to employ such men, equipment and materials as may be necessary for the proper completion of said work and to deduct the cost thereof from the amount due under the Contract.

- 6. I/We agree that the Village reserves the right to select any one, combination of, or all the Bid items in this proposal for the Contractor to complete without affecting any of the Bid prices.
- 7. I/We hereby affirm that by submission of this Bid, each Bidder and each person signing on behalf of any Bidder certifies, and in the case of a joint bid each party thereto certifies. as to its own organization, under the penalty of perjury, that to the best of knowledge and belief:
 - (a) the prices in this Bid have been arrived at independently without collusion, consultation, communication, or agreement for the purpose of restricting competition, as to any matter relating to such prices with any other Bidder or with any competitor;
 - (b) unless otherwise required by law, the prices which have been quoted in this Bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to opening, directly or indirectly, to any other Bidder or to any competitor; and
 - (c) no attempt has been made or will be made-by the Bidder to induce any other person, partnership or corporation to submit or not submit a Bid for the purpose of restricting competition.
 - (d) no member of the Village Board or and officer or employee of the Village of Elmsford, New York, or person whose salary is payable in whole or in part from the said Treasury is, shall be or become interested, directly, as contracting party, partner, stockholder, surety or otherwise, in this Bid, or in the performance of the Contract, or in the supplies, materials or equipment and work or labor to which it relates, or in any portion of the profits thereof.
- 8. I/We hereby further agree that this proposal is a firm Bid and shall remain in effect for a period of at least forty five (45) calendar days from the date of the opening of Bids, and that with said period of forty five (45) days, the Village of Elmsford will accept or reject this proposal, or this period may be extended by mutual agreement.
- 9. I/WE do hereby declare that, if this is a Corporate Bid, I have been duly authorized to act as the Signator on this proposal in behalf of this Corporation.
- 10. I/We hereby affirm under penalty of perjury, the truth of all statements in this proposal.

*Total Lump Sum Bid:	
(written in numbers)	_
(written in words)	_
*The TOTAL BID shall be the total lump sum for performing all the work as in the contract documents and on the plans.	s described
Date: Date:	
Address of Individual, Firm or Corporation	
Telephone Number of Individual, Firm or Corporation	
By:(Authorized Signator)	
Corporate Seal (if incorporated)	
Bidder acknowledges receipt of Addenda as follows:	
Signature	
Signature	
Signature	

STATE LAWS AND REGULATIONS

<u>GRAND JURY TESTIMONY</u>: Bidders attention is directed to the following clause, Chapter 605 of the New York State Laws of 1959:

"A person who refuses, when called before a grand jury to testify concerning this contract or any transaction in connection therewith, to sign a waiver of immunity against subsequent criminal prosecution or to answer any relevant question concerning this contract or transaction, shall be disqualified from thereafter selling to or submitting bids to or receiving awards from or entering into any contract with any municipal corporation or any public department, agency or official thereof for goods, work, or services, for a period of 5 years after such refusal; and any and all contracts made with any municipal corporation or any public department, agency or official thereof after July 1st, 1959, may be cancelled or terminated by the municipal corporation without incurring any penalty or damages on account of such cancellation or termination; but any money owing to the municipal corporation for goods delivered or work done prior to the cancellation or termination shall be paid."

NON-COLLUSION IN BIDDING: Each bidder shall submit a statement of non-collusion in bidding the work proposed herein. Failure to submit a non-collusive bidding certificate will constitute grounds for the rejection of said bid.

EMPLOYMENT PREFERENCE: The contractor shall comply in all respects with Section 222 of the Labor Law of the State of New York, and agrees that preference shall be given in employment to citizens of the State of New York who have been residents for at least six consecutive months immediately prior to the commencement of their employment, but persons other than citizens of the State of New York who may be employed by the contractor, or by any subcontractor, shall furnish satisfactory proof of residence in accordance with the rules adopted by the Industrial Commissioner of the State of New York. Upon demand of the aforesaid Industrial Commissioner, the contractor shall furnish a list of the names and addresses of all his subcontractors. The contractor and each subcontractor shall keep a list of his employees, stating whether they are citizens of the State of New York, native born citizens or naturalized citizens and, in case of naturalization, the date thereof, and the name of the court in which granted. This contract shall be null and void if the provisions of said Section 222 aforesaid are not complied with.

SALES TAX EXEMPTION: The contractor's attention is directed to the changes made in Section 1115 of the Tax Law of the State of New York by Chapter 513 and 514 of the Laws of 1974. In connection with capital improvement contracts entered into on or after September 1, 1974, all tangible personal property which will become an integral component of a structure, building or real property of New York State, or any of its political subdivisions, including the Village of Elmsford, is exempt from State and local retail sales tax and compensating use tax. In formulating their proposals, all bidders shall exclude any dollar amounts for the payment of State and local retail sales tax and

compensating use tax. The successful bidder shall be obligated to file the required Contractor Exempt Purchase Certificates.

<u>LABOR AND WAGES</u>: A governing provision in the contract will be the rate of wages of all labor applicable to the kind of work, as determined by the New York State Industrial Commissioner pursuant to the Labor Law which states that a schedule of wages so determined by the New York State Industrial Commissioner and the Fiscal Officer be incorporated in the contract by the Village.

The Labor Department Schedule of Hourly Minimum rates of wages when omitted from these specifications are still included even if not received at the time of printing of these specifications. Copies of the labor rates shall be forwarded to the bidders as and when received. Such omission does not vary or affect the obligation of the contractor to comply with the law or his compensation therefor.

The contractor and each and every subcontractor performing work on the site of the project to which this contract relates shall comply with the applicable provisions of the Labor Law, as amended, of the State of New York, and particularly Article 8 thereof. All provisions of Section 220 of the Labor Law shall be deemed a part of this contract.

NON COLLUSIVE BIDDING CERTIFICATION

Made pursuant to Section 103-d of the New York State General Municipal Law, as amended

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid party thereto certifies as to its own organization, under penalty of perjury, that to the best of his knowledge and belief:

The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor; and

Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to the opening, directly or indirectly, to any other bidder or to any competitor; and

No Attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

A bid shall not be considered for award nor shall any award be made where Sections a. (1), (2), and (3) above have not been complied with, provided, however, that if in any case the bidder cannot make the foregoing certification, the bidder shall so state and shall furnish with the bid a signed statement that sets forth in detail the reasons therefor. Where Sections a.(1), (2), and (3) above have not been complied with, the bid shall not be considered for award nor shall any award be made unless the head of the purchasing unit of the Village of Elmsford thereof to which the bid is made, or his designee, determines that such disclosure was not made for the purpose of restricting competition.

Dated:	
(Seal of Corporation)	Legal Name of Person, Firm or Corporation
	Address of Person, Firm or Corporation
Signature:	
Print Name & Title:	

BID BOND

KNOW ALL MEN BY THESE PR	ESENTS, that we	
	, hereinafter called the Princip	oal. as Principal, and the
		, of
a corporation duly organized under th Surety, as Surety, are held and firmly bound unt		
in the sum of		
for the payment of which sum well a bind ourselves, our heirs, executors, firmly by these presents.	and truly to be made, the said Prir	
WHEREAS, the Principal has	s submitted a bid for	
enter into a Contract with the Obligee in as may be specified in the bidding or Coperformance of such Contract and for prosecution thereof or in the event of the or bonds, the Principal shall pay to the Oamount specified in said bid and such lar another party to perform the work covere to remain in full force and effect.	ontract Documents with good and suf- the prompt payment of labor and failure of the Principal to enter such obligee the difference not to exceed the ger amount for which the Obligee mand by said bid, then this obligation shall	, and give such bond or bond ficient surety for the faithful I material furnished in the contract and give such bond e penalty hereof between the y in good faith contract with Il be null and void, otherwise
SIGNED AND SEALED this	day of	AD 20
In the presence of:	PRINCIPAL	(Seal)
WITNESS	{	
	{SURETY	(Seal)
WITNESS	{ TITLE	

CONTRACTOR'S DECLARATION

The names and addresses of all partners, officers, or parties interested in the foregoing bid are as follows: Title of Office Held if Bidder is a Corp. Address Full Name The undersigned bidder hereby designates the address stated below as the place to which all notices and letters may be delivered or mailed. Contractor By_____ (signature) Witness Title The business address of the bidder is: The above-named bidder is a (corporation)(partnership)(individual) -- strike out designations which do not apply -- in the State of _____. DATE:

CERTIFICATE AS TO CORPORATE PRINCIPAL

Ι, _	, certify that I am the								- 1					
_,	Secreta	iry of	f the	Corpora	ation	name	ed as	Pri	ncipal	in	the	within	bond;	that
the	said	bond	on	behalf	of								who s	
	nine: ar	nd that	said h	ond was			-						ure there	
				of this go				., u.,						
							1		(Cor	porat	e Seal	l)		
							- 			Titl	e			

CERTIFICATION BY BIDDER REGARDING EQUAL EMPLOYMENT OPPORTUNITY

Name of Bidder

INSTRUCTIONS

This certification is required pursuant to Executive Order 11246, Part II, Section 203 (b), (30F.R. 12319-25). Each Bidder is required to state in his bid whether he has participated in any previous contract or subcontract subject to the equal opportunity clause; and, if so, whether he has filed all compliance reports due under applicable filing requirements.

	pliance reports due under applicable filing requirements.
	CONTRACTOR'S CERTIFICATION
Cont	ractor's Name:
Addı	ress:
1.	Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause. YESNO
2.	Compliance reports were required to be filed in connection with such contract or subcontract. YESNO
	If "YES', state what reports were filed and with what agency.
3.	Bidder has filed all compliance reports due under applicable instructions, including SF-100. YES NO
4.	If answer to item is "NO', please explain in detail on reverse side of this certification.
	ification - The information above is true and complete to the best of my knowledge and f. A willfully false statement is punishable by law. (U.S. Code, Title 18, Section 1001).
	(NAME AND TITLE OF SIGNER - PLEASE TYPE)
	(SIGNATURE) (DATE)

CERTIFICATION OF NONSEGREGATED FACILITIES

(Applicable to federally assisted construction contracts and related subcontracts exceeding \$10,000, which are not exempt from the Equal Opportunity clause.)

The federally assisted construction contractor certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to permit their services at any location, under his control, where segregated facilities are maintained. The federally assisted construction contractor certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments and that he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The federally assisted construction contractor agrees that a breach of this certification is a violation of the Equal Opportunity clause in this contract. As used in this certification, the term 'segregated facilities' means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise. The federally assisted construction contractor agrees that (except where he has obtained identical certifications from proposed subcontractors for specific time periods) he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause, and that he will retain such certifications in his files.

Signature	Date				
	Name and Title of Signer (Please Type)				

NOTE: The penalty for making false statements in offers is prescribed in 18 U.C. 1001.

CONTRACTOR'S ACKNOWLEDGMENT (If Corporation)

STATE OF NEW YORK) SS: COUNTY OF WESTCHESTER)
On this day of, 20, before me personally came, to me known, and known to me to be the, of, the corporation described in and which executed the within instrument, who being by me duly sworn, did depose and say that he resides at and that he is
that he resides at and that he is of said corporation and knows the corporate seal of the said corporation; that the seal affixed to the within instrument is such corporate seal and that it was so affixed by order of the Board of Directors of said corporation and that he signed his name thereto by like order.
Notary Public
CONTRACTOR'S ACKNOWLEDGMENT (If Individual)
On this day of, 20, before me personally came, to me known and known to me to be the same person described in and who executed the within instrument and he duly acknowledged to me that he executed the same for the purpose herein mentioned and, if operating under any trade name, that the certificate required by the New York State Penal Law, Sections 440 and 440-b has been filed with the County Clerk of Westchester County.
Notary Public
CONTRACTOR'S ACKNOWLEDGMENT (If Partnership)
On this day of, 20, before me personally came, to me known, and known to me to be a member of the firm of and the person described in and who
executed the within instrument in behalf of said firm, and he acknowledged to me that he executed the same in behalf of, and as the act of said firm for the purposes herein mentioned and that the certificate required by the New York State Penal Law, Sections 440 and 440-b has been filed with the County Clerk of Westchester County.
Notary Public

CERTIFICATE OF AUTHORITY

Ι,	certify that (officer other than
officer executing proposal documents) I am the	
	of
the "Contractor) a corporation duly organized which organized, e.g. the New York Busin agreement; that	(name of contractor) d and in good standing under the law under
	(person executing bid proposal) who
signed said agreement on behalf of the Contra	
that said agreement was duly signed for and its Board of Directors, thereunto duly author and effect at the date hereof.	
Date:	
	(Signature)
(Corporate seal)	
STATE OF NEW YORK) SS: COUNTY OF WESTCHESTER)	
On this day of	, 20, before me personally came
-	_, to me known, and known to me to be the
of	the
corporation described in and which executed sworn did depose and	the above certificate, who being by me duly
say that he resides at	
0.4	nd that he is
of said corporation and knows the corporate sto the above certificate is such corporate sea Board of Directors of said corporation, and the	seal of said corporation; that the seal affixed and that it was so affixed by order of the
	·
	Notary Public

CERTIFICATE OF SURETY

The undersigned hereby certify that	they are the duly authorized agents of
duly authorized to do business in the	e State of New York, and agree to furnish to
surety bonds for the faithful perfor	mance of any and all provisions contained in the Specifications nt that we will be surety for on each bond is:
	Surety Company or Agent
4	By
The terms of the Su	urety Company for furnishing the bond are hereby accepted.
*======================================	Name of Bidder By
Witness	(signature) Title

INDEMNIFICATION AGREEMENT

The Contractor agrees to protect, defend, indemnify and hold the Village of Elmsford and any agents, officers, employees and consultants of any of them; free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities of every kind and character arising out of or relating to any and all claims, liens, demands, obligations, actions, proceedings or causes of action of every kind and character in connection with or arising directly or indirectly out of this agreement and/or the performance hereof: without limiting the generality of the foregoing, any and all such claims, etc., relating to personal injury, death, damage to property, defects in materials or workmanship, actual or alleged infringement of any patent, trademark, copyright (or application for any thereof) or of any other tangible or intangible personal or property right, or any actual or alleged violation of any applicable statute, ordinance, administrative order, rule or regulation, decree of any court, shall be included in the indemnity hereunder. The Contractor further agrees to investigate, handle, respond to, provide defense for and defend any such claims, etc., at his sole expense and agrees to bear all other costs and expenses related thereto, even if it (claims, etc.), is groundless, false or fraudulent. In any case in which such indemnification would violate Section 5-322.1 of the New York General Obligations Law, or any other applicable legal prohibition, the foregoing provisions concerning indemnification shall not be construed to indemnify the Owner for damage arising out of bodily injury to persons or damage to property caused by or resulting from the sole negligence of the Owner, or its employees.

SIGNED AND SEALED this _		day of	A.D. 20
In the presence of:	{	PRINCIPAL	(Seal)
WITNESS	{	TITLE	

AGREEMENT

THIS AGREEMENT, made this	day of	, 20,
by and between(a corporation organized and existing under	r the state of	
)*(a partnership cons	isting of
)*(an individual tradi	ng as
)*(hereinafter called t	the "Contractor"
and Village of Elmsford, New York	hereinafter called the	"Owner"
WITNESSETH, that the Contractor and to mutually agree as follows: Article 1. Statement of Work. The Compersonnel, labor, materials, machinery, to including utility and transportation service required supplemental work for the complete the hereinafter referenced Contract Documents.	ntractor shall furnish all super cols, appurtenances, equipm ces and perform and completion of this Contract in stric	ervision, technical tent and services, lete all work and t accordance with
Article 2. The Contract Price. The Own of the Contract in current funds, for the to sum or unit price stipulated in the bid fadditions and deduction as provided in the Conditions.	otal quantities of work perfor for the respective work com	rmed at the lump apleted subject to

^{*} Strike out the two terms not applicable.

Article 3. Contract Documents. The Contract Documents shall consist of the following (including their attachments and exhibits):

- a. This agreement
- b. Addenda (if any)
- c. Invitation for Bids
- d. Instructions to Bidders
- e. Signed copy of Bid, With all attachments required for the Bidding
- f. Special Conditions
- g. General Conditions
- h. Technical Specifications
- Drawings (as listed in the Schedule of Drawings)
- j. Certificates of Insurance

This Agreement, together with other Documents enumerated in the Article 3, which said other Documents are as fully a part of the Contract as if hereto attached or herein repeated, forms the Contract between the parties hereto. In the event that any provision in any component part of this Contract conflicts with any provision of any other component, the part first enumerated in this Article 3 shall govern, except as otherwise specifically stated.

IN WITNESS WHEREOF, the parties hereto have caused this AGREEMENT to be executed in three (3) original copies on the day and year first above written.

ATTEST:			
(Contractor)			
By:			
(Name of Contractor)			
Title:			
Village of Elmsford, New York			
By:			
Title			

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS that
(Here insert the name and address or legal title of the Contractor)
as Drivainal harainafter called the Contractor and
as Principal, hereinafter called the Contractor, and
(Here insert the legal title of Surety)
as Surety, hereinafter called Surety, are held and firmly bound unto
The Village of Elmsford
as Obligee hereinafter called Owner, in the amount of
the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.
WHEREAS, Contractor has by written agreement dated
20 entered into a Contract with Owner for
in accordance with drawings and specifications prepared by
The Village of Elmsford Engineering Department
which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.
NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, the Contractor shall promptly and faithfully perform said Contract, then this obligation shall be null and void; otherwise shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of time made by the Owner.

Whenever Contractor shall be, and declared by Owner to be in default under the Contract, the Owner having performed Owner's obligations thereunder, the Surety may promptly remedy the default, or shall promptly

Complete the Contract in accordance with its terms and conditions, or

Obtain a bid or bids for submission to Owner for completing the Contract in accordance with terms and conditions, and upon determination by Owner and Surety of the lowest responsible bidder, arrange for a contract between such bidder and Owner, and make available as work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the Contract price; but the exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount forth in the first paragraph hereof. The term "balance of the Contract price," as used in this paragraph, shall mean the total amount payable by Owner to Contractor under the Contract and any amendments thereof less the amount properly paid by Owner to Contractor.

Any suit under this bond must be instituted before the expiration of two (2) years from the date which final payment under the Contract fails due.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the Owner named herein or the heirs, executors, administrators or successors of Owner.

SIGNED AND SEALED this _	day of	A.D. 20
In the presence of:	PRINCIPAL	(Seal)
WITNESS	{TITLE	
	{SURETY	(Seal)
WITNESS	{ TITLE	

LABOR AND MATERIAL PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS that
(Here insert the name and address or legal title of the Contractor)
as Principal, hereinafter called Principal, and
(Here insert the legal title of Surety)
as Surety, hereinafter called Surety, are held and firmly bound unto
The Village of Elmsford
as Obligee, hereinafter called Owner, for the use and benefit of claimants as hereinbelow defined, in the amount of
Dollars (\$)
for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents. WHEREAS, Principal has by written agreement dated
20 entered into a contract with Owner for
in accordance with the drawings and specifications prepared by
The Village of Elmsford Engineering Department

which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

A. A claimant is defined as one having a direct contract with the Principal or with a subcontractor of the Principal for labor, material, or both, used or reasonably required for use in the performance of the

Contract labor and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment directly applicable to the Contract.

- B. The above named Principal and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The Owner shall not be liable for the payment of any costs or expenses of any such suit.
- C. No suit or action shall be commenced hereunder by any claimant,
 - 1. Unless claimant, other than one having a direct contract with the Principal, shall have given written notice to any two of the following: The Principal, the Owner, or the Surety above named, within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the material for which said claim is made, stating with substantial accuracy the amount claimed and the name of the part to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, Owner or Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner which is legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer.
 - 2. After the expiration of one (1) year following the date on which the Principal ceased work on such Contract, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.
 - 3. Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the state in which the project, or any part thereof, is situated, or in the United States District Court for the district in which the project, or any part thereof, is situated, and not elsewhere.

D. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and again this bond.

SIGNED AND SEALED this		day of	A.D.20	
In the presence of:	{	PRINCIPAL		(Seal)
WITNESS	{	TITLE		
		{SURETY		(Seal)
WITNESS		{		

GENERAL RELEASE

(TO-BE SUBMITTED WITH REQUISITION FOR FINAL PAYMENT)

KNOW ALL MEN BY THESE PRESENTS, that			
Contractor			
for and in consideration of the sum of			
lawful money of the United States of America, to it in hand paid by			
The Village of Elmsford			
have remised, released, quit-claimed, and forever dischared, and by these presents do for its successors and assigns remise, release, quit-claim, and forever discharge the said			
The Village of Elmsford			
and its successors and assigns and administrators, of and from and all manner of action and actions, caused and causes of action, suits, debts, dues, sum and sums of money, accounts, reckonings, bonds, bills, specialties, covenants, contracts, controversies, agreements, promises, variances, trespasses, damages, judgements, patents, extents, executions, claims and demands whatsoever in law and unity which against the said			
The Village of Elmsford			
now have or which heirs, executors, or administrator hereafter can, shall, or may have, for upon or by reason of any matter, cause or thing whatsoever, from the beginning of the world to the day of the date of these presents rising out of the construction, in accordance with contract entered into between parties hereto, dated			
, any admittance or supplements thereto.			
IN WITNESS WHEREOF, the undersigned corporation has caused this agreement to be signed by its			
and its corporate seal to be			
hereto			
affixed and duly attested by its this			
day of, 20			
ATTEST: PRINCIPAL:			

MAINTENANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

That We,		
		(hereinafter called the Principal)
as Principal and the	, a	Corporation with an
office and place of business for t	the State of New York at	, New York,
(hereinafter called the Surety) as	Surety, are held and firm	nly bound unto the
Village of Elmsford (herein	nafter called the Obligee)	as Obligee in the sum of
(\$) DOLLA	ARS, lawful money of the	United States of America, for
the payment whereof the Princip	oal and Surety bind thems	elves, their successors and
assigns, jointly and severally, fir	mly by these presents.	
Signed, sealed and dated	this day of _	, 20
WHEREAS, the Principa	al heretofore entered into	a written contract with the
Obligee for		
,	•	ipal shall guarantee
NOW, THEREFORE, th Principal shall indemnify the Ob at his own expense any defects of	e condition of this obligate of the condition of this obligate against loss by reas or deficiencies in material	s or workmanship which may
appear in the work under said co from the date of acceptance of the remain in full force and effect.		
	2	Principal
	By:	
	Bv:	

STATE OF)		
COUNTY OF			
On this	day of	20	before me
personally appeared the	e within named		
to me known, and know	wn to me to be		
the individual describe	d in and who executed the w	ithin bond, and	
	_acknowledged to me that he	e	
executed the same.			
		NOTARY PI	UBLIC

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NOTE: The headings of the articles herein are intended for the convenience of reference only and shall not be considered as having any bearing on their interpretation.

GENERAL CONDITIONS

PART I

101. **DEFINITIONS**

Whenever used in any of the Contract Documents, the following meanings shall be given to the terms herein defined:

- a. The term "Contract" means the Contract executed by the Owner and the Contractor.
- b. The term "Owner" means the Village of Elmsford, which is authorized to undertake this Contract.
- c. The term "Contractor" means the person, firm or corporation entering into the Contract with the Owner to perform and complete the work involved in this Contract.
- d. The term "Subcontractor" means a person, firm or corporation supplying labor for work at the site of the project for and under separate contract or agreement with the Contractor.
- e. The term "Project Area" means the area shown on the drawing in the immediate vicinity of the work, unless otherwise defined in the Special Conditions.
- f. The term "Engineer" means the Engineer of the Project, or such of his subordinates or assistants as have Project Engineer status: or if a Consulting Engineer is employed to perform construction management and inspection, then this term shall apply to said Consulting Engineer and those subordinates and assistants that have Project Engineer status. A list of authorized Project Engineers will be furnished to the Contractor on request.
- g. The term "Village" means the Village of Elmsford within which the Project Area is situated.
- h. The term "Contract Documents" means and shall include the Documents listed in Article 3 of the Agreement.
- i. The term "Drawings" or "Contract Drawings" means the drawings listed in the Schedule of Drawings.
- j. The term "Technical Specifications" or "Supplemental Technical Specifications" means that part of the Contract Documents which describes, outlines and stipulates, the quality of materials to be furnished; the quality of workmanship required; measurement and payment.
- k. The term "Addendum" or "Addenda" means any changes, revisions or clarifications of the Contract Documents which have been duly issued by the Owner to prospective Bidders prior to the time of receiving Bids.

102. SUPERINTENDENCE BY CONTRACTOR

- a. Except where the Contractor is an individual and gives his personal superintendence to the work, the Contractor shall provide a competent superintendent, satisfactory to the Owner, for the work at all times during working hours with full authority to act for him. The Contractor shall also provide an adequate staff for the proper coordination and expediting of his work. Should, in the opinion of the Owner, any language barrier exist between the superintendent and the Owner, the Contractor shall furnish a qualified interpreter.
- b. The Contractor shall lay out his work including all survey required and he shall be responsible for all work executed by him under the Contract. He shall verify all figures, elevations, etc. before

proceeding with the work and will be held responsible for any error resulting from his failure to do so.

103. SUBCONTRACTS

- a. The Contractor shall not execute an agreement with any Subcontractor or permit any Subcontractor to perform any work included in this Contract until he has received written approval of such Subcontractor from the Owner.
- b. The Contractor shall be as fully responsible to the Owner for the acts and omissions of his Subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him. All subcontractors must have adequate superintendence on the work site when they are performing work.
- c. The Contractor shall cause appropriate provision to be inserted in all Subcontracts relative to the work to require compliance by each subcontractor with the applicable provisions of the Contract for the work embraced in this Contract.
- d. Nothing contained in the Contract shall create any contractual relation between any Subcontractor and the Owner.
- e. The Contractor shall not subcontract more than 50% of the total work of this contract.

104. OTHER CONTRACTS

The Owner reserves the right to let other Contracts in connection with this work or to perform work related to this project with his own forces. The Contractor shall offer other Contractors and the Owner reasonable opportunity for the introduction and storage of their materials and the execution of their work, and shall properly connect and/or coordinate his work with theirs. The Contractor shall cooperate fully with such other Contractors, by scheduling his own work with that to be performed under other Contracts as may be directed by the Owner. The Contractor shall not permit or commit any act, which will interfere with the performance of work by any other Contractor as scheduled.

Wherever work being done by the Owner or its forces, or other Contractors, is contiguous to work covered by this contract, the respective rights of the various interests involved shall be established by the Owner, to secure the completion of the various portions of the work in general harmony.

If any part of the Contractor's work depends for proper execution or results upon the work of others, the Contractor shall inspect and promptly report to the Engineer in writing any defects or deficiencies in such work that render it unsuitable for such proper execution and results.

105. RESPONSIBILITIES OF CONTRACTOR

Except as otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools equipment, water light, heat, power, transportation, superintendence, temporary construction of every nature, charges, levies, fees or other expenses and all other services and facilities of every nature whatsoever necessary for the performance of the Contract and to complete this Contract in every respect within the specified time.

106. FITTING AND COORDINATION OF THE WORK

The Contractor shall be responsible for the proper fitting of all work and for the coordination of the operations of all trades, Subcontractors or Suppliers engaged upon this Contract. He shall be prepared to guarantee to each of the Subcontractors, the locations and measurements that they may require for the fitting of their work to all surrounding work. The Contractor shall, at his own expense, effect all cutting, fitting, or patching of his work required to make the same conform to the Contract Drawings and specifications and except with the consent of the Owner, not to cut or otherwise alter the work of any other Contractor.

107. MUTUAL RESPONSIBILITY OF CONTRACTOR

If, through acts or neglect on the part of the Contractor, any other Contract or Subcontractor shall suffer loss or damage on the work, the Contractor shall settle with such other Contractor or Subcontractor by agreement or arbitration, if such other Contractor or Subcontractor will so settle. If such other Contractor or Subcontractor shall assert any claim against the Owner on account of any damage alleged to have been so sustained, the Owner will notify the Contractor, who shall defend at his own expense any suit based upon such claim, and, in any judgment or claims against the owner shall pay or satisfy such judgment or claim and pay all costs and expenses in connection therewith and will in all other respects, including, but not limited to attorney's fees and court costs, hold harmless the Owner and Engineer.

108. ASSIGNMENT OR NOVATION

The Contractor shall not assign or transfer, whether by an assignment or novation, any of its rights, duties, benefits, obligations, liabilities, or responsibilities under this Contract without the written consent of the Owner; provided, however, that assignments to banks, trust companies, or other financial institutions may be made without the consent of the Owner.

No assignment of any of the Contractor's rights or benefits under the Contract is subject to a prior lien for labor performed, services rendered and materials, tools and equipment supplied for the performance of the work under this Contract in favor of all persons, firms or corporations rendering such labor or services or supplying such materials, tools or equipment.

109. PROGRESS SCHEDULE

NOT REQUIRED

110. COMMUNICATIONS

- a. All notices, demands, requests, instructions, approvals, proposals and claims must be in writing.
- b. Any notice to or demand upon the Contractor shall be sufficiently given if delivered at the office of the Contractor stated on the signature page of the Agreement (or at such other office as the Contractor may from time to time designate) in a sealed, postage-prepaid envelope or delivered with charges prepaid to any telegraph company for transmission, in each case addressed to such office.
- c. All papers required to be delivered to the Owner shall, unless otherwise specified in writing to the Contractor, be delivered to the Village of Elmsford Village Hall, and any notice to or demand upon Owner shall be sufficiently given if so delivered, or if deposited in the United States mail in a sealed, postage- prepaid envelope or delivered with charges prepaid to any telegraph company for transmission to said Owner at such address, or to such other representatives of the Owner or to such other address as the may subsequently specify in writing to the Contractor for such purpose.
- d. Any such notice shall be deemed to have been given as of the time of actual delivery or (in case of mailing), when the same should have been received in due course of post, or in the case of telegrams, at the time of actual receipt, as the case may be.

111. PAYMENTS TO CONTRACTOR

- a. Partial Payments
 - 1. Due to the short timeframe and the size of the project, no partial payment shall be made.
- b. Final Payment
 - 1. After final inspection and acceptance by the Owner of all work under the Contract, the Contractor shall prepare his requisition for final payment which shall be based upon the

carefully measured or computed quantity of each item of work at the applicable unit prices stipulated in the Agreement. The total amount of the final payment due the Contractor under this Contract shall be the amount computed without retainage less all-previous payments. Final payment to the Contractor shall be made subject to his furnishing the Owner with a release in satisfactory form of all claims against the Owner, arising under and by virtue of his Contract, other than such claims, if any as may be specifically excepted by the Contractor from the operation of the release as provided elsewhere herein.

- 2. The Owner, before paying the final estimate, may require the Contractor to furnish releases or receipts from all subcontractors having performed any work and all persons having supplied materials, equipment (installed on the Project) and services to the Contractor, if the Owner deems the same necessary in order to protect its interest. The Owner, however, may if it deems such action advisable, make payment in part or in full to the Contractor without requiring the furnishing of such releases or receipts of any payment so made shall in no way impair the obligations of any surety or sureties furnished under this Contract.
- 3. If it was necessary for the Owner to expend money for labor, materials or equipment on this project because the Contractor failed to perform satisfactorily or promptly, and a bill for such sum remains unpaid, the Owner may deduct this sum from partial payments or the final payment. Furthermore, if the specifications provide for certain work to be done by the Owner with the fee or cost to be borne by the Contractor, and a bill for such services remains unpaid, the Owner may deduct this sum from the partial or the final payment.
- Withholding of any amount due the Owner under the section entitled "LIQUIDATED DAMAGES" shall be deducted from the final payment due the Contractor. At the Owner's option, liquidated damages may be deducted from any partial payment.

c. Withholding Payments

Notwithstanding the above, the Owner may withhold from any payment otherwise due the Contractor so much as may be necessary to protect the Owner and if it so elects may also withhold any amounts due from the Contractor to any Subcontractors or material dealers, for work performed or material furnished by them. The foregoing provisions shall be construed solely for the benefit of the Owner and will not require the Owner to determine or adjust any claims or disputes between the Contractor and his Subcontractors or material dealers, or to withhold any monies for their protection unless the Owner elects to do so. The failure or refusal of the Owner to withhold any monies from the Contractor shall in no way impair the obligations of any surety or sureties under any bond or bonds furnished under this Contract.

d. Payments Subject to Submission of Certificates

Each payment to the Contractor by the Owner shall be made subject to submission by the Contractor of all written certifications required of him and his Sub-contractors by the Section entitled, CONTRACTOR'S CERTIFICATES under the GENERAL CONDITIONS.

112. CHANGES IN THE WORK

- a. The Owner may make changes in the work required to be performed by the Contractor under the Contract by making additions thereto, or by omitting work therefrom, without invalidating the Contract.
- b. Except for the purpose of affording protection against any emergency endangering life or property, the Contractor shall make no change in the materials used or in the specified manner of construction and/or installing the improvements or supply additional labor, services or materials beyond that actually required for the execution of the Contract, unless in pursuance of a written order from the Owner, authorizing the Contractor to proceed with the change. No claim for an adjustment of the Contract price will be valid unless so ordered.

- c. The Contractor agrees to perform any of the aforementioned changed work, along with all other required work found under the Contract, without delay and in accordance with good construction practices.
- d. These changes outlined above may be made without relieving or releasing the Contractor from any of his obligations under the Contract provisions, and without affecting the validity of the guaranty bonds, and without relieving or releasing the surety or sureties of said bonds. All such work shall be executed under the terms of the original Contract unless it is provided otherwise.
- e. All adjustments to the Contract payment provisions will be made in accordance with the following paragraphs.
- f. If applicable unit prices are contained in the Agreement (established as a result of either a Unit Price Bid or a Supplemental Schedule of Unit Prices), the Owner may order the Contractor to proceed with desired changes in the work, the value of such changes to be determined by the measured quantities involved in the applicable unit prices specified in the Contract.
- g. If applicable unit prices are not contained in the Agreement, the Owner shall, before ordering the Contractor to proceed with desired changes, request an itemized proposal from him covering the work involved in the change after which the procedure shall be as follows:
 - 1. If the change in the work involves additional work, the procedure shall be as follows:
 - (a) If the proposal is acceptable, the Owner will prepare the Change Order in accordance therewith for acceptance by the Contractor; or
 - (b) If the proposal is not acceptable and prompt agreement between the two parties cannot be reached, the Owner may order the Contractor to proceed with the work on a Cost-Plus Basis. A Cost-Plus Basis is defined as the net cost of the work to the Contractor plus an allowance to cover overhead and profit as stipulated below:

"Net cost of the work" is defined as (1) gross cost of labor plus (2) net cost of materials plus (3) gross cost of equipment.

(1) "Gross cost of labor" is defined as net cost of labor plus fringe benefits.

"Net cost of labor" is defined as the cost of required labor based on the prevailing rates established by the State Labor Department and stated in the Contract Document. No part of any salary for employees above the grade of foreman, and having general supervision of this work, will be included in this item.

"Fringe benefits" are defined as all insurance's, taxes and other benefits for the employee required by law or by union contract. In lieu of an item-by-item determination of the actual value of such fringe benefits, all fringe benefits are hereby determined to total an amount of 40% of net cost of labor, and the Contractor in submitting his bid agrees that this percentage shall be used, regardless of whether actual fringe benefits are more or less than this amount.

- "Net cost of materials" shall be defined as the cost of all materials incorporated in the work, including delivery charges, less any allowable cash discounts, as shown by receipted bills.
- "Gross cost of equipment" is defined as the "net cost of equipment" plus an allowance of 10% for fuel and lubricants.

"Net cost of equipment" shall be defined as a rental rate, which is reasonable and based on rental rates prevailing in the area where the work is to be done. Such rental rate shall be negotiated, and shall be agreed upon in writing before the

work is begun. However, in no case shall the rental rates exceed the rates set forth in the current edition of the "Associated Equipment Distributors Compilation of Rental Rates for Construction Equipment".

The cost of furnishing small tools and accessories and materials used for construction but no incorporated in the work shall be considered as part of the Contractor's overhead, and shall not be included in the "net cost of the work".

An allowance of 15% will be added for overhead and profit to "gross cost of labor" and "Net Cost of Materials" and is hereby stipulated to be in lieu of an actual determination of overhead and profit. The Contractor in submitting his bid agrees that this allowance shall be used, regardless of whether actual overhead and profit is more or less than this amount.

No percentage for overhead and profit shall be added to the amounts of equipment rental prices agreed upon, but the price agreed upon shall be the total compensation allows for use of such equipment.

- 2. If the change in the work requires a reduction in the work involved, the procedure shall be as follows:
 - (a) If the proposal is acceptable, the Owner will prepare the Change Order in accordance therewith for acceptance by the Contractor; or
 - (b) If the proposal is not acceptable and prompt agreement between the two parties cannot be reached, the Engineer shall fix the cost value of the credit. The Owner may then order the Contractor to proceed with the work. Should the Contractor disagree with the cost value of the credit as fixed by the Engineer, he may appeal the same in accordance with the procedures outlined in the GENERAL CONDITIONS.
- h. Each Change Order shall include in its final form:
 - 1. A detailed description of the change in the work.
 - 2. The Contractor's proposal (if any) or a confirmed copy thereof.
 - 3. Definite statements as to the resulting change in the Contract price and/or time.
 - 4. The statement that the Change Order is subject to the approval of the Owner.
- i. Any error or discrepancy in or between any of the Contract Documents shall be immediately reported to the Engineer who shall make such corrections and interpretations as may be deemed necessary for the completion of the work in a satisfactory and acceptable manner.
- j. Change Orders shall in general be in writing. If a Contractor claims that a change order was given to him orally, his claim shall be invalid unless such oral change order was given by an authorized Engineer as defined in Section 101.f of this Contract, and further unless such oral change order was confirmed in writing within 24 hours of the giving of the alleged oral change order.
- k. When change orders, or claims involve a subcontractor, no surcharge will be allowed the Contractor for handling, processing, supervision, or coordination.

113. CLAIMS FOR EXTRA COST

a. All claims between parties, including all claims for additional compensation and/or additional time, arising out of, or in any way related to this Contract and/or the performance of the same, or its interpretation shall within ten (10) days of the event or action giving rise to the claim be presented to the Engineer. All papers pertaining to claims shall be filed in quadruplicate. Such notice need not detail the amount of the claim but shall state the facts surrounding the claim in sufficient detail to identify the claim, together with its character and scope. In the meantime, the Contractor shall

proceed with the work as directed. Any claim not presented within the time limit specified in this paragraph shall be deemed to have been waived, except that if the claim is of a continuing character and notice of the claim is not given within ten (10) days prior to the receipt by the Engineer of notice thereof. The Contractor shall in no case allow any claim or dispute to delay the work.

- b. As soon as practicable after the final submission of all information the Owner shall make a determination of any claim. Said decision of the Owner shall be a condition precedent to any further action on the claim. However, upon certification in writing by the claimant the Owner shall be obliged to render a decision on said claim within sixty (60) days of the date of said certification. Should the Owner fail to render its decision within the aforementioned sixty- (60) day period, its decision will not be a condition precedent to any further action on the part of the claimant.
- c. There shall be no added compensation paid for delay to the Contractor unless the Owner causes said delay by a material breach of this Contract, and compliance with the foregoing notice provisions shall be a condition precedent to the prosecution of any such claim. In any claim for delay except for "Excusable Delays and Extensions of Time" as defined in the GENERAL CONDITIONS SECTION "TERMINATION"; "DELAYS AND EXTENSIONS"; "LIQUIDATED DAMAGES" wherein it is alleged that the Contractor's equipment was caused to remain idle, only one half of the prevailing rental rates for use of said equipment will be considered as damages for idled equipment in order to allow for the absence of fair wear and tear, which is allowed for in prevailing rental rates for equipment usage.
- d. Claims for additional compensation for extra work, due to alleged errors in ground elevations, contour lines, or bench marks, will not be considered unless accompanied by certified survey data, made prior to the time the original ground was disturbed, clearly showing that errors exist which resulted, or would result, in handling more material, or performing more work, than would be reasonably estimated from the Drawings and maps issued.
- e. If, on the basis of the available evidence, the Owner determines that an adjustment of the Contract Price and/or Time is justifiable, the procedure shall be as provided in Sections -"CHANGES IN THE WORK" or "TERMINATIONS; DELAYS AND EXTENSIONS; LIQUIDATED DAMAGES" of the GENERAL CONDITIONS.
- f. In the event of an unfavorable decision by the Owner, the Contractor shall have the right to contest said decision as provided for under the provisions of this Contract.

114. NO OPTIONS PAID

It shall be clearly understood that there will be no payment for materials incorporated into the work (other than that shown on the Contract Drawings or specified) unless ordered by the Engineer.

115. TIME AND MATERIALS WORK NOTIFICATION

Should the Contractor perform work in accordance with the General Conditions, "CHANGES IN THE WORK", he shall give a minimum of 24 hours advance written notice prior to his anticipated beginning any work on a Cost-Plus Basis, to the Owner.

116. TERMINATION; DELAYS AND EXTENSIONS; LIQUIDATED DAMAGES

a. Termination of Contract. For its own convenience the Owner may, at any time prior to the issuance of a Notice to Proceed, void the Contract by giving unequivocal and unconditional written notice of such avoidance to the Contractor and in the event of such avoidance the Owner will not be liable to the Contractor for any claims or losses, including anticipation of performance under the Contract.

At any time subsequent to the Notice to Proceed the Owner, may at its own convenience, terminate the Contract by giving unequivocal and unconditional written notice of such termination to the Contractor. In the event of such termination by the Owner, the Owner shall be responsible to the

Contractor for the following monies only, which monies shall be subject to legitimate changes of the Owner against the Contractor:

- 1. All reasonable costs incurred by the Contractor in performance of or in anticipation of performance of the Contract provided the Contractor shall take all reasonable steps to mitigate such damages including the return and/or resale of materials ordered; and
- 2. On Lump Sum projects, a mark-up of 10% for profit and 10% for overhead on the reasonable cost of the work that is completed and in place in accordance with the Contract Drawings and Specifications will be allowed. On unit price contracts, allowances for profit and overhead shall be considered to have been included in each of the Contractor's original unit prices bid. The Contractor shall remain responsible for the work completed, in accordance with the Contract provisions.

Should any work under this contract be subject to, or terminated by the action of any third party, governmental unit or court due to any ecological or other reason the rights of the Contractor to recover from the Owner shall be determined as set forth above.

The Owner may give notice in writing to the Contractor and his Surety of any material breach of the Contract by the Contractor to include but not be limited to any of the following:

- (a) Failure to begin the work under the Contract within the time specified.
- (b) Failure to perform the work with sufficient workmen, equipment or materials to insure the prompt completion of said work.
- (c) Unsuitable performance of the work or failure to perform anew such work as shall be rejected as defective and unsuitable.
- (d) Neglecting or refusing to remove material rejected as defective and unsuitable.
- (e) Discontinuing the suitable prosecution of the work for a period of 72 hours, excluding Sundays and holidays without written authorization of the Engineer.
- (f) Failure to commence discontinued work within 48 hours after notice to resume (excluding Sundays and holidays).
- (g) Becoming insolvent or declared bankrupt, or commits any act of bankruptcy or insolvency.
- (h) Allowing any final judgment to stand against him unsatisfied for a period of ten (10) calendar days.
- (i) Making any assignment for the benefit of creditors.
- (j) Violating any covenants contained in the Contract Documents.
- (k) Failure to eliminate unsafe conditions within 12 hours.

The Contractor or Surety within a period of ten (10) calendar days after such notice shall take all practical action to correct said material breach. Should said action fail to meet with the approval of the Owner, the Owner, may at its discretion, order the Surety to complete the work or, without violating the Contract, take the prosecution of the work out of the hands of said Contractor and Surety.

The Owner may appropriate or use any or all materials and equipment on the ground as may be suitable and acceptable and may enter into an agreement, either by negotiation or public letting, for the completion of said Contract according to the terms and provisions thereof, or use such other methods or combinations thereof, as in its opinion shall be required or desirable for the completion of said Contract in an acceptable manner. All costs and charges incurred by the Owner together with the cost of

completing the work under Contract shall be deducted from monies due or which may become due said Contractor. In case such expense shall exceed the sum which would have been payable under the Contract, then the Contractor and the Surety shall be liable and shall pay to the Owner the amount of said excess.

- b. Excusable Delays and Extensions of Time. The right of the Contractor to proceed shall not be terminated nor shall the Contractor be charged with liquidated damages for any delays in the completion of the work due:
 - 1. To any acts of the Government, including controls or requisitioning of materials, equipment, tools, or by labor by reason of war, National Defense, or any other national emergency.
 - 2. To any acts of the Owner caused by an injunction or litigation against said Owner, by a third party.
 - 3. To causes not reasonably foreseeable by the parties to this Contract at the time of the execution of the Contract which are beyond the control and without the fault or negligence of the Contractor, including, but not restricted to, acts of God or of the public enemy, acts of another Contractor in performance of some other Contract with the Owner, fires, floods, epidemics, quarantine, restrictions, strikes, freight embargoes, and weather of unusual severity such as hurricanes, tornadoes, cyclones and other extreme weather conditions; and
 - 4. To any delay of any Subcontractor occasioned by any of the causes specified in subparagraphs 1, 2 and 3 of this paragraph "b".

Provided, however, that the Contractor promptly notify the Owner within ten (10) days in writing of the cause of the delay. Upon receipt of such notification, the Owner shall ascertain the facts and the cause and the extent of delay. If, upon the basis of the facts and the terms of this Contract, the delay is properly excusable, the Owner shall extend the time for completing the work for a period of time commensurate with the period of excusable delay.

No claim for damages or any claim other than for an extension of time as herein provided shall be made or asserted against the Owner by reason of any delay.

c. Liquidated Damages for Delay. If the work is not completed within the time stipulated in Section-TIME OF COMPLETION under SPECIAL CONDITIONS, including any extensions of time for excusable delays as herein provided, the Contractor shall pay to the Owner as fixed agreed, and as liquidated damages (it being impossible to determine the actual damages occasioned by the delay) for each calendar day of delay, until the work is completed, the amount as set forth in Section - LIQUIDATED DAMAGES under SPECIAL CONDITIONS and the Contractor and his sureties shall be liable to the Owner for the amount thereof. Neither permission given by the Owner for the Contractor to continue the work after the time fixed for completion, nor the inspection and acceptance of such work, shall be deemed a waiver on the part of the Owner of any of his rights under this Contract.

117. ENGINEER'S AUTHORITY

The Engineer will decide all questions, which may arise in the relation to the work and the construction thereof. The Engineer's estimates and decisions shall be final and conclusive, except as herein otherwise expressly provided. In case any question shall arise between the parties hereto relative to said Contract, the determination or decision of the Engineer shall be a condition precedent to the right of the Contractor to receive any money or payment for work under this Contract affected in any manner or to any extent by such question.

118. TECHNICAL SPECIFICATIONS AND CONTRACT DRAWINGS

Anything mentioned in the Technical Specifications and not shown on the Contract Drawings and not mentioned in the Technical Specifications shall be of like effect as if shown on or mentioned in both.

In case of difference between the Contract Drawings and Technical Specifications, the Technical Specifications shall govern. In case of any discrepancy within the Contract Drawings or within the Technical specifications, the matter shall be immediately submitted to the Owner without whose decision said discrepancy shall not be adjusted by the Contractor, save only at his own risk and expense.

119. REQUESTS FOR SUPPLEMENTARY INFORMATION

It shall be the responsibility of the Contractor to make timely request of the Owner for any additional information not already in his possession which should be furnished by the Owner under the terms of this Contract, and which he will require in the planning and execution of the work. Such requests may be submitted from time to time as the need is approached, but each shall be filed in ample time to permit appropriate action to be taken by all parties involved so as to avoid delay. Each request shall be in writing, and list the various items and latest date by which each will be required by the Contractor. The first list shall be submitted within two (2) weeks after Contract award and shall be as complete as possible at that time. The Contractor shall, if requested, furnish promptly any assistance and information the Engineer may require in responding to these requests of the Contractor. The Contractor shall be fully responsible for any delay in his work or to others arising from his failure to comply fully with the provisions of this Section.

120. SHOP DRAWINGS

a. Shop Drawings shall only be required for or-equal substitutions

121. SAMPLES, CERTIFICATES AND TESTS

The Contractor shall submit all samples, materials, certified test reports, materials certificates, certificates of compliance, affidavits, etc., as called for in the Contract Documents or required by the Engineer, promptly after award of the Contract and acceptance of the Contractor's bonds. No such materials and/or equipment, etc., shall be manufactured or delivered to the site, except at the Contractor's own risk, until the required samples/certificates/tests/etc., have been approved in writing by the Owner. Any delay in the work caused by late or improper submission of the above for approval shall not be considered just cause for an extension of the Contract time.

122. MATERIALS AND WORKMANSHIP

- a. Unless otherwise specifically provided for in the Technical Specifications, all workmanship, equipment, materials and articles incorporated in the work shall be new and the best grade of the respective kinds for the purpose. Where equipment, materials, articles or workmanship are referred to in the Technical Specifications as "equal to" any particular standard, the Engineer shall decide the question of equality.
- b. All work performed and all materials furnished shall be, in conformity with the lines, grades, cross sections, dimensions and material requirements, including tolerances shown on the Contract Drawings or indicated in the Specifications.
- c. The Contractor shall furnish to the Owner for approval the manufacturer's detailed specifications for all machinery, mechanical and other special equipment, which he contemplates installing together with full information as to type, performance characteristics and all other pertinent information as required, and shall likewise submit for approval as required full information concerning all other materials or articles which he proposes to incorporate in the work. See Section SAMPLES, CERTIFICATES AND TESTS.
- d. Machinery, mechanical and other equipment, materials or articles installed or used without such prior approval shall be at the risk of subsequent rejection.
- e. Materials specified by reference to the number or symbol of a specific standard, such as an ASTM Standard, a Federal Specification or other similar standard, shall comply with requirements in the latest revision thereof and any amendment or supplement thereto in effect on the date of the Invitation for Bids, except as limited to type, class or grade, or modified in such reference. The

standards referred to, except as modified in the Technical Specifications, shall have full force and effect as though printed therein.

- f. The Contractor shall employ only competent and skillful men to do the work and whenever the Engineer shall notify the Contractor, in writing, that any man on the work is, in his opinion, incompetent or disorderly, the Contractor shall forthwith remove such person and shall not again employ him on any part of the work without the written consent of the Engineer.
- g. The Owner may stop any worker, any part of the work under the Contract if the methods or conditions are such that unsatisfactory work might result, if improper materials or workmanship is being used, or unsafe conditions exist. Any action by the Owner under this provision shall not be deemed a cause of delay and no extensions of permitted time will be granted because of such action.
- h. In the event the materials furnished or the work performed deviates from the requirements of the Contract Drawings and Specifications, but, in the opinion of the Owner, constitutes substantial performance, the Owner may accept the same. Should the deviation in question result in a savings to the Contractor the Owner will be entitled to a credit in the full amount of said savings. Should the deviation in question result in an additional cost to the Contractor, the Owner will not be liable to the Contractor for such additional cost.

If the materials or the finished product in which the materials are used or the work performed are not in conformity with the Contract Drawings and Specifications and have resulted in an inferior or unsatisfactory product, the work and materials shall be removed and replaced or otherwise corrected by and at the expense of the Contractor.

123. PERMITS AND CODES

a. The Contractor shall give all notices required by and shall observe and comply with all Federal and State laws and Local by-laws, ordinances and regulations in any manner affecting the conduct of the work, and all such orders or decrees as may exist at present and those which may be enacted later, of bodies or tribunals having any jurisdiction or authority over the work. The Contractor shall indemnify and save harmless the Owner and Engineer and all of its officers, agents and servants against any claim or liability arising from or based on the violation of any such law, bylaw, ordinance, regulation, order or decree, whether by himself or his employees. All construction, work and/or utility installations shall comply with all applicable ordinances and/or codes including any and all written waivers thereto.

Before commencing any work, the Contractor shall examine the Contract Drawings and Specifications for compliance with applicable ordinances, codes, etc. and shall immediately report any discrepancy to the Owner. Where the requirements of the Contract Drawings and Specifications fail to comply with such applicable ordinances, codes, etc., the Owner will adjust the Contract by Change Order to conform to such ordinances, codes, etc., (unless waivers in writing covering the differences have been granted by the governing body or department) and make appropriate adjustment in the Contract Price.

Should the Contractor fail to observe the foregoing provisions and proceed with the construction or work and/or install any utility at variance with any applicable ordinance, code, etc., including any written waivers (notwithstanding the fact that such installation is in compliance with the Contract Drawings and Specifications), the Contractor shall remove such work without cost to the Owner, but a Change Order will be issued to cover only the excess cost the Contractor would have been entitled to receive if the change had been made before the Contractor commenced work on the items involved.

b. Unless otherwise specified, the Contractor shall at his own expense, secure and pay to the appropriate department of the Local/State/Federal Government the fees or charges for all permits including but not limited to those required for the making of water taps and the supplying of any

equipment required by the regulations of the water district or company, Electrical Underwriters permits, and any other permits required by the regulatory body or any of its agencies.

c. The Contractor shall comply with applicable Local/State/Federal laws, ordinances, codes, etc., governing noise, the disposal of surplus excavation, materials, debris and rubbish on or off the Project Area and commit no trespass on any public or private property in any operation due to or connected with the work under this Contract.

124. CARE OF WORK

a. The Contractor shall be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance, whether or not the same has been covered in whole or in part by payments made by the Owner.

Materials shall be stored so as to insure the preservation of their quality and fitness for the work and shall be located so as to facilitate prompt inspection. When considered necessary, they shall be placed on wooden platforms or other hard, clean surfaces and not on the ground, and when directed, shall be placed in weatherproof buildings.

Stored materials, even though approved before storage, shall be inspected prior to their use in the work and shall meet the requirements of the specifications at the time it is proposed to use them.

- b. The Contractor shall at his sole expense and without any additional cost to the Owner provide watchmen and/or other security measures as may be reasonably required to properly protect and care for materials and work completed, and to otherwise prevent property damage and/or personal injury.
- c. In an emergency affecting the safety of life or property, including adjoining property, the Contractor, without special instructions or authorization from the Owner, is authorized to act at his discretion to prevent such threatened loss or injury, and he shall so act. He shall likewise act if instructed to do so by the Owner. Any compensation claimed by the Contractor on account of such emergency work will be reviewed by the Owner to determine its validity. If compensation is determined to be valid, then it will be determined by the Owner as provided in the Section CHANGES IN THE WORK under GENERAL CONDITIONS.
- d. The Contractor shall avoid damage as a result of his operations to existing sidewalks, streets, curbs, pavements, utilities (except those which are to be replaced or removed), adjoining property, etc., and he shall at his own expense completely repair any damage thereto caused by his operations. If any damage is not repaired or acceptable arrangements for repair are not made within a reasonable period of time, the Owner may act to repair such damage by utilizing its own forces or using another contractor employed for that purpose, and the costs of such repair shall be deducted from any payments due the Contractor. If a damage claim has been referred by the Contractor to his insurance company, such referral shall in no way relieve the Contractor of his responsibilities.
- e. The Contractor shall shore-up, brace, underpin, secure and protect as may be necessary, all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site, which may be in any way affected by the excavations or other operations connected with the construction of this Contract. The Contractor shall be responsible for the giving of any and all required notices to any adjoining or adjacent property owner or other party before the commencement of any work. The Contractor shall indemnify and save harmless the Owner and the Engineer from any damages on account of settlements or the loss of lateral support of adjoining property and from all loss or expense and all damages for which the Owner and the Engineer may become liable in consequence of such injury or damage to the work or adjoining and adjacent structures and/or their premises.

125. ACCIDENT PREVENTION

a. The Contractor shall exercise proper precautions and safety measures at all times for the protection of persons and/or property and shall be responsible for all injuries and/or damages to all persons and/or property, either on or off the site, which occur as a result of his prosecution of the work under this Contract. The safety provisions of all applicable Local/State/Federal laws and building and construction codes shall be observed and the Contractor shall take or cause to be taken such additional safety and health measures as the Owner may determine to be reasonably necessary.

Machinery, equipment and trucks shall be properly guarded, and operational hazards shall be eliminated in accordance with the provisions and intent of the latest rules and regulations of OSHA, to the extent that such provisions are not in contravention of applicable law. The Contractor's attention is also called to the Section - SAFETY PROVISIONS of the GENERAL CONDITIONS.

- b. The Contractor shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment of the work under this Contract in accordance with the requirements of the applicable State/Local/Federal regulations. The Contractor shall promptly furnish the Owner with reports concerning these matters.
- c. The Contractor shall indemnify and save harmless the Owner, Dolph Rotfeld Engineering, P.C., (the Engineer) and their consultants from any and all claims for damages resulting from personal injury, death and/or property damage, suffered or alleged to have been suffered, by any person as a result of any work conducted under this Contract. See also the Section INDEMNITY CLAUSE of the GENERAL CONDITIONS.

126. SANITARY FACILITIES

Not Required.

127. USE OF PREMISES

- a. The Contractor shall confine his equipment, storage of materials, and construction operations to the Contract Limits as shown on the Drawings and as prescribed by ordinances or permits, or as may be desired by the Owner, and shall not unreasonably encumber the site or public rights of way with his materials and construction equipment.
- b. The Contractor shall comply with all instructions of the Owner, Engineer and the ordinances, codes, etc., of the Local/State/Federal Government, regarding signs, advertising, traffic, fires, explosives, danger signals, barricades, etc.

128. REMOVAL OF DEBRIS, CLEANING, ETC.

The Contractor shall, periodically or as directed during the progress of the work, remove and legally dispose of all surplus excavated material and debris, and keep the Project Area and public rights of way reasonably clear. Upon completion of the work, prior to final inspection, he shall remove all temporary construction facilities, debris and unused materials provided for the work, and restore the whole site of the work and public rights of way to a condition satisfactory to the Engineer. Trash burning on the site of the work will be subject to prior approval of the Owner and existing Local/State/Federal regulations. The cost of all required clean-up shall be included in the various prices bid under this Contract.

129. LAYOUT OF WORK

The Contractor shall perform all layout work necessary for the satisfactory execution of the construction as shown on the Contract Drawings and all costs in connection therewith shall be included in the contract price.

The Contractor shall employ competent personnel and all work shall be subject to the approval of the Engineer.

The Contractor shall be held responsible for the protecting and safeguarding of all control points and bench marks set by the Engineer and his own forces. Any replacement or re-establishment of control points or benchmarks by the Engineer shall be at the expense of the Contractor.

The required horizontal and vertical control necessary to perform this work is furnished on the Contract Drawings.

130. BLASTING

No Blasting Necessary.

131. INSPECTION/ACCEPTANCE OF THE WORK

All materials and workmanship shall be subject to inspection, examination or test by the Owner and the Engineer to determine the acceptability of the work at any and all times during manufacture or construction and at any and all places where such manufacture or construction is carried on and the Contractor shall provide proper facilities for such access and inspection. The Owner or Engineer shall have the right to reject defective material and workmanship or require its correction. The Owner or Engineer shall have the right to reject materials, which have not been approved prior to incorporation in the work, and the right to reject work that has been performed without inspection. Rejected materials shall be removed and replaced without charge. Rejected workmanship shall be corrected if possible to the Engineer's satisfaction without additional charge. If in the opinion of the Engineer correction is not feasible, or if correction has been attempted but is not satisfactory to the Engineer, the work must be removed and replaced without additional charge. If the Contractor fails to proceed at once with the correction or replacement of rejected workmanship or defective material, the Owner may by contract or otherwise have the defects remedied or rejected materials removed from the Project Area and charge the cost of the same against any monies which are due or may become due the Contractor, without prejudice to any rights or remedies of the Owner.

Neither inspection, testing, approval nor acceptance of the work in whole or in part by the Owner or its agents shall relieve the Contractor or his sureties of the full responsibility for materials furnished or work performed not in strict accordance with the Contract.

The assignment of a part-time inspector to this project will in no way relieve the Contractor of the requirement to comply with all of the specifications.

Where the Contractor has been directed by the Owner or Engineer to leave certain items of work exposed for inspection, and he fails to do so, he will be required to uncover such work, at his own expense.

132. FINAL INSPECTION

When the improvements embraced in this Contract are substantially completed, The Contractor shall notify the Owner in writing that the work will be ready for final inspection on a definite date which shall be stated in the notice. The notice will be given at least ten (10) days prior to the date stated for final inspection, and bear the signed concurrence of the representative of the Owner having charge of inspection. If the Owner determines that the status of the improvements is as represented, he will make the arrangements necessary to have final inspection commenced on the date stated in the notice, or as soon thereafter as is practicable. The inspection party may also include the representative of the Village of Elmsford having charge of improvements of like character when such improvements are later to be accepted by the Village.

133. INSURANCE

The insurance requirements for this contract are specified in the Insurance Section of this document.

134. WARRANTY OF TITLE

No material, supplies or equipment, incorporated or to be incorporated in the work shall be purchased subject to any chattel mortgage or under a conditional sale or other agreement by which an interest therein or in any part thereof is retained by the seller or supplier. The Contractor shall warrant good title to all materials, supplies and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same together with all improvements and appurtenances constructed or placed thereon by him to the Owner free from any claims, liens or charges. Neither the Contractor nor any person, firm or corporation furnishing any material or labor for any work covered by this Contract shall have any right to a lien upon any improvement or appurtenance thereon. Nothing contained in this paragraph, however, shall defeat or impair the right of person furnishing materials or labor to recover under any law permitting such persons to look to funds due the Contractor in the hands of the Owner. The provisions of this paragraph shall be inserted in all subcontracts and material contracts and notice of its provisions shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

135. GENERAL GUARANTEE

Neither the final certificate of payment nor any provisions in the Contract nor partial or entire use of the improvements embraced in this Contract by the Owner or the public shall constitute an acceptance of work done in accordance with the Contract or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials and workmanship. The Contractor shall promptly remedy any defects in the work and pay for any damage to other work resulting therefrom, which shall appear within a period of one year from the date of final payment.

136. NO ARBITRATION

All claims, counterclaims, disputes and other matters in question between the Owner and the Contractor, not otherwise resolved, arising out of or relating to this agreement or its breach shall be decided in a court of competent jurisdiction. The Owner and the Contractor hereby agree that there shall be no requirement for arbitration of any controversies or disputes hereunder, all such matters to be resolved at law.

137. RISK OF LOSS

The Owner assumes no responsibility for the condition of existing buildings and structures and other property on the Project Area not for their continuance in the condition existing at the time of issuance of the Invitation for Bids or thereafter. No adjustment of Contract Price or allowance for any change in conditions which may occur after the Invitation for Bids has been issued will be made except as provided for herein.

138. REQUIRED PROVISIONS DEEMED INSERTED

Each and every provision of law and clause required by law to be inserted in this Contract shall be deemed to be inserted herein and the Contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the Contract shall forthwith be physically amended to make such insertion or correction.

139. CORRECTIONS

The Engineer shall have the right to correct any errors or omissions in the Contract, specifications or Contract Drawings when such corrections are necessary for the proper expression of their intent.

Such corrections shall take effect from the time that the Engineer gives notice thereof, and any alterations in the work rendered necessary thereby shall be made as corrected. Any conflict between the approved Contract Drawings and specifications, or any disagreement in measurements upon the Contract Drawings must be submitted to the Engineer before construction of the work.

140. SAFETY PROVISIONS

The safety provisions of applicable laws, building and construction codes and the safety codes approved by the Owner shall be observed.

The provisions of the Federal Occupational Safety and Health Administration's "Occupational Safety and Health Standards" and "Safety and Health Regulations for Construction" shall be observed.

Should at any time during the work under this Contract any Local/State/Federal safety inspector visit the site for the purpose of a safety inspection, the Contractor shall immediately notify the Engineer's representative on the job site.

141. CONNECTING TO EXISTING WORK

The Contractor shall remove such existing masonry, concrete, equipment and piping as is necessary, in order to make the proper connections to the existing work at the locations shown. Also, he shall make the necessary pipe line, roadway and other connections at the several points in order than on completion of this Contract, water, sewage, or storm water, as the case may be, will flow through the several pipe lines and structures. Unless otherwise specified herein, no extra payment will be made for this work, but the entire cost of the same shall be included in the unit or lump sum prices bid for the various items of the work to be done under this Contract.

142. EXISTING IMPROVEMENTS

The Contractor shall conduct his work so as to minimize damage to existing improvements, except where specifically stated otherwise in the specifications or drawings; it will be the responsibility of the Contractor to restore, as nearly as practical, to their original conditions all improvements on public or private property damaged by his operations.

The utility mains, ducts, poles and services in the construction area, where shown on the Contract Drawings are at the approximate locations furnished by various utilities concerned. Whenever existing improvement information is either indicated on the drawings or supplied to the Contractor at a later date, it is understood that such information is furnished in good faith for the Contractor's convenience. The Contractor must interpret this information according to his own judgment, and must make his own determinations regarding the location of all improvements. No claim will be allowed because of incorrect, incomplete or omitted existing improvement information.

The various utility companies have been made aware of the pending construction and are generally familiar with the locations of conflicts in the case of the proposed construction. The various utility companies will make all adjustments to their own lines except where otherwise shown on the Contract Drawings or specified. The Contractor shall give ample notice to the various utilities so that existing lines can be marked in the field and adjustments made. The Contractor shall cooperate fully with the various utilities and shall plan his work so that least interference is caused for all parties concerned. No additional payments shall be made to the Contractor for delays caused by utility interference. The Contractor shall support all utility lines uncovered during excavation.

143. ACCESS TO SITE

The Contractor shall make every effort to minimize damage to all access routes, and he shall be required to restore them to their original condition. The Contractor shall acquire all necessary permits for working in, on or from public streets or rights-of-way and for securing additional access rights thereto with respect to the Village of Elmsford.

All costs of the removal and restoration to original condition of walls, fences, structures, utility lines, poles, guy wires and anchors, and other improvements required for passage of the Contractor's equipment shall be borne by the Contractor. The Contractor shall notify the proper authorities of the Village of Elmsford and the Owner and all utilities of any intended modification or disruption to their property prior to the start of construction and shall cooperate with them in the scheduling and performance of his operation.

If the Contractor, by direct negotiation and bargain with any land owner, lease or tenant, has secured for himself any right to use more space or greater privileges than the space provided by the Owner for purposes incidental to the performance of the Contract, he shall, upon request of the Engineer, furnish to the Engineer proper evidence that such additional rights have been properly secured and assurance that no damage to or claim upon the Owner will arise therefrom. The Owner shall not be liable in any way for any expense incurred by the Contractor in securing any such right to use the additional property.

The Contractor shall be responsible for and reimburse the Owner and others for any and all losses, damage or expense which the Owner and/or Local Government or those others may suffer, either directly or indirectly or through any claims of any person or party, for any trespass outside the spaces and rights-of-way provided by the Owner to the Contractor or any violation or disregard of the terms and conditions established for the use or occupancy of those rights or for negligence in the exercise of those rights.

The Owner may retain or deduct from any sum or sums due or to become due to the Contractor such amount or amounts as may be proper to insure the Owner against loss or expense by reason of the failure of the Contractor to observe the limits and conditions of the rights-of-way, rights-of-access, etc., provided by the Owner.

144. ACCESS TO ADJACENT PROPERTIES

The Contractor shall at all times maintain vehicular and pedestrian access to all properties abutting or adjacent to construction under this Contract, all at the Contractor's sole expense. In the event that normal access is cut off to a particular property due to operations or proposed work called for under this Contract, the Contractor shall, at his sole expense, make other arrangements for access to said property satisfactory to the property owner, tenant and the Engineer.

145. USE OF ROADWAYS

During the progress of the work, the Contractor shall make ample provisions for both vehicular and foot traffic on any public road, and shall indemnify and save harmless the Owner from any expense whatsoever due to his operations on/over said roadways. The Contractor shall also provide free access to all fire hydrants, water and gas valves located along the line or in the vicinity of his work. Gutters and waterways must be kept open or other provisions made for the removal of the storm water. Roadway intersections may be blocked by one-half at a time and the Contractor shall lay and maintain temporary driveways, bridges and crossings, such as in the opinion of the Engineer, are necessary to reasonably accommodate the public and to provide access to private driveways. In the event of the Contractor's failure to comply with these provisions, the owner may cause the same to be done, and will deduct the cost of such work from any monies due or to become due the Contractor under this Contract, but the performance of such work by the Owner or at its insistence shall serve in no way to release the Contractor from his general or particular liability for the safety of the public or the work.

146. INDEMNITY CLAUSE

The Contractor shall sign and be held to Indemnification Agreement in Section D of this document.

147. DISPUTES

a. All disputes arising between the parties arising out of, or in any way related to this Contract and/or the performance of the same, or its interpretation, shall within ten (10) days of the event or action giving rise to the dispute be presented to the Engineer. All papers pertaining to the dispute shall be filed in quadruplicate. Such notice shall state the facts surrounding the dispute in sufficient detail to identify the dispute, together with its character and scope. In the meantime, the Contractor shall proceed with the work under this Contract as directed. Any dispute not presented within the time limit specified in this paragraph shall be deemed to have been waived, except that if the dispute is of a continuing character and notice of the dispute is not given within ten (10) days of its commencement, the dispute will be considered only for a period commencing ten (10) days prior to

the receipt by the Engineer of notice thereof. The Contractor shall in no case allow any dispute to delay the work under this Contract.

- b. As soon as practicable after the final submission of all information the Owner shall make a determination of the dispute. Said decision of the Owner shall be a condition precedent to any further action on the dispute. However, upon certification in writing by the claimant that the dispute has been submitted in its final form the Owner shall be obliged to render a decision on said dispute within sixty (60) days of the date of said certification. Should the Owner fail to render its decision within the aforementioned sixty- (60) day period, its decision will not be a condition precedent to any further action on the part of the claimant.
- c. Each decision by the Owner will be in writing and will be mailed to the Contractor by registered or certified mail, return receipt requested, directed to his last known address.
- d. In the event of an unfavorable decision by the Owner, the Contractor shall have the right to contest said decision as provided for under the provisions of this Contract. The Contractor shall in no case allow the dispute or decision to delay any work but shall notify the Owner promptly that he is proceeding with the work under protest and he may then except the matter in question from the final release.

148. INTENTIONALLY LEFT BLANK

149. "OR EQUAL" CLAUSE, UNLESS OTHERWISE SPECIFIED:

Whenever a material, article or piece of equipment is identified on the Contract Drawings or in the specifications by reference to manufacturers' or vendors' names, trade names, catalog numbers, etc., the intent is to establish a standard. Any material, article, or equipment of other manufacturers and vendors of equally high quality (particularly with regard to points specified in the specifications) which will perform equivalently within the design ranges specified will be equally acceptable provided that the material, article or equipment so proposed is, in the opinion of the Engineer, of equal substance and function. Further the manufacturer must agree to comply fully with the warranty requirements of the specifications. The Contractor may not assume that the Engineer will approve substitute equipment and non-approval of said equipment will form no basis for a claim for additional compensation by the Contractor. No substitute equipment shall be purchased or installed by the Contractor without the Engineer's written approval. If the Engineer's approval is obtained for alternate equipment, the Contractor shall, at his own expense, make any changes in the structures, building, piping or electrical necessary to accommodate the equipment and if engineering is required due to substitution of other material the Contractor shall reimburse the owner for the engineering service. The Contractor must pay for any laboratory testing required to establish the equality of his proposal.

150. <u>CONSTRUCTION, EXCAVATION AND DEMOLITION OPERATIONS AT OR NEAR UNDERGROUND FACILITIES</u>

The Contractor's attention is directed to the State of New York, Department of Labor, Board of Standards and Appeals Industrial Code Rule 753 - "Construction, Excavation and Demolition Operations at or near Underground Facilities" effective April 1, 1975 and any amendments thereto.

The Contractor will be required to comply with all applicable requirements of Industrial Code Rule 53.

Requests for copies by mail should be directed to the State of New York, Department of Labor, Office of Public Information, State Office Building Campus, Albany, New York 12201; or, single copies may be obtained by applying in person at the Department's office in Albany or in New York City at the Department of Labor.

151. REVIEW BY OWNER

The Owner, its authorized representatives and agents shall, at all times have access to and be permitted to observe and review all work, materials, equipment, payrolls, personnel records, employment

conditions, material invoices and other relevant data and records pertaining to this Contract, provided, however, that all instructions and approval with respect to the work will be given to the Contractor only by the Owner through its authorized representatives or agents.

152. DEDUCTIONS FOR UNCORRECTED WORK

If the Owner deems it not expedient to require the Contractor to correct work not done in accordance with the Contract Documents, an equitable deduction from the Contract Price will be made by agreement between the Contractor and the Owner and subject to settlement, in case of dispute, as herein provided.

153. PATENTS

The Contractor shall hold and save the Owner and Engineer, their officers, and employees, harmless from liability of any nature or kind, including but not limited to court costs and attorney's fees, for or on account of, any patented or unpatented invention, process, article or appliance manufactured or used in the performance of the Contract, which has been recommended by the Contractor, including its use by the Owner, unless otherwise specifically stipulated in the Technical Specifications.

154. INFORMATION FROM OWNER

In addition to showing the construction under this Contract, the drawings may show certain information obtained by the Owner regarding conditions and features, which exist at the site of the work, both at and below the surface of the ground. The Owner and the Engineer expressly disclaim any responsibility for the accuracy or completeness of the information given on the drawings with regard to the existing conditions and features and the Contractor will not be entitled to any extra compensation on account of inaccuracy or incompleteness of such information. The information, which is shown, is only for the convenience of the Contractor, who must verify this information to his own satisfaction.

155. EXISTING UTILITIES, STRUCTURES AND FIXTURES

The Contractor will be required, at no additional expense to the Owner, to do everything necessary to support, protect and sustain all sewer, water, gas mains or service pipes; electric light, power poles, telephone or telegraph poles, manholes, valve boxes, concrete gutters, guide rails conduits and any and all utilities, structures or fixtures laid across or along the site of the work. In case any of the said utilities, structures or fixtures are damaged by the Contractor, they shall be repaired by the Contractor at his own expense, or by the authorities having control of the same and the expense of said repairs shall be deducted from the monies due or to become due the Contractor under this Contract.

Should it become necessary to remove or relocate any utilities, structures or other fixtures, due to a grade and alignment conflict which would require the proposed utility, structure or fixture (not trench excavation, sheeting or other construction features) to occupy the same space as the existing pipe, pole, conduit and/or other fixture, the Contractor shall notify the owner of the obstruction and the Engineer of the location and the circumstances and shall cease work (which might prove detrimental to the utility, structure or fixture encountered) if necessary until satisfactory arrangements have been made with the owners of the same properly care for and relocate them. Should it be necessary to cease work and a delay is caused thereby, the Contractor shall have no claim for damages or any claim other than for an extension of time. See GENERAL CONDITIONS, CLAIMS FOR EXTRA COST.

The removal or relocation of such interference's may be done by the owner of the interfering utility or structure with his own forces, or by a contractor whom he may engage for such purpose, or by private contract between the utility company and his contractor; or alternately he may request the Owner to cause this work to be performed under this contract (at the utility company's expense). In the last instance, the contractor shall perform such work under the terms of this contract and shall be compensated as described in GENERAL CONDITIONS-CHANGES IN THE WORK, except where SPECIAL CONDITIONS or TECHNICAL SPECIFICATIONS provide otherwise.

If the Contractor desires temporary changes of location for his convenience for any reason whatsoever, of water lines, gas lines, sewer lines, wire lines, service connections, water and gas meter boxes, valve

boxes, light standards, cableways, signals and any other utilities, structures or fixtures, he shall satisfy the Engineer and Owner that the proposed relocation does not interfere with his or other Contractor's operations, or the requirements of the Contract Drawings and does not cause an obstruction or a hazard to traffic. The Contractor shall make his own request to the utility companies, pipe owners or other parties affected for such relocation work. Such relocation work for the convenience of the Contractor shall be made solely at the Contractor's expense.

The Contractor shall not remove or relocate any utility, structure of fixture without the written approval of the owner of that utility, structure or fixture unless otherwise shown on the Contract Drawings, specifications or ordered by the Engineer.

156. CONTROL OF EXISTING FLOWS

During the construction of all proposed work, the Contractor shall take every precaution and do the necessary work to maintain the flow of storm drainage, sanitary sewage and natural flows through the working areas. The Contractor is solely responsible for providing his flow control system and there shall be no separate payment for the required work. The Contractor shall be responsible for any flooding or sanitary backup on his work and to the property owners affected by such flooding or backup. The Contractor shall make such provisions as may be required by the local, state or federal health officers or any other public bodies with jurisdiction over the flow of storm drainage, sanitary seepage and natural flows.

In the event the Contractor uses water from natural water sources for his operations, intake method shall be such as to create no harmful effects; and where water is taken from a stream, reasonable flow downstream from the intake shall be maintained.

157. SEWAGE, SURFACE, GROUNDWATER AND FLOOD FLOWS

The Contractor shall furnish all the necessary equipment, shall take all necessary precautions, and shall assume the entire cost of handling any sewage, seepage, storm, groundwater, surface and flood flows which may be encountered at any time during the construction of the work. The manner of providing for these flows shall meet the approval of the Engineer and the entire cost of said work shall be included in the unit or lump sum prices bid for the various items of the work to be done under the Contract.

The Contractor shall employ such feasible and practical methods in his operations as will prevent pollution, sedimentation or the introduction of impurities or other objectionable materials that may become suspended or dissolved in waters reaching streams, ponds, lakes, water supplies or other water bodies.

Water shall not be disposed of by discharging it into any street gutter, drainage channel, existing drainage system, natural stream, waterway, lake, pond or bog, etc., without the prior approval of the Authority having jurisdiction thereof. Should such approval be obtained, the Contractor shall ensure that no solids, debris, suspended soil particles, impurities or pollutants are allowed to enter the drainage system. The Contractor shall be fully responsible for any damages to these systems resulting from his disposal methods and any necessary measures (such as but not limited to cleanup) required to return the system to preconstruction conditions. In addition to the above, disposal on private property shall be only with the prior written permission of the property owner.

Any water used for any purpose by the Contractor shall not be discharged in such a way as to create pollution, sedimentation or other adverse effects upon the aforementioned streams or waters.

In addition, the Contractor shall provide all necessary pumps, dams, drains, ditches, flumes, well points and other means of excluding and removing groundwater or water from any other source, from trenches, tunnels and other parts of the work and for preventing the trench slopes from sliding or caving. He shall sufficiently de-water all trenches, tunnels or other excavations to completely dry out and solidify the bottom of the trench to provide a firm solid, completely dry bottom on which to place foundation material, lay pipe or build a structure.

It is expressly understood that the Engineer or Owner is not responsible for any flooding, high water tables, underground water or any other water problems which may be encountered on any portion of the work called for under this Contract and that the Contractor must include all anticipated costs for dewatering all excavations in the price bid under this Contract.

158. WEATHER CONDITIONS/WORK IN FREEZING WEATHER

In the event of temporary suspension of work, or during inclement weather, or whenever the Engineer shall direct, the Contractor will, and will cause his Subcontractors to protect carefully his and their work and materials against damage or injury from the weather. If, in the opinion of the Engineer, any work or materials shall have been damaged or injured by reason of failure on the part of the Contractor or any of his Subcontractors so to protect his and their work, such materials shall be removed and replaced at the expense of the Contractor.

Unless written permission be given, work liable to be affected by frost or freezing shall be suspended during freezing weather. When work proceeds under such a condition the Contractor shall provide approved facilities for heating the materials and for protecting the finished work.

159. MAINTENANCE AND PROTECTION OF TRAFFIC

The provisions contained herein shall be deemed in effect unless more stringent provisions are called for within the Technical Specifications. The Contractor will be required to protect and maintain pedestrian and vehicular traffic.

The Contractor shall maintain and protect traffic by so conducting his construction operations that the traveling public is subjected to a minimum of delay and hazard.

Residents along the existing roads and those having business along them shall have safe means of ingress and egress at all times. Traffic shall be maintained at the intersections of all roads or streets crossing the road construction. Where directed by the [24] the Contractor shall provide such adequate and proper bridges over excavations as may be necessary or directed for the purpose of accommodating pedestrians or vehicles.

In the event any portion of a public road must be closed to traffic, permission shall be secured by the Contractor from the Village of Elmsford or County or permission shall be secured by the Contractor from the County or State Department of Transportation if in their jurisdiction and notice must be given by the Contractor to the Police and Fire Departments, and adequate detour sign posted.

Approved signs shall be provided along all highways while work is in progress, and where traffic direction is required, flagmen shall be designated by the Contractor to direct traffic past the equipment, machinery or construction operations. Construction equipment shall be removed entirely from the traveled roadway when work is shut down for the day and two lanes of traffic shall be maintained at night. Barricades shall be placed wherever the safety of the traveling public requires, where a road is officially closed, where an excavation is being made, or where heavy construction equipment is operating. In addition barricades shall be placed where they are deemed necessary in the opinion of the Owner, or the Chief of Police, to direct traffic or to prevent entrance to streets or areas where construction is in progress.

Barricades shall be in accordance with the New York State Department of Transportation Specifications and shall be lighted as provided therein. On traveled roads, a lighted warning sign is to be placed two-hundred (200) feet before the approach of barricades, or as is necessary for safety along the approach lines.

Where trenches have been cut, barricades, red flags, and warning signs, all properly lighted, shall be placed at frequent intervals and maintained until the trenches have been properly backfilled and compacted.

All barricades, lights, flags and bombs shall be maintained intact at all times overnight, over the weekends, holidays or if the project is shut down for any period of time.

160. HOURS OF WORK

No work shall be done on the job before 8:00 a.m. nor after 5:00 p.m. unless the Owner is notified, nor shall any work be done on Saturdays, Sundays, or legal holidays unless Contractor shall have given Owner written request at least forty-eight (48) hours in advance. Owner will make no additional payment for overtime work under any circumstances unless the Engineer has given a prior written order. The Contractor shall comply with the any municipal Noise Ordinance.

161. WATCHMAN

Contractor may, at his option and expense, employ a watchman to protect property at all times during which work is not under active supervision of his Construction Superintendent. Owner will not assume responsibility for losses or damage to property through theft or vandalism.

162. FIELD COPIES

The Contractor shall keep one copy of the specifications, plans and all shop drawings in good order, available to the Engineer and his representative at the job location.

163. EMERGENCY WORK

If in the opinion of the Owner the work is carried on in such fashion that the public safety, private property, streets, or utilities are endangered, or that the work is carried on in such a manner as to create unnecessary inconvenience to the public, the Owner shall, immediately upon giving notice, be authorized to undertake such corrective measures as he may deem to be necessary. The cost of such work shall be deducted from payments due the Contractor under this contract.

164. PROTECTION

The Contractor shall protect and maintain all property, Structures and utilities, public or private and shall provide whatever means are required to do so, as part of this contract. The Contractor shall take steps to protect the site and neighborhood from dust, mud, paint, and inconvenience. He shall take such steps as are necessary to prevent mud and silt from washing off the project area, prevent dust from blowing about the neighborhood, and prevent loaded trucks from spilling material upon traveled roadways.

If the work is stopped for any purpose all rigging, scaffolds, and equipment shall be made secure to prevent any danger from wind, storm or accidents.

The Contractor must put up and maintain such barriers, signs and red lights as will effectively protect his work, materials, and prevent accidents in consequence of the work. Steps shall be taken to prevent trespass wherever the public may be endangered. He shall assume all liability occasioned in any way by his acts or neglect, or those of his agents, employees or workmen.

The Contractor shall so control his operation as to prevent damage to trees and shrubs, which are to be preserved. Protection may include coverings, fences and boards lashed to trees to prevent damage from blasting or machine operations or hand tunneling through root areas. The Contractor shall carefully cut off all branches of trees, which may have been broken or injured during construction.

Should work necessitate the moving of a survey monument the property owner, Village, County or other agency which can reasonably be assumed to have established the monument, shall be informed far enough in advance to arrange for adequate referencing. In no case, however, shall a monument be disturbed without prior approval of the Village.

All barricades, lights, flags, bombs and any other means set up to protect the public or the work from injury or damage shall be maintained overnight, over weekends and holidays, or for any duration during which the job is not complete but the work may be shut down. Additional precaution such as filling of trenches or installation of steel plates may be required in areas of heavy traffic, on weekends extended by legal holidays or when there is expectation of inclement weather.

165. PAYMENT FOR GENERAL CONDITIONS

The cost of the performance of any work required by these General Conditions shall be considered to be a part of the Contractor's Base Bid if the contract is a Lump Sum Contract, and spread out among all the unit prices if the contract is a Unit Price Contract. There will be no additional payment for work required by these General Conditions.

166. DAMAGE TO PRIVATE PROPERTY

If the Contractor damages private property or facilities outside the designated work area (which work area is to be restored under the restoration provisions of the contract), he shall restore the private property or facilities promptly and completely in the same manner as specified under the restoration provisions of these specifications. If he does not do so within a reasonable period of time, as determined by the Owner, the Owner may retain or deduct from any sum or sums due to the Contractor such amount or amounts as are necessary to correct the condition and employ its own forces or another contractor to do the corrective work. The fact that the Contractor has referred damage claim to his insurance carrier shall not relieve him of liability for prompt and full restoration of damage. For purposes of this section of the contract, the Owner will treat what are essentially private facilities within a public right-of-way (including but not limited to mailboxes, shrubs, flowers and other plantings, walls, light poles, etc.) in the same manner as described above for private property.

167. RESTORATION

All man-made and natural features in the construction site disturbed or removed for the proper completion of the work shall be reset or replaced. All man-made or natural features damaged or destroyed shall be repaired or restored to a condition equal to or better than that existing at the start of the work, with materials equal to or better than the original ones.

In cases where it is impossible to replace an item with an equivalent item (large trees, exotic plants) the Contractor may, subject to the approval of the Engineer, substitute other similar items whose total value shall equal that of the destroyed one.

Where the work area extends onto private property, the Contractor shall make all reasonable attempts to satisfy the owners. In case of dispute, the Owner shall be the judge as to the reasonableness of equivalency of repaired and restored features.

If the contract documents contain more detailed or more stringent specifications for restoration than in this section, the more detailed or stringent specifications shall take precedence over this section. If the contract documents do not contain detailed specifications for restoration, then this section expresses the intent of the Owner; all published specifications of the Owner containing details of construction applicable to items of restoration (e.g. grass, pavement, etc.) shall be deemed included in these contract documents as if set forth in full, if not actually printed herein.

If the contract documents contain a specific payment clause for restoration, then that clause shall apply; otherwise, payment for restoration shall be as described in Section 165.

SPECIAL CONDITIONS

SCOPE:

Under the contract for which these specifications are intended, the Contractor shall furnish all labor, materials, and equipment necessary to remove and dispose of three existing outdoor condensing units and install new HVAC units as shown on the plans and as detailed in the specifications, and other related items; patch, clean and restore the site, all in accordance with the Contract Documents. See Section 01110 Summary of the Work for additional information.

Any work that is necessary to complete the project, but is not included as a specific item, will be considered as incidental work and no direct payment will be made.

Existing utilities cannot be interrupted during construction.

Items of work which are considered incidental include, clean-up, obtaining and complying with permits and codes, coordination with other contractors and utility companies.

Contractor shall remove existing equipment from site as soon as the project is complete.

Payment for these and other incidental work items, will be included in the Contractor's lump sum bid price.

TIME OF COMPLETION:

The Contractor shall provide the required bonds, insurance and other documents as may be required to complete this agreement and sign the Contract within ten (10) business days of notice of award. Work shall commence within ten (10) days after the signing of the contract, and shall be conducted in such a manner as to be completely finished on or before the expiration of forty five (45) consecutive calendar days. In the event that any portion of the contract is stopped by the Engineer due to inclement weather, or any other good and sufficient reason, the contractor will be granted an extension of time equal to the number of working days thereby.

LIQUIDATED DAMAGES:

The Contractor and his Sureties shall be liable for and shall pay to the Owner the sum of \$100.00 (One Hundred Dollars) as fixed, agreed and liquidated damages for each calendar day of delay from the above stipulated completion, or as modified in accordance with the GENERAL CONDITIONS, until such work is satisfactorily completed and accepted.

CONTRACTOR TO CHECK DIMENSIONS AND SCHEDULES:

The Contractor will be required to check all dimensions and quantities shown on the schedules given to him by the Owner, and shall notify the Owner of all errors therein which he may discover by examining and checking the same. The Contractor shall not take advantage of any error or omission in these specifications and schedules. The Owner will furnish all instructions should such error or omission be discovered, and the Contractor shall carry out such instructions as if originally specified.

EXCAVATION OPERATIONS AT OR NEAR UNDERGROUND FACILITIES:

The Contractor's attention is directed to the State of New York, Department of Labor, Board of Standards and

Appeals Industrial Code Rule 753 - "Construction, Excavation and Demolition Operations at or near Underground Facilities" effective April 1, 1975 and any amendments thereto.

LAYOUT OF WORK:

The Contractor shall perform all layout work necessary for the satisfactory execution of the construction as shown on the contract Drawings and all costs in connection therewith shall be included in the contract price.

ELECTRICAL WORK:

All electrical work involved in wiring the new HVAC systems shall be performed by an electrician licensed in Westchester County, hired by the Contractor as a sub-contractor. Payment for electrical work will be included in the Contractor's lump sum bid price. Electrician shall hire a third-party electrical inspector, approved to work in the Village of Elmsford to inspect the work and provide an electrical certificate upon completion of the work. The cost of the electrical inspection will be included in the Contractor's lump sum bid price.

WORK BY OTHERS:

It shall be the responsibility of the Contractor to coordinate his work under this Contract with any work being done by others in the vicinity, including private utilities and the Elmsford Department of Public Works., in order that the construction may proceed in an efficient and logical manner. The Contractor shall have no claim whatever against the Owner, or other parties due to delays or other reasons caused by the work of others or his failure to coordinate such work.

INTENT OF TECHNICAL SPECIFICATIONS:

The Technical Specifications included in the Contract Documents indicate the general requirements for the type and quality of material to be furnished and installed, and work to be performed. The Contractor shall apply the general standards to the specific installation. The Contractor shall adhere to the standards indicated in the Technical Specifications, and as ordered by the Engineer.

HVAC EQUIPMENT ALTERNATE

The proposed system is designed based on Daiken equipment specified. If the Contractor proposes alternate (or equal) equipment, Contractor shall provide a complete equipment data package including all the information as follows for the Owners engineer to review:

- 1) Alternate equipment package shall include, but is not limited to:
 - a) Equipment capacities at the design condition, power requirements, indoor units CFM/static pressures, fan curves, installation requirements, and physical dimensions. Nominal performance data is not acceptable.
 - b) The mechanical contractor shall list the equipment supplier and submit the required data package with the bid detailing a complete comparison of the proposed alternate equipment to the specified equipment and the associated cost reduction of the alternate equipment. The contractor bids an alternate manufacturer with full knowledge that that manufacture's product may not be acceptable or approved.
 - c) All equipment must have visible and permanent label clearly identifying the original manufacturer of the equipment. These labels shall have original manufacturer's name and contact information and be located both inside and outside the equipment and on all equipment-related literature. Submittals shall include the above statement as confirmation by supplier that all conditions are agreed to and complied to. Failure to comply with these requirements shall be sufficient cause for rejection of the

- submittal and product with no further consideration.
- d) The submitted documents shall be complete system designs and show no less information than the HVAC equipment/controls contract bid documents.
- 2) Contractor shall submit, as part of the equipment data package, <u>condensing unit data sheets</u>. Data sheets to include the following:
 - a) COOLING capacities at project design conditions:
 - i) Cooling (Btu/h)
 - ii) Cooling Input Power
 - iii) Part Load IEER:
 - iv) Full Load EER:
 - b) HEATING capacities at project design conditions:
 - i) Heating (Btu/h)
 - ii) Heating Input Power
 - iii) Full Load COP @ 47°F:
 - iv) Full Load COP @ 17°F:
 - c) The submitted capacity and efficiency performance must meet or exceed the listed performance on the schedule at the designed space conditions including de-rate factors for defrost if applicable and refrigerant piping losses.
 - d) OPERATING TEMPERATURE RANGE:
 - (1) Cooling
 - (2) Heating
 - e) POWER SUPPLY:
 - (1) Maximum Circuit Amps (MCA)
 - (2) Maximum Overcurrent Protection Amps (MOP)
 - (3) Maximum Starting Current (MSC)
 - (4) Condenser Fan Motor
 - f) REFRIGERANT:
 - Refrigerant type and charge details including field charge for piping to ensure code compliance.
 - (2) Control of refrigerant temperature based on weather and load or alternative function.
 - g) UNIT DATA:
 - (1) Max. number of indoor units
 - (2) Sound pressure level at 3ft (dBA)
 - (3) Weight (lbs)
 - (4) Dimensions
 - (5) Demand limit function description
 - (6) Details on sequential start functionality
 - (7) Coil anticorrosion data
- 3) Equipment supplier shall guarantee the performance of their system and all published data submitted. Performance shall be based on the design criteria below.
 - a) Room Temperature (Cooling)
 - b) Room Temperature (Heating)
 - c) Ambient Temperature (Summer)
 - d) Ambient Temperature (Winter)
 - e) Defrost De-rate Factor
 - f) Refrigerant Piping Loss
- 4) The alternate equipment supplier shall submit with bid, <u>indoor unit data sheets</u>. Data sheets to include the following:

- a) Capacities at project design conditions:
 - i) Cooling (Btu/h)
 - ii) Cooling Input Power (kW)
 - iii) Part Load IEER
 - iv) Full Load EER
 - v) Heating (Btu/h)
 - vi) Heating Input Power (kW)
 - vii) Full Load COP@47°F
 - viii) Full Load COP@17°F
 - ix) Air Flow (CFM)
- b) External Static Pressure (ESP)
- c) Electrical Data (MAC, MOP, MSC, RLA)
- d) Weight (lbs)
- e) Dimensions
- 5) The equipment supplier shall provide a certificate which states that the equipment has a minimum salt spray resistance of 1000 hours.
- 6) The equipment supplier shall submit the warranty certificate to the Owner.

OSHA REQUIREMENTS:

The Contractor shall comply with the latest OSHA requirements.

EMERGENCY TELEPHONE LIST

The Contractor shall provide to the Owner three-(3) telephone numbers which grant 24 hour, 7 day a week contact with a principal within the Contractor's company. The telephone numbers shall be utilized by the Owner in the event of an emergency situation arising during non-working hours.

INSURANCE

- 1. The Contractor, prior to signing of the contract, shall provide to the **Village of Elmsford** and maintain throughout the life of the contract, at his own cost and expense, proof of the following insurance by insurance companies licensed in the State of New York.
 - a. Workmen's Compensation. The Contractor shall take out and maintain during the life of this contract the statutory Workmen's Compensation, Disability, and Employer's Liability insurance for all of his employees to be engaged in work on the project under this Contract, and, in case any such work is sublet, the Contractor shall require the Subcontractor similarly to provide Workmen's Compensation, Disability, and Employer's Liability Insurance for all of the latter's employees to be engaged in such work.
 - b. Public Liability Insurance with a single limit of liability per occurrence for bodily injury and property damage of \$1,000,000. The Certificate of Insurance shall indicate the following coverage:
 - (1) Premises Operations;
 - (2) Any deductibles shall not be the liability of the Village of Elmsford, New York.
 - c. Automobile Liability Insurance with the single limit of liability per occurrence for bodily injury and per occurrence for property damage at \$1,000,000. This insurance shall include coverage for:
 - (1) Owned automobiles;
 - (2) Hired automobiles;
 - (3) Non-owned automobiles.
 - d. Owners and Contractors Protective Liability Policy \$1,000,000 single limit endorsed that the **Village of Elmsford** is not responsible for the premium.
 - e. Property Damage Property Damage Insurance shall include the legal liability of its Contractor for loss or damage to property of the **Village of Elmsford.**
 - f. Unemployment Insurance The Contractor for the agreed consideration, promises and agrees to pay the contributions measured by the wages of his employees required by State Unemployment Insurance Law and all amendments thereto, and to accept the account of any contribution measured by the wages as aforesaid of employees of the Contractor and his subcontractors assessed against the Owner under the authority of said law.
- 2. The Contractor shall obtain and maintain in full force and effect all of his insurance policies with a reputable insurer licensed to do business in the State of New York with at least an <u>A</u> Best rating.

- 3. All policies and certificates of the Contractor shall contain clauses as follows:
 - a. The insurance companies issuing the policy or policies shall have no recourse against the **Village of Elmsford, New York** for payment of any premium or for assessments under any form of policy.
 - b. Any and all deductibles in the above described insurance policies shall be assumed by and be for the account of, and at the sole risk of the Contractor.
 - c. In case of cancellation or material change in any of the policies, thirty (30) days notice shall be given to the **Village of Elmsford**, **New York**, by registered mail, return receipt requested.
- 4. All property losses shall be made payable to and adjusted with the Village of Elmsford.
- 5. All policies of insurance shall be acceptable to and approved by the Department of Law prior to the inception of any work.
- 6. Other coverages may be required by the **Village of Elmsford** based on specific need.
- 7. If, at any time, any of the said policies shall be or become unsatisfactory to the **Village of Elmsford**, as to form or substance, or if a company issuing such a policy shall be or become unsatisfactory to the **Village of Elmsford** the Contractor shall promptly obtain a new policy, submit same to the **Village of Elmsford**, for approval and submit a certificate thereof as hereinafter provided. Upon failure of the Contractor to furnish, deliver and maintain such insurance as above provide, this Contract, at the election of the **Village of Elmsford**, may be forthwith declared suspended, discontinued or terminated. Failure of the Contractor to take out and/or to maintain or the taking out and/or maintenance of any required insurance, shall not relieve the Contractor for any liability under the contract, nor shall the insurance requirements be construed to conflict with the obligations of the Contractor.
- 8. In the event that claims in excess of these amounts are filed by reason of any operations under the contract, the amounts of excess of such claims, or any portion thereof, may be withheld from payment due or to become due the Contractor until such time as the Contractor shall furnish additional security covering such claims.
- 9. The Insurance Policy shall be endorsed to name the **Village of Elmsford**, and any directors, officers, employees, subsidiaries, and affiliates, as additional insured on all policies and Hold Harmless documents, and shall stipulate that this insurance is primary, that any other insurance or self-insurance maintained by the **Village of Elmsford** shall be excess only and shall not be called upon to contribute with this insurance. ISO Additional Insured Endorsement form number CG2010 1185 under GL. Contractors Form B must be utilized and accompany the Certificate of Insurance.
- 10. Copies of the insurance policies shall be submitted to the **Village of Elmsford** attorney for approval prior to the signing of the Contract.

WAGE RATE CERTIFICATION

The project assisted under this agreement is subject to the requirements of the Davis-Bacon Act (the Act), 40 USC 276a. The Act requires that all construction employees of both contractors and subcontractors working on a federally-funded or assisted construction project be paid the current prevailing Davis-Bacon wages (wages).

The wages are those included in the bid package. By submitting a bid and by signing this form, a bidding contractor agrees to pay his/her construction employees the current prevailing Davis-Bacon wages as included in the bid package and to assure that any sub-contractors used on the project also pay their construction employees the wages included in the bid package.

Since this project is subject to the requirements of both Federal and State Labor Standards, the Contractor is required to pay the higher of the two rates for the job classification.

Company Name:	
Federal ID #:	
Address:	
Signature of Authorized Representative:	
Printed Name/Title of Authorized Representative:	

"General Decision Number: NY20240017 01/05/2024 Superseded General Decision Number: NY20230017

State: New York

Construction Types: Building, Heavy, Highway and Residential

County: Westchester County in New York.

BUILDING CONSTRUCTION PROJECTS, RESIDENTIAL CONSTRUCTION PROJECTS (consisting of single family homes and apartments up to and including 4 stories), AND HEAVY AND HIGHWAY CONSTRUCTION **PROJECTS**

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

|If the contract is entered |into on or after January 30, | generally applies to the |2022, or the contract is | contract. |renewed or extended (e.g., an |. The contractor must pay |option is exercised) on or |after January 30, 2022:

|. Executive Order 14026

| all covered workers at least \$17.20 per hour (or | the applicable wage rate | listed on this wage | determination, if it is | higher) for all hours spent performing on the contract in 2024.

If the contract was awarded on |. Executive Order 13658 |or between January 1, 2015 and | generally applies to the |January 29, 2022, and the |contract is not renewed or |extended on or after January | covered workers at least 30, 2022:

| contract.

|. The contractor must pay all| | \$12.90 per hour (or the | applicable wage rate listed| | on this wage determination, | if it is higher) for all | hours spent performing on that contract in 2024.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification Number Publication Date

01/05/2024

Davis Bacon Wage Rate Determination - Published January 5, 2024

ASBE0091-003 05/29/2023	Rates	Fringes
HAZARDOUS MATERIAL HANDLER (Duties limited to preparation, wetting, stripping, removal, scraping, vacuuming, bagging and disposing of all insulation materials whether they contain asbestos or not from	Naces	TTINGO
mechanical systems)		47.35
types of mechanical sytems)	\$ 44.97 	47.35
BOILERMAKER	Rates \$ 65.88	Fringes 48.47+a
FOOTNOTE: a. PAID HOLIDAYS: New Year's Day, Independence Day, Labor I after Thanksgiving, Christmas	Day and Goo	d Friday, Friday
BRNY0001-003 06/01/2018 Pointer, cleaner and caulker		Fringes 33.38
BRNY0004-001 01/02/2023	Data -	Enings.
MARBLE MASON		Fringes 39.03
BRNY0005-006 06/01/2022 HEAVY & HIGHWAY CONSTRUCTION	Datas.	Eningog
BRICKLAYER Bricklayers, Stone Masons, Cement Masons, Plasterers, Pointers, Caulkers and	Rates	Fringes
Cleaner	\$ 45.29	36.50
BRNY0005-007 06/01/2022 BUILDING/RESIDENTIAL CONSTRUCTION		
Bricklayer, Cement Mason, Plasterer & Stonemason	Rates \$ 44.79	Fringes 36.50
BRNY0007-001 07/01/2022		
TERRAZZO FINISHER TERRAZZO WORKER/SETTER		Fringes 36.97 38.60

Davis Bacon Wage Rate Determination - Published January 5, 2024

BRNY0007-002 12/05/2022 TILE FINISHER	Rates	Fringes 33.02
TILE FINISHER	, 40.44 	33.02
BRNY0020-001 07/04/2022 MARBLE FINISHER	Rates \$ 49.20	Fringes 36.21
BRNY0024-001 01/02/2023	Rates	Fringes
BRICKLAYER MARBLE POLISHERS	\$ 47.22	30.29
BRNY0052-001 12/05/2022	Datas	Eringo
Tile Layer	Rates \$ 63.04	Fringes 36.30
CARP0279-001 07/01/2022	Rates	Fringes
Carpenters: Building Heavy & Highway Residential	\$ 45.60	32.35 32.35 21.11
CARP0740-001 07/01/2022		Fringes
MILLWRIGHT	\$ 5/.80 	55.96 -
CARP1556-007 07/01/2022 Diver Tender		Fringes 53.56 53.56
CARP1556-009 07/01/2022 Dock Builder & Piledrivermen	Rates \$ 58.16	Fringes 53.56
CARP1556-011 07/01/2022		
Carpenters: TIMBERMEN		Fringes 53.94
CARP2287-001 07/01/2022	Rates	
Carpenters: Soft Floor Layers	. \$ 55.05	47.83
ELEC0003-003 04/21/2021		
ELECTRICIAN (Teledata	Rates	Fringes
Technician)a. \$2.00 per hour not to exceed		
ELEC1249-001 05/01/2023		

ELECTRICIAN (LIGHTING AND TRAFFIC SIGNAL WORK Including any and all Fiber Optic Cable necessary for Traffic Signal Systems, Traffic monitoring systems and Road Weather	Rates	Fringes
<pre>Information systems) Flagman\$ Ground Digging Machine</pre>	32.84	7%+35.40
Operator\$	49.26	7%+35.40
Ground Truck Driver\$		7%+35.40
Tractor, Trailer Unit\$		7%+35.40
Lineman & Technician\$	54.73	7%+38.40
Mechanic\$	43.78	7%+35.40
FOOTNOTE:		
a. PAID HOLIDAYS: New Years Da Day, Labor Day, Thanksgiving Day		
President's Day, Good Friday, De for the President of the Untied the Governor of the State of New works two days before and two da	coration Day, I States and Elec York provided	Election Day ction Day for the employee

ELEC1249-006 05/01/2023

Rates Fringes

ELECTRICIAN (LINE CONSTRUCTION)

Substation and switching structures pipetype cable, underground fuild and gas filled transmission conduit and cable installation, fiber optic ground wire, fiber optic shield wire or any other like product having ground protection or fiber optic capabilities, maintenance jobs or projects; railroad catenary installation and maintenance bonding of rails; Overhead & underground distribution work & Maintenance; Overhead and undertı

verhead and under- ground		
ransmission line work:		
Cable Splicer\$	65.90	7%+38.40
Flagman\$	35.95	7%+35.40
Groundman digging machine		
operator\$	53.92	7%+35.40
Groundman truck driver		
<pre>(tractor trailer unit)\$</pre>	50.92	7%+35.40
<pre>Groundman truck driver;\$</pre>	47.93	7%+35.40
Lineman & Technician\$	59.91	7%+38.40

Mechanic			
ELEC1249-009 01/01/2022			
Rates Fringes ELECTRICIAN (LINE CONSTRUCTION) TELEPHONE, CATV FIBEROPTICS CABLE AND EQUIPMENT Cable Splicer\$ 36.28 %3+5.14			
Groundman\$ 18.25 %3+5.14 Installer Repairman- Teledata Lineman/Technician-			
Equipment Operator\$ 34.43 %3+5.14			
ELEV0001-002 03/17/2022			
Rates Fringes ELEVATOR MECHANIC Elevator Constructor\$ 75.14 47.446+a+b Modernization and Repair\$ 59.09 45.564+a+b FOOTNOTE: a. PAID HOLIDAYS: New Year's Day, Good Friday, President's Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, Friday after Thanksgiving, and Christmas Day. b. PAID VACATION: An employee who has worked less than 5 years shall recieve vacation pay credit on the basis of 4% of his hourly rate for all hours worked; an employee who has worked 5 to 15 years shall receive vacation pay credit on the basis of 6% of his hourly rate for all hours worked; an employee who has worked 15 or more years shall receive vacation pay credit on the basis of 8% of his hourly rate for all hours worked.			
WESTCHESTER COUNTY (Towns of Bedford, Cortland, Lewisboro, Mt. Kisco, North Salem, Pound Ridge, Somers, and Yorktown) Rates Fringes ELEVATOR MECHANIC\$ 67.35 37.335+a+b FOOTNOTE: a.Vacation: 6%/under 5 years based on regular hourly rate for all hours worked. 8%/over 5 years based on regular hourly rate for all hours worked. b. PAID HOLIDAYS: New Year's Day; Memorial Day; Independence Day; Labor Day; Veterans' Day; Thanksgiving Day; the Friday after Thanksgiving Day; and Christmas Day.			

ENGI0137-005 03/06/2017

BUILDING & RESIDENTIAL CONSTRUCTION

	Rate	s Fringes
Power equipment operato:	rs:	
GROUP 1-A	\$ 53.9	95 28.52+a
GROUP 1-B	\$ 49.0	68 28.52+a
GROUP 2-A	\$ 52.0	03 28.52+a
GROUP 3-A	\$ 50.3	11 28.52+a
GROUP 3-B	\$ 47.0	67 28.52+a
GROUP 4-A	\$ 49.	60 28.52+a
GROUP 4-B	\$ 41.8	35 28.52+a
GROUP 5	\$ 45.3	17 28.52+a
GROUP 5-A	\$ 56.	63 28.52+a
GROUP 5-B	\$ 42.8	33 28.52+a
GROUP 6	\$ 44.	92 28.52+a
MODEC Hormota 200	aborro mogullam	rata

NOTES: Hazmat: 20% above regular rate

Pumping operation Premium .50

Crane Operators (100-149 ft) 2.00

Crane Operators (149 ft +) 3.00

Loader Operators (over 5 cu y) .50 Shovel Operators (over 4 cu yd)1.00

FOOTNOTE:

a. New Years Day, Memorial Day, Independence Day, Labor Day Thanksgiving Day, Christmas Day, plus Lincoln's Birthday, Washington's Birthday, Good Friday, Columbus Day, November Election Day, Veteran's Day.

POWER EQUIPMENT OPERATORS CLASSIFICATION

GROUP 1-A: Carrier- trailer horse; concret-portable hoist; crane & hoist engineer-steel (concrete, material, super structure sub- structure); derrick (stone-steel); elevator & cage; hoist- single/double or triple drum; hoist-portable mobile unit; hoist engineer-concert (crane-derrick-mine hoist); hoist engineer- material; overhead crane; power house plant; telephies (cableway); whirly; maintenance engineer; Lull hilift or similar; hydraulic crane 25 ton and over; cherry picker 25 tons and over; backhoe Oliver 88; fordson; dynahoe; dual purpose and similar machines; Barber Green Loader-euclid loader or similar type; conway or similar mucking macking machines; dragline; gradall; shovel; backhoe etc. (crawler or truck); front end loaders; hydraulic boom; jersey spreader; lift slab console; letournequ or tounapull (scrapers over 20 yds struck); mucking machines; pavement breaker (air ram); paver (concrete); road boring machine; road mix machines; ross carrier and similar machines; post hole digger; shovel (tunnels); side boom; spreader (asphalt); scoopmobile-tractor-shovel over 1 1/2 yds. trenching machines vermeer concrete saw trencher and similar; tractor type demolition equipment; winch truck (a frame); hydraulic crane over 10 ton up to 25 ton); cherry picker over 10 ton

up to 25 ton)

GROUP 1-B: Compressor (steel erection); pulse meter and push button buzz box; elevator; mechanic (outside) all types; welder; scrapers 20 yds struck and under; machine pulling sheep's foot roller; vibratory rollers; roller 4 tons and over.

GROUP 2-A: Compactor self-propelled; grader; bulldoze D7 and similar tractors with a draw bar horsepower of 100 or over; bulldozer D6 and under; welder; scraper 20 yds struck and under; machine pulling sheep's foot roller; vibratory rollers.

GROUP 3-A: Asphalt plant; boiler (high pressure); concrete mixing plants; concrete pump; firemen; forklift; forklift (electric); joy drill or similar tractor drilling machine; loader - 1 1/2 yards and under; locomotive (all sizes); mixer concrete - 21E and over; portable asphalt plant; portable batch plant; portable crusher; quarry master; stone crusher; well drilling machine and well point system; cherry picker under 10 tons; hydraulic crane under 10 tons; concert buffy; one yard an up ride on dumper (benford or similar).

GROUP 3-B: Compressor over 125 cu. feet; conveyor belt machine regardless of size; lighting unit (portable & generator); welding machine (steel erection and excavation); and compressor plant; stud machine; ladder hoist.

GROUP 4-A: Air tractor drill; batch plant; bending machine; concrete breaker; concrete spreader; curb cutter machine; farm tractor (all types); finishing machine-concrete; hepavac clean air machine (all similar types: removal of asbestos etc.); material hopper-sand-stone-cement; mixer-concrete-under 21E; mulching grass spreader; pump-gypsum, etc., pump-plaster-grout -fireproofing; shop mechanic (not employed on job site); roller under 4 ton; spreading and fine grading machine; steel cutting machine; syphon pump-air-steam; tar joint machine; turbo jet burner or similar equipment; vibrator (1 to 5); fine grading machine; roof hoist (tugger hoist); television cameras-water- sewer-gas-etc.

GROUP 4-B: Compressor to 125 feet; dust; dust collector; heater all types; pump; pump station (water and sewer); steam jenny; sweeper; chipper; mulcher.

GROUP 5: Motorized roller (walk behind)

GROUP 5-A: Master Mechanic

GROUP 5-B: Utility Man

GROUP 6: Warehouse Man

ENGI0137-006 03/06/2017

HEAVY & HIGHWAY

	Rates	Fringes
Power equipment operators:		
GROUP 1\$	58.54	28.15+a
GROUP 1-A\$	51.68	28.15+a
GROUP 1-B\$	54.42	28.15+a

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GROUP 2-A....$ 49.52
                              28.15+a
GROUP 2-B.....$ 51.05
                              28.15+a
GROUP 3.....$ 48.67
                              28.15+a
GROUP 4-A....$ 44.29
                              28.15+a
GROUP 4-B.....$ 38.13
                              28.15+a
GROUP 5.....$ 54.69
                              28.15+a
GROUP 5-A-1.....$ 54.69
                              28.15+a
GROUP 5-A-2....$ 66.22
                              28.15+a
                              28.15+a
GROUP 5-A-3.....$ 63.97
GROUP 5-A-4.....$ 60.03
                              28.15+a
GROUP 5-A-5.....$ 50.65
                              28.15+a
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POWER EQUIPMENT OPERATORS CLASSIFICATIONS (HEAVY & HIGHWAY) GROUP 1: Boom Truck; Cherry Picker; Clamshell; Crane, (Crawler, Truck); Dragline; Rough Terrain Crane GROUP 1-A: Auger; Auto Grader; Dynahoe and Dual purpose and similar machines; Boat Captain; Boring Machine (all types); Bull Dozer-all sizes; Central Mix Plant Operator; Chipper-all types; Close circuit t.v.; Compactor with Blade; Concrete Portable Hoist; C.M.I. or similar; Conway or similar mucking machines; Gradall, Shovel Backhoe, etc. Grader; Derrick, (Stone- Steel; Elevator & cage, materials or passengers; Front end loaders over 1 1/2 yds.; Hoist Single, Double, Triple Drum, Hoist Portable Mobile Unit; Hoist Engineer-Concrete (Crane-Derrick-Mine Hoist); Hoist Engineer-Material, Hydraulic Boom; Letourneau or Tournapull (Scrapers over 20 yds. struck); Log Skidder; Movable Concrete Barrier Transfer & Transport Vehicle; mucking machines; overhead crane; paver (conccrete); pulsemeter; push button (buzz box) elevator; road mix machines; Robot Hammer (brock or similar), Ross carrier and similar machines; shovels (tunnels); side boom; Slip Form Machine; spreader (asphalt); scoopmobile-tractor-shovel over 1 1/2 yards; trenching machines; telephies- vermeer concrete saw trencher and/or similar; tractor-type demolition equipment, Whirly

GROUP 1-B: Road Paver, Asphalt
GROUP 2-A: Ballast Regulators; Compactor self-propelled; Cow
Tracks; Fusion Machine; Rail Anchor Machines; Roller 4 ton
and over; Scrapers - 20 yards struck; Switch Tampers;
Vibratory roller, etc.

GROUP 2-B: Mechanic (outside) all types
GROUP 3-A: Air tractor drill; asphalt plant; batch plant;
boiler (high pressure; concrete breaker; concrete pump
concrete spreader; curb cutter machine; farm tractor (all
types); finishing machine (concrete); fine grading machine;
fireman; forklift; forklift (electric); joy drill or
similar tractor drilling machine; loader - 1 1/2 yards and
under; locomotive (all sizes), maintenance engineer;
machine pulling sheeps foot roller; material hopper; mixer
concrete - 21-E and over; mulching grass spreader; portable
asphalt plant, portable batch plant, portable crusher;
powerhouse plant; quarry master; roller under 4 ton;
spreading and fine grading machine; steel cutting machine;
stone crusher; sweeper; turbojet burner or similar; well

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drilling machine; winch truck ""A"" frame. John Henry Drill
 or similar.
GROUP 4-A: Service men (fuel or grease truck).
 GROUP 4-B: Oiler; Compressor - compressor plant; paint
 compressor-steel erection; conveyor belt machine; lighting
 unit (portable & generator); oiler; pumps - pump
 station-water-sewer- gypsum- plaster, etc.;
 roller-motorized (walk-behind); welding machine (steel
 erection excavation); well point system; bending machine;
 dust collector; mixer - concrete under 21-E; heater all
 types; steam jenny; syphon pump-air-steam; tar joint
 machine; vibrator (1 to 5); Compressor Truck Mounted (2-6)
GROUP 5: Oiler
GROUP 5-A-1: Master Mechanic
 GROUP 5-A-2: Engineer - all tower cranes, all climbing
 cranes and all cranes of 100 ton capacity or greater (3900
 Manitowac or similar) irrespective of manufacturer and
 regardless of how the same is rigged (except for pile rigs).
GROUP 5-A-3: Engineer-- Pile Driver
GROUP 5-A-4: Hoist Engineer- Steel -Sub Structure
 GROUP 5-A-5: Jersey-spreader, pavement breaker (air ram);
 Post Hole Digger
NOTES:
Loader Operator (over 5 cu yds)
Shoval Operators (over 4 cu yd)
                                        .50
                                       1.00
Hazmat premium over regular rate 20%
CRANES:
100 ft- 149 ft: receive $2.00 more than Group 1 rate
149 ft and over receive $3.00 more than Group 1 rate
FOOTNOTE:
 a. PAID HOLIDAYS: New Year's Day; Lincoln's Birthday; Good
 Friday; Memorial Day; Independence Day; Labor Day; Veterans
 Day; Columbus Day; November Election Day; Thanksgiving Day;
 and Christmas Day
 IRON0040-001 07/01/2023
WESTCHESTER COUNTY
                               Rates
IRONWORKER, STRUCTURAL.....$ 57.20 86.77
_____
 IRON0046-003 07/01/2023
                                Rates
                                             Fringes
IRONWORKER
    METALLIC LATHERS AND
                                                28.80
    REINFORCING IRONWORKERS.....$ 56.95
 IRON0197-001 07/01/2023
                                Rates Fringes
IRONWORKER
   STONE DERRICKMAN.....$ 58.90
 IRON0580-001 07/01/2023
Rates Fringes IRONWORKER, ORNAMENTAL......$ 47.15 63.75
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LABO0060-002 03/26/2023 HEAVY/HIGHWAY Rates Fringes Laborers: 26.85 GROUP 1....\$ 49.55 26.85 GROUP 2....\$ 48.20 GROUP 3.....\$ 47.80 26.85 GROUP 4....\$ 47.45 26.85 26.85 GROUP 5.....\$ 47.10 GROUP 6....\$ 40.75 26.85 GROUP 7....\$ 49.10 26.85 SHAFT AND TUNNEL IN FREE AIR GROUP 1.....\$ 53.55 GROUP 2.....\$ 55.70 34.30+a GROUP 4.....\$ 62.10 34.30+a LABORERS CLASSIFICATIONS (HEAVY/HIGHWAY): GROUP 1: Blasters. GROUP 2: Burner, Jumbo Driller, Joy Driller, Wagon Driller, Air Track Driller, Hydraulic Driller, Concrete Form Aligner, Concrete Form and Curb Form Highway (Steel), Asphalt Screedman, Asphalt Raker. GROUP 3: Asphalt Curb Machine Operator, Jeeper Operator, Pavement Breaker Operator, Power Saw Operator, Jack Hammer Driller. All types of pheumatic tools gasoline driller, concrete saw, gunniting, railroad spike puller and sandblasting, pipe layer, deck winches on scows, power buggy operator, power wheelbarrow operator. GROUP 4: General concrete laborers-anything pertaining to concrete, aggregate or concrete material handling, puddlers, asphalt worker, rock scalers, vibrator operator, bit grinder, concrete grinder, air tampers and all tampers not covered by any other classification, form pin puller, pumps and their operation, service of air power, epoxy and waterproofing worker, fine grade person between forms, barco rammer, guard and guide rail and link fence, steel GROUP 5: Common laborers, signal person and pit person, truck spotters, powder person, landscape and nursery person, dump person. GROUP 6: Flagperson GROUP 7: Asbestos and Toxic Waste laborer SHAFT AND TUNNEL IN FREE AIR CLASSIFICATIONS GROUP 1: Outside laborers GROUP 2: Blaster, Concrete and form setters, drill runners, air tuggers, chippers, pneumatic tools, and source of airpower, pumps and their operations, vibrator operators, Puddlers, Chuck tenders, nippers, concrete laborers tunnel sewer and water pipeliners, boring, Laborers, Powder carriers, signalmen, and Brakemen GROUP 4: Miners FOOTNOTE: a. PAID HOLIDAYS: New Year's Day, Lincoln's Birthday, Washington's Birthday, Good Friday, Memorial Day,

Davis Bacon Wage Rate Determination - Published January 5, 2024

Independence Day, Labor Day, Col Election Day, Veterans' Day, Tha Day.		
LABO0235-001 05/01/2016 BUILDING		
LABORER\$	Rates 33.30	Fringes 26.25
LABO0235-002 05/01/2016 RESIDENTIAL		
LABORER\$		Fringes 19.55
PAIN0009-003 05/01/2023	Rates	Fringes
PAINTER GLAZIERS\$ Painters, Paperhanger,		52.77
Drywall Finishers & Lead Abatement Worker\$ Spray, Scaffold,	43.00	40.21
Sandblasting\$	46.00	40.21
PAIN0806-001 10/01/2023	Rates	Fringes
Painters: Structural Steel and Bridge.\$	56.00	54.33
PLUM0021-003 05/01/2023	Rates	Fringes
Plumber and Steamfitter Zone 1\$		41.51
ROOF0008-003 05/01/2023	Rates	Fringes
ROOFER\$		38.37
SFNY0669-002 04/01/2023	Rates	Fringes
SPRINKLER FITTER\$		30.19
SHEE0038-001 07/01/2023	Rates	Fringes
Sheet metal worker\$		45.62
TEAM0456-001 07/01/2018 HEAVY & HIGHWAY CONSTRUCION		
Truck drivers:	Rates	Fringes
GROUP 1\$ GROUP 2\$ GROUP 3\$ GROUP 4\$	3 40.72 3 41.17	29.17+a 29.17+a 29.17+a 29.17+a

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GROUP 5.....$ 40.72
                                               29.17+a
    GROUP 6.....$ 41.47
                                              29.17+a
    GROUP 7.....$ 42.22
                                              29.17+a
    GROUP 8.....$ 42.59
                                              29.17+a
    GROUP 9.....$ 42.09
                                               29.17+a
    GROUP 10.....$ 42.72
                                              29.17+a
    GROUP 11....$ 42.47
                                               29.17+a
 Hazardous/Toxic Waste - An additional 20% of the basic hourly
 wage rate set forth in this wage determination.
CLASSIFICATION DESCRIPTIONS
 GROUP 1: Lowboy (carrying equipment)
 GROUP 2: Straight jobs: 6-Wheeler, 10-Wheeler, A-Frame
 Trucks (inside cab), Winch Truck (inside cab), Dynamite
 Truck, Seeding Truck, Mulching Truck, Agitator Truck, Water
 Truck, Cement Trucks (all types), Suburbans, Station
 Wagons, Cars, Pickups.
 GROUP 3: Fuel and tire trucks.
 GROUP 4: Tractor trailers (all types)
 GROUP 5: 14 Wheeler
 GROUP 6: Athey wagon, Belly dumps, Articulated Dumps,
 Trailer wagons.
 GROUP 7: Darts.
 GROUP 8: RXS
 GROUP 9: Off Road Equipment (Under 40 Tons): Euclid
 GROUP 10: Off Road Equipment (Over 40 Tons) Euclid, DJB
 GROUP 11: Off Road Equipment (Under 40 Tons) DJB
 a. PAID HOLIDAYS: New Year's Day, Lincoln's Birthday,
 President's Day, Decoration Day, Independence Day, Labor
 Day, November Election Day, Thanksgiving Day, Day after
 Thanksgiving and Christmas Day, provided employee works two
 or more days in the calendar
                                week in which the holiday
  falls.
  PAID VACATION: 4 weeks paid vacation after 20 years of
 service and 30 days of employment in current contract year;
  3 weeks after 10 years of seniority service; 3 weeks after
  10 years and 60 days of employment in contract year, 3
 weeks and 1 day after 16 years of seniority service, 3
 weeks and 2 days after 17 years of seniority service; 3
 weeks and 3 days after 18 years of seniority service; 3
 weeks and 4 days after 19 years of seniority service; The
 third week and every additional day shall be granted to
  employee in the calendar year in which he completes his
  tenth or other years of seniority service; 2 weeks after
  130 days of employment in the calendar year; 2 weeks after
  5 years and 90 days seniority service in calander year; 1
 week and 1 additional day for each additional 18 days of
  employment not exceeding 10 days in any one calander year
  after 90 days of employment. Casual employees 1 day for
  every 18 days of employment. An employee who does not
  qualify for vacation shall be paid pro rata on a daily
  basis. Holiday shall be counted as days worked for vacation
  benefits.
  LEGAL SERVICES FUND: Employer shall contribute $.20 to the
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fund on the same basis for all hours paid to employees in

the form of holiday pay or vacation pay. In addition to the benefits paid for Health-Welfare and Pension for up to 40 hours worked an additional \$.25 is paid for each hour worked. The employer shall grant 3 calendar days off without loss of pay to an employee who has death in his/her immediate family, inclusive of the day of the funeral.

WEIDERS - Pagaine rate prescribed for craft performing

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at

https://www.dol.gov/agencies/whd/government-contracts. Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1,

2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier. Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier. A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations

Davis Bacon Wage Rate Determination - Published January 5, 2024

Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION"

SUMMARY OF THE WORK

PART 1 GENERAL

1.01 WORK COVERED BY CONTRACT DOCUMENTS

- A. Title and location of the Work: Village of Elmsford Village Hall HVAC 2024 15 South Stone Avenue, Elmsford, NY 10523
- B. Type of Contract: Fixed price (Lump Sum).
- C. Summary of work in the Lump Sum Price Bid:
 - a. Remove and dispose of three outdoor compressor units.
 - b. Install complete HVAC systems as shown on plans and as specified herein.
 - c. Provide mounting brackets, thermostats, hoses, cables, hangers, connectors and all equipment and appurtenances necessary for proper operation of the systems in accordance with manufacturers instructions and all applicable codes and regulations.
 - d. Provide Westchester County Licensed Electrician to wire all equipment and hire a third-party electrical inspector to inspect and certify electrical work. All electrical work and inspection costs to be included in the lump sum bid.
 - e. Patch all wall penetrations.
 - f. Clean up site.
- B. All work to be performed in accordance with the Construction Documents and the manufacturer's written instructions and recommendations.

1.02 PHYSICAL COMPLETION DATE

A. Physically complete the Work within 45 days after the Agreement is signed.

1.03 RESTRICTED WORK PERIOD

A. No work is to be performed in the courtroom between the hours of 8 AM and 1 PM on Wednesdays due to the use of the premises for weekly Village Court Sessions.

1.04 CONSTRUCTION DOCUMENTS

A. After Contract award the Village will furnish the contractor 3 sets of the project manual.

1.05 OCCUPANCY

A. This is an occupied Facility. The building will be occupied and operational during execution of the Work. Ingress to and egress from the building shall be maintained at all times.

1.06 CONNECTION TO ELECTRICAL EQUIPMENT OR SYSTEMS

A. Contractor will be allowed to utilize electrical outlets inside and outside the building, provided the capacity of the circuits is not exceeded.

1.07 CONTRACTOR USE OF PREMISES

- A. Work hours shall be Monday through Friday between the hours of 8 AM and 5 PM except as noted in 1.03. Contractor shall arrange with Engineer at least 48 hours in advance for Saturday work. No work shall be performed on Sundays.
- B. Inform the Engineer of work area access requirements. The Engineer will coordinate and schedule the requirements with Facility staff to obtain and ensure timely availability of work areas.
- C. Store materials in area provided and perform the Work so that pedestrian and vehicular traffic is not obstructed.
- D. Do not diminish the level of life safety during performance of the Work.
- E. Utility Outages and Shutdowns: Do not interrupt utility services within the building.

1.08 REFERENCE SPECIFICATIONS AND STANDARDS

- A. Comply with the requirements of the various specifications and standards referred to in these Specifications, except where they conflict with the requirements of these Specifications. Such reference specifications and standards shall be the date of latest revision in effect at the time of receiving bids, unless the date is given.
- B. Examine the Contract Documents thoroughly and promptly report any errors or discrepancies to the Engineer's Representative before commencing the Work.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION (Not Used)

SUBMITTALS

PART 1 GENERAL

1.01 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

A. Other provisions pertaining to submittals are included in the General Conditions and in various sections of the specifications.

1.02 SUBSTITUTIONS FOR BRAND NAMED PRODUCTS

A. Whenever a product is specified by brand name, a substitute brand, equal to that named, may be submitted for approval subject to the requirements of Article 5 of the General Conditions and as noted in the Special Conditions.

1.03 WAIVER OF CERTAIN SUBMITTAL REQUIREMENTS

A. Unless otherwise specified, the requirement to submit product data and samples for approval will be waived for products specified by brand name if the specifically named products are furnished for the Work. In such cases, furnish two copies of required Product Data to the Engineer for information only.

1.04 SHOP DRAWINGS

- A. Submit 2 copies of each shop drawing required by the Specifications. Show the information, dimensions, connections, and other details necessary to ensure that the shop drawings accurately interpret the Contract Documents.
- B. The shop drawings will be reviewed, and 1 stamped copy returned. If returned copies are stamped "DISAPPROVED" or "RETURNED FOR CORRECTION", promptly resubmit 2 copies of shop drawings meeting Contract requirements.

1.05 PRODUCT DATA

- A. Submit 2 copies of each item of product data required by the Specifications. Modify product data by deleting information that is not applicable to the project or by marking each copy to identify pertinent products. Supplement standard information, if necessary, for applicability to project.
- B. The product data will be reviewed, and 1 stamped copy returned. If returned copies are stamped "DISAPPROVED" or "RETURNED FOR CORRECTION", promptly resubmit 2 copies of product data meeting Contract requirements.

1.06 SAMPLES

A. Submit 2 (unless a different number is specified) of each sample required by the Specifications. Samples shall show the quality, type, range of color, finish, and texture of the material intended to be furnished for the Work.

01330 - 1

B. Samples will become the property of the Village when submitted unless specifically stated otherwise and will not be incorporated in the Work.

1.07 PAYMENT SUBMITTAL

A. Prepare and submit an application for payment on standard AIA Payment form. Payments will be made based on the determination of percentage of Work completed unless otherwise directed by the Engineer.

1.08 SUBMITTAL REQUIREMENTS

- A. Identify all submittals by project title and number. Include Contractor's name, date, and revision date. On shop drawings, product data, and samples, also include name of supplier and subcontractor (if any), and applicable specification section number. Stamp each submittal and initial or sign the stamp to certify review and approval of submittal, verification of field measurements, and compliance with the Contract Documents.
- B. Send submittals to the Office of the Village Engineer, Village of Elmsford, 15 South Stone Avenue, Elmsford, NY 10523. Enclose a transmittal letter with each submittal.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION (Not Used)

MATERIALS AND EQUIPMENT

PART 1 GENERAL

1.01 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

A. Specific requirements pertaining to materials and equipment specified elsewhere are additional to the provisions of this Section.

1.02 PRODUCT LABELS

A. When materials or equipment are specified to conform to ASTM, Federal or other reference specifications, the materials delivered to the site shall bear the manufacturer's printed labels stating that the materials meet the requirements of such referenced specifications.

1.03 TRANSPORTATION AND HANDLING

- A. Deliver factory packaged materials and equipment in the manufacturer's original containers.
- B. Transport and handle materials and equipment in such a manner as to prevent their damage.
- C. Arrange for delivery of materials and equipment during the hours of the day established by the Engineer.
- D. Have workers available to receive and unload materials and equipment delivered to the site.

 Do not deliver, or have delivered, any materials and equipment to the site unless such forces are available.
- E. Facility personnel are not authorized to sign for receipt of Contractor's material or equipment.

1.04 STORAGE AND PROTECTION

- A. Neatly store, protect, and secure materials and equipment in locations where directed.
- B. Protect materials and equipment subject to damage by temperature or other weather conditions.
- C. Do not store volatile liquids in a Village building.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION (Not Used)

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REMOVALS, CUTTING, AND PATCHING

PART 1 GENERAL

1.01 REMOVING, CUTTING, AND ALTERING

- A. Do not disturb any existing structure, piping, apparatus, or other construction unless required by the Contract.
- B. Remove existing construction as required to install and connect the Work to adjacent construction in an approved manner. Remove materials and equipment superseded by the Work unless specifically indicated otherwise.
- C. Cut and alter existing materials as required to perform the Work. Limit cutting to the smallest amount necessary. Core drill round holes and saw-cut other openings where possible.
- D. Perform the cutting, drilling, and removals in a manner which will prevent damage to adjoining construction which is to remain.
- E. Prior to any cutting, drilling, or removals, investigate both sides of the surface involved.
- F. Determine the exact location of all structural members. Do not cut, drill, or remove structural members such as joists, beams, or columns supporting construction that is to remain unless expressly required by the Work. If unforeseen obstructions are encountered, take all precautions necessary to prevent damage and obtain instructions from the Engineer before proceeding with the Work.

1.02 PATCHING

- A. Patch existing construction and finishes defaced, damaged, or left incomplete due to alterations and removals. Patching, except as otherwise indicated, shall be limited to the areas which have been cut or altered.
- B. Prepare existing surfaces properly to receive and, where required, bond with the Work.
- C. Unless otherwise indicated, provide new materials to match the appearance and performance of existing corresponding materials as closely as practicable.
- D. Paint patched areas and surfaces which will remain exposed by removals to match existing adjacent surfaces as closely as practicable using same type of paint. Painting, except as otherwise indicated, shall be limited to the areas which have been patched.

PART 2 PRODUCTS (Not Used)
PART 3 EXECUTION (Not Used)

DEMOLITION

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

A. Removals, Cutting and Patching: Section 01730.

1.02 SUBMITTALS

A. None

1.03 QUALITY ASSURANCE

A. N/A

1.04 PROJECT CONDITIONS

- A. Recycle demolition debris to the extent possible.
- B. Burning is prohibited.
- C. Protect utilities during the Work of this Section.
- D. Do not interrupt utility services to building.

PART 2 PRODUCTS

A. N/A

PART 3 EXECUTION

3.01 PREPARATION

 A. Provide barricades or temporary construction fence, around the work area prior to start of the Work of this Section. Locate temporary fence where directed.
 Remove temporary fence in its entirety, including all anchorage materials, after completion of demolition operations.

3.02 DEMOLITION

A. Perform demolition in a systematic manner.

3.03 DISPOSAL

- A. All equipment, and debris removed as part of the work shall be disposed of by the contractor at no additional cost to the Village.
- B. Remove demolition debris from Village property as soon as practicable.
- C. Do not store, sell, or burn materials on Village property.

15701 - ACCU-1 VARIABLE REFRIGERANT VOLUME HVAC SYSTEM

PART 1 GENERAL

Size Range: 6 to 34 Tons Nominal

1.01 QUALITY ASSURANCE

A. MANUFACTURER QUALIFICATIONS:

- The units shall be tested by a National Recognized Testing Laboratory (NRTL), in accordance with ANSI/UL 1995 – Heating and Cooling Equipment and bear the Listed Mark.
- 2. All wiring shall be in accordance with the National Electric Code (NEC).
- 3. The system will be produced in an ISO 9001 and ISO 14001 facility, which are standards set by the International Standard Organization (ISO). The system shall be factory tested for safety and function.
- 4. The condensing unit will be factory charged with R410A.

1.02 DELIVERY, STORAGE AND HANDLING

A. Unit shall be stored and handled according to the manufacturer's recommendations.

1.03 WARRANTY

B. STANDARD LIMITED WARRANTY

- 1. Manufacturer shall warrant original owner of the non-residential building, multifamily residence or residence in which the products are installed that under normal use and maintenance for comfort cooling and conditioning applications such products (the "Products") will be free from defects in material and workmanship. This warranty applies to compressor and all parts and is limited in duration to ten (10) years starting from the "installation date" which is one of the two dates below:
 - a. The installation date is the date that the unit is originally commissioned, but no later than 18 months after the manufacture date noted on the unit's rating plate.
 - b. If the date the unit is originally commissioned cannot be verified, the installation date is three months after the manufacture date.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. DESIGN BASIS:

The HVAC equipment basis of design is Daikin North America. All bidders shall furnish
the minimum system standards as defined by the base bid model numbers, model
families or as otherwise specified herein. In any event, the contractor shall be
responsible for all specified items and intents of this document without further
compensation.

2.02 HVAC SYSTEM DESIGN

A. SYSTEM DESCRIPTION:

- 1. The variable capacity heat pump air conditioning system shall be a Daikin Variable Refrigerant Volume Series (heat or cool model) system as specified, or approved equal.
- 2. The system shall consist of multiple evaporators using PID control, REFNET™ joints and

- headers, a two-pipe refrigeration distribution system and Daikin VRV® condenser unit.
- The condenser shall be a direct expansion (DX), air-cooled heat pump, multi-zone airconditioning system with variable speed inverter driven compressors using R-410A refrigerant.
 - a. The condensing unit may connect an indoor evaporator capacity up to 200% of the condensing unit capacity. All zones are each capable of operating separately with individual temperature control.
 - b. The condensing unit shall be interconnected to indoor unit models it has been designed recommended to work with by the manufacturer, and shall range in capacity from 5,800 Btu/h to 96,000 Btu/h in accordance with manufacturers engineering data detailing each available indoor unit.
 - c. The indoor units shall be connected to the condensing unit utilizing manufacturers approved piping joints and headers to ensure correct refrigerant flow and balancing. T style joints are not acceptable for a variable refrigerant system.
- 4. Operation of the system shall permit either cooling or heating of all of the indoor units simultaneously. Each indoor unit or group of indoor units shall be able to provide set temperature independently via a local remote controller, an Intelligent Manager, an Intelligent Controller or a BMS interface.
- 5. The condensing unit model numbers and the associated number of connectable indoor condensing unit is indicated in the following table. Each indoor unit or group of indoor units shall be independently controlled.

MODEL NUMBER (or equal)	NOMINAL CAPACITY (Tons)	MAXIMUM NUMBER OF INDOOR UNITS
RXYQ96XATJ*	8	16

- 6. Advanced Zoning A single system shall provide for up to 64 zones.
- 7. Control: all interior units shall be operated by a single wired remote controller Daiken BRC1E73 or approved equal.
- 8. VFD Inverter Control and Variable Refrigerant Temperature Each condensing unit shall use high efficiency, variable speed all "inverter" compressor(s) coupled with inverter fan motors to optimize part load performance. The system capacity and refrigerant temperatures shall be modulated automatically to set suction and condensing pressures while varying the refrigerant volume for the needs of the cooling or heating loads. The control will be automatic and customizable depending on load and weather conditions.
 - a. Indoor shall use PID to control superheat to deliver a comfortable room temperature condition and optimize efficiency.
- Configurator software Each system shall be available with configurator software
 package to allow for remote configuration of operational settings and also for assessment
 of operational data and error codes.
 - a. If this software is not provided by an alternate manufacturer, for each individual outdoor unit the contractor shall do the settings manually and keep detailed records for future maintenance purposes.
- 10. Independent Control Each indoor unit shall use a dedicated electronic expansion valve for independent control.
- 11. Flexible Design
 - a. Systems shall be capable of up to 540ft (165m) [623 ft. (190m) equivalent] of linear

- piping between the condensing unit and furthest located indoor unit.
- b. Systems shall be capable of up to 3,280ft (1,000m) total "one-way" piping in the piping network.
- c. Systems shall have a vertical (height) separation of up to 295ft between the condensing unit and the indoor units.
- d. Systems shall be capable of up to 295ft (90m) from the first REFNET™ / branch point.
- e. The condensing unit shall have the ability to connect an indoor unit evaporator capacity of up to 200% of the condensing unit nominal capacity.
- f. Systems shall be capable of 98ft (30m) vertical separation between indoor units.
- g. Condensing units shall be supported with a fan motor ESP up to 0.32" WG as standard to allow connection of discharge ductwork and to prevent discharge air short circuiting.
- 12. Oil Return Each system shall be furnished with a centrifugal oil separator and active oil recovery cycle.
- 13. Simple wiring Systems shall use 16/18 AWG, 2 wire, stranded, non-shielded and non-polarized daisy chain control wiring.
- 14. Outside Air Systems shall provide outside air capability.
- 15. Space saving Each system shall have a condensing unit module footprint no larger than 48-7/8" x 30-3/16" (1694mm x 1242mm x 767mm).
- 16. Each condensing unit shall include a multi-functional digital display that can provide system operation status such as operating refrigerant temperatures, pressures, outdoor electronic expansion valve opening and compressor operation time.
- 17. Each condensing unit shall include a service window that can provide easy access to system field settings and operation status without completely removing the condensing unit panel.
- 18. Advanced diagnostics Systems shall include a self-diagnostic, auto-check function to detect a malfunction and display the type and location.
- 19. Each condensing unit shall incorporate contacts for electrical demand shedding with optional 3 stage demand control with 12 customizable demand settings.
- 20. Advanced controls Each system shall have at least one remote controller capable of controlling up to 16 indoor units.
- 21. Each system shall be capable of integrating with open protocol BACnet and LonWorks building management systems.
- 22. Low sound levels Each system shall use indoor and condensing units with quiet operation as low as 27 dB(A).
- 23. The condensing unit shall have configurable settings for intermittent fan operation to help minimize snow accumulation on fan blades when the system is off.

B. PERFORMANCE:

1. The system shall perform as indicated below:

MODEL NUMBER (or or well)	SYSTEM IEER	SYSTEM IEER	
MODEL NUMBER (or equal)	(Ducted)	(Non-Ducted)	
RXYQ96XATJ*	22.5	27.3	

MODEL NUMBER	SYSTEM EER	SYSTEM EER
MODEL NUMBER	(Ducted)	(Non-Ducted)

RXYQ96XATJ*	12.6	14.3
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MODEL NUMBER	SYSTEM COP@47°F (Ducted)	SYSTEM COP@47°F (Non-Ducted)
RXYQ96XATJ*	3.49	4.21

MODEL NUMBER	SYSTEM COP@17°F (Ducted)	SYSTEM COP@17°F (Non-Ducted)
RXYQ96XATJ*	2.50	2.70

2. Performance Conditions:

- a. Cooling: Indoor temperature of 80°FDB (26.7°CDB), 67°FWB (19.5°CWB) and outdoor temperature of 95°FDB (35°CDB).
- b. Heating: Indoor temperature of 70°FDB (21.1°CDB) and outdoor temperature of 47°FDB (8.3°CDB), 43°FWB (6.1°CDB).
- c. Equivalent piping length: 25ft (7.5m)

3. Cooling Operation:

- a. The operating range in cooling will be 23°F DB \sim 122°F DB (-5°CDB \sim 50°CDB).
- b. Cooling mode indoor room temperature range will be 57-77°FWB (13.8 25°CWB).
- c. Cooling operation may be extended down to 10°F DB when the system is designed with the following limitations:
 - 1) The system must be a single module outdoor unit: RXYQ72/96/120/144/168XA.
 - 2) The smallest capacity indoor unit connected to the system must be 12,000 Btu/h.
 - 3) The system must run continuously in cooling operation with a minimum of 1.5 tons of indoor units in operation.

4. Heating Operation:

- a. The operating range in heating will be -4°F WB 60°F WB (-20°CWB 15.5°CWB).
- b. Heating mode indoor room temperature range will be 59°FDB 80°F DB (15°CDB 26.7°CDB).

2.03 EQUIPMENT

A. ELECTRICAL:

1. The power supply to the condensing unit shall be:

POWER SUPPLY VOLTAGE	VOLTAGE RANGE
208-230V / 3ph / 60 Hz	187V - 253V (±10%)

MODEL (or equal)	MCA	MOP	COMPRESSOR RLA
RXYQ96XATJ*	36.3	45	23.8

B. WIRING:

- 1. The control voltage between the indoor and condensing unit shall be 16VDC non-shielded, stranded 2 conductor cable.
- 2. The control wiring shall be a two-wire multiplex transmission system, making it possible to connect multiple indoor units to one condensing unit with one 2-cable wire, thus simplifying the wiring installation.
- 3. The control wiring maximum lengths shall be as shown below:

	CONDENSER TO INDOOR UNIT	CONDENSER TO CENTRAL CONTROLLER	INDOOR UNIT TO REMOTE CONTROL
CONTROL WIRING LENGTH	6,560 ft (2,000 m)	3,280 ft (1,000 m)	1,640 ft (500 m)
WIRE TYPE	16/18 AWG, 2 wire, non-polarity, non-shielded, stranded		

C. REFRIGERANT PIPING:

- The system shall be capable of refrigerant piping up to 540ft (165m) actual or 623ft (190m) equivalent from the condensing unit to the furthest indoor unit, a total combined liquid line length of 3,280ft (1,000m) of piping between the condensing and indoor units with 295ft (90m) maximum vertical difference, without any oil traps or additional components.
- 2. Manufacturer approved piping joints and headers shall be used to ensure proper refrigerant balance and flow for optimum system capacity and performance.
 - a. T style joints shall not be acceptable as this will negatively impact proper refrigerant balance and flow for optimum system capacity and performance.

D. PAINT/CORROSION RESISTANCE:

1. Paint and corrosion resistance shall be at a minimum per the table below:

	VRV IV X				
COMPONENT	BASE MATERIAL	SURFACE TREATMENT	COATING THICKNESS External & Internal Surface		
EXTERNAL PANEL BASE	Galvanized steel	POLYESTER	≧1.5 mils		
EXTERNAL	Galvanized steel	POLYESTER	≧1.5 mils		
FRONT PANEL					
PILLAR	Galvanized steel	POLYESTER	≧1.5 mils		
COMPRESSOR COVER	ASTM material	Resin Paint	≧0. 78 mils		
FIN GUARD	Iron wire	Resin Paint	≧0. 79 mils		
FAN GUARD AND DRUM	Polypropylene	No treatment required	N/A		
FAN	Acrylonitrile - glass	No treatment required	N/A		
FAN MOTOR FRAME	Resin	No treatment required	N/A		
FAN MOTOR SHAFT	Carbon steel	No treatment required	N/A		
FAN MOTOR SUPPORT	Galvanized steel	POLYESTER	≧1.5 mils		
HEAT EXCHANGERS (FIN ONLY)	Aluminum	Polymer Anti-corrosion surface treatment	Salt Spray 1000 hours, blister rating 10		
ELECTRICAL PARTS BOX	Hot-dip zinc- coated steel	No treatment required	N/A		

ELECTRICAL PARTS BOARD	Glass cloth / Glass nonwoven cloth material	Insulation Varnish	No specific thickness
SCREWS	Carbon steel wire rods	High corrosion resistance treatment	≧0. 28 mils

2.03 OUTDOOR/CONDENSING UNIT

A. GENERAL:

- 1. The condensing unit is designed specifically for use with provided components.
- 2. The condensing unit shall be factory assembled in the USA and pre-wired with all necessary electronic and refrigerant controls.
- 3. The refrigeration circuit of the condensing unit shall consist of Daikin inverter scroll compressors, motors, fans, condenser coil, electronic expansion valves, solenoid valves, 4-way valve, distribution headers, capillaries, filters, shut off valves, oil separators, service ports and refrigerant accumulator or approved equal.
- 4. Liquid and suction lines must be individually insulated between the condensing and indoor units.
- 5. The condensing unit can be wired and piped with access from the left, right, rear or bottom.
- 6. The connection ratio of indoor units to condensing unit shall be permitted up to 200% of nominal capacity.
- 7. Each condensing system shall be able to support the connection of up to 64 indoor units dependent on the model of the condensing unit.
- 8. The sound pressure level standard shall be that value as listed in the Daikin engineering manual for the specified models at 3 feet from the front of the unit. The condensing unit shall be capable of operating automatically at further reduced noise during night time or via an external input.
- 9. The system will automatically restart operation after a power failure and will not cause any settings to be lost, thus eliminating the need for reprogramming.
- 10. The condensing unit shall be modular in design and should allow for side-by-side installation with minimum spacing.
- 11. The following safety devices shall be included on the condensing unit; high pressure sensor and switch, low pressure switch, control circuit fuses, crankcase heaters, fusible plug, overload relay, inverter overload protector, thermal protectors for compressor and fan motors, over current protection for the inverter and anti-recycling timers.
- 12. To ensure the liquid refrigerant does not flash when supplying to the various indoor units, the circuit shall be provided with a sub-cooling feature.
- 13. Oil recovery cycle shall be automatic occurring 2 hours after start of operation and then every 8 hours of operation.
- 14. The condensing unit shall be capable of heating operation at -4°F (-20°C) wet bulb ambient temperature without additional low ambient controls or an auxiliary heat source.

B. UNIT CABINET:

1. The condensing unit shall be completely weatherproof and corrosion resistant. The unit shall be constructed from rust-proofed galvanized steel panels coated with a baked enamel finish.

C. FAN:

1. The condensing unit shall consist of one or more propeller type, direct-drive 350 or 750

W fan motors that have multiple speed operation via a DC (digitally commutating) inverter. Reference table below.

MODEL NUMBER (or equal)	FAN MOTOR OUTPUT (W) & QUANTITY
RXYQ96XATJ*	350 x 2

- The condensing unit fan motor shall have multiple speed operation of the DC (digitally commutating) inverter type, and be of high external static pressure and shall be factory set as standard at 0.12 in. WG. A field setting switch to a maximum 0.32 in. WG pressure is available to accommodate field applied duct for indoor mounting of condensing units.
- 3. The fan shall be a vertical discharge configuration with a nominal airflow maximum range of 5,544 CFM to 22,283 CFM dependent on model specified.
- 4. The fan motor shall have inherent protection and permanently lubricated bearings and be
- 5. The fan motor shall be provided with a fan guard to prevent contact with moving parts.

D. SOUND:

Nominal sound pressure levels shall be as shown below.

MODEL NUMBER (or equal)	SOUND PRESSURE LEVEL dB(A)
RXYQ96XATJ*	61

 Night setback control of the fan motor for low noise operation by way of automatically limiting the maximum speed shall be a standard feature. Operation sound level shall be selectable from 3 steps.

OPERATION SOUND dB(A)	NIGHT MODE SOUND PRESSURE LEVEL dB(A) APPROX.
Level 1	55
Level 2	50
Level 3	45

E. CONDENSER COIL:

- 1. The condenser coil shall be manufactured from copper tubes expanded into aluminum fins to form a mechanical bond.
- 2. The heat exchanger coil shall be of a waffle louver fin and rifled bore tube design to ensure high efficiency performance.
- 3. The heat exchanger on the condensing units shall be manufactured from Hi-X seamless copper tube with N-shape internal grooves mechanically bonded on to aluminum fins to an e-Pass Design.
- 4. The fins shall be coated with an anti-corrosion hydrophilic blue coating as standard from factory with a salt spray test rating of 1000hr per ASTM test standards.
- 5. The condensing unit shall be factory equipped with condenser coil guards on all sides.

F. COMPRESSOR:

- The inverter scroll compressors shall be variable speed (PVM inverter) controlled which
 is capable of changing the speed to follow the variations in total cooling and heating
 load as determined by the suction gas pressure as measured in the condensing unit.
 - a. In addition, samplings of evaporator and condenser temperatures shall be made so that the high/low pressures detected are read every 20 seconds and calculated. With each reading, the compressor capacity (INV frequency) shall be controlled to eliminate deviation from target value.

- Non –inverter-driven compressors, which may cause starting motor current to exceed the nominal motor current (RLA) and require larger wire sizing, shall not be allowed.
- 2. The inverter driven compressors in the condensing unit shall be of highly efficient reluctance DC (digitally commutating), hermetically sealed scroll "G-type" or "J-type".
- 3. Neodymium magnets shall be adopted in the rotor construction to yield a higher torque and efficiency in the compressor instead of the normal ferrite magnet type.
 - a. At complete stop of the compressor, the neodymium magnets will position the rotor into the optimum position for a low torque start.
- 4. The capacity control range shall be as low as 10% to 100%.
- 5. The compressor's motor shall have a cooling system using discharge gas, to avoid sudden changes in temperature resulting in significant stresses on winding and bearings.
- 6. Each compressor shall be equipped with a crankcase heater, high pressure safety switch, and internal thermal overload protector.
- 7. Oil separators shall be standard with the equipment together with an intelligent oil management system.
- 8. The compressor shall be mounted on vibration dampening rubber grommets to minimize the transmission of vibration, eliminating the standard need for external spring isolation.
- 9. In the event of compressor failure, the remaining compressors shall continue to operate and provide heating or cooling as required at a proportionally reduced capacity. The microprocessor and associated controls shall be manually activated to specifically address this condition for single module and manifolded systems.
- 10. In the case of multiple condenser modules, conjoined operation hours of the compressors shall be balanced by means of the Duty Cycling Function, ensuring sequential starting of each module at each start/stop cycle, completion of oil return, completion of defrost or every 8 hours. When connected to a central control system sequential start is activated for all system on each DIII network.
- 11. Compressor configurations:

MODEL NUMBER	COMPRESSOR MOTOR	QUANTITY	COMPRESSOR
(or equal)	OUTPUT (W)		Types
RXYQ96XATJ*	4,100	1	Inverter controlled

2.04 INDOOR/EVAPORATOR UNITS

See separate specification.

PART 3 EXECUTION

3.01 Installation of equipment shall be in accordance with the manufacturers' written instructions, these specifications and plans, latest ASHRAE and NEC standards, and 2020 Mechanical Code of New York State.

15702 - ACCU-2 VARIABLE REFRIGERANT VOLUME HVAC SYSTEM

Part 1 GENERAL

Size Range: 3 to 5 tons nominal

1.01 QUALITY ASSURANCE

A. MANUFACTURER QUALIFICATIONS:

- 1. The units shall be tested by a National Recognized Testing Laboratory (NRTL), in accordance with ANSI/UL 1995 Heating and Cooling Equipment and bear the Listed Mark.
- 2. All wiring shall be in accordance with the National Electric Code (NEC).
- 3. The system will be produced in an ISO 9001 and ISO 14001 facility, which are standards set by the International Standard Organization (ISO). The system shall be factory tested for safety and function.
- 4. The condensing unit will be factory charged with R410A.

1.02 DELIVERY, STORAGE AND HANDLING

A. Unit shall be stored and handled according to the manufacturer's recommendations.

1.03 WARRANTY

B. STANDARD LIMITED WARRANTY

- 1. Manufacturer shall warrant original owner of the non-residential building, in which the products are installed that under normal use and maintenance for comfort cooling and conditioning applications such products (the "Products") will be free from defects in material and workmanship. This warranty applies to compressor and all parts and is limited in duration to ten (10) years starting from the "installation date" which is one of the two dates below:
 - a. The installation date is the date that the unit is originally commissioned, but no later than 18 months after the manufacture date noted on the unit's rating plate.
 - b. If the date the unit is originally commissioned cannot be verified, the installation date is three months after the manufacture date.

Part 2 PRODUCTS

2.01 MANUFACTURERS

A. DESIGN BASIS:

1. The HVAC equipment basis of design is Daikin North America. All bidders shall furnish the minimum system standards as defined by the base bid model numbers, model families or as otherwise specified herein. In any event, the contractor shall be responsible for all specified items and intents of this document without further compensation.

2.02 HVAC SYSTEM DESIGN

A. The variable capacity, heat pump air conditioning system shall be a Daikin Variable Refrigerant Volume Series (heat/cool model) split system or approved equal. The system shall consist of multiple evaporators using PID control, and Daikin VRV®IV-S model condensing unit. The RXTQ outdoor units shall be a nominal 3 ton, 4 ton, or 5 ton direct expansion (DX), air-cooled heat pump air-conditioning system, inverter driven variable speed compressor, multi-

zone split system, using R-410A refrigerant. The outdoor unit may connect an indoor evaporator capacity up to 130% to that of the outdoor condensing unit capacity. All indoor units are each capable of operating separately with individual temperature control.

- B. The Daikin outdoor unit shall be interconnected to indoor unit models FXFQ, FXEQ, FXUQ, FXHQ, FXMQ, FXLQ, FXNQ, FXTQ, FXDQ, FXZQ,FXAQ and FXMQ_MF and shall range in capacity from 7,500 Btu/h to 54,000 Btu/h in accordance with Daikin's engineering data book detailing each available indoor unit. The indoor units shall be connected to the condensing unit utilizing Daikin's REFNET™ specified piping joints and headers to ensure correct refrigerant flow and balancing. T style joints are not acceptable.
- C. Operation of the system shall permit either cooling or heating of all of the indoor units. Each indoor unit or group of indoor units shall be able to provide set temperature independently via a local remote controller, an Intelligent Touch Controller (ITC), an Intelligent Touch Manager (ITM) or a BMS interface.
- D. The RXTQ outdoor unit model numbers and the associated number of connectable indoor units per RXTQ outdoor unit is indicated in the following table. Each indoor unit or group of indoor units shall be independently controlled.

Model Number	Nominal Capacity	Number of Connectable
	(Tons)	Indoor Units
RXTQ36TBVJ9A	3	6

2.03 VRVIV-S FEATURES AND BENEFITS

Voltage Platform – Heat pump condensing units shall be available in 208-230V/1/60 configurations.

- B. Advanced Zoning A single system shall provide for up to 9 zones.
- C. Independent Control Each indoor unit shall use a dedicated electronic expansion valve for independent control.
- D. VFD Inverter Control Each condensing unit shall use a high efficiency, variable speed "inverter" compressor coupled with inverter fan motors for superior part load performance.
 - Compressor capacity shall be modulated automatically to maintain a constant suction pressure, while varying the refrigerant volume for the needs of the cooling or heating loads.
 - Indoor units shall use PID control to control superheat to deliver a comfortable room temperature condition.
- E. Variable Refrigerant Temperature (VRT) Control Each condensing unit shall utilize an algorithm to automatically adjust the refrigerant suction and condensing temperatures in response to the heating and cooling loads, and in response to the current weather conditions. The VRT control shall be capable of being customized in the following modes and sub-modes:
 - 1. Automatic (factory preset) The Automatic VRT mode shall allow the target evaporator temperature (Te) and target condensing temperature (Tc) to float based on outdoor ambient temperature conditions, and shall incorporate the following sub-modes:
 - a. Powerful
 - b. Quick

- c. Mild (factory preset)
- 2. High Sensible The High Sensible mode shall allow the system Te and Tc values to be programmed to series of fixed Te and Tc values. The High Sensible mode shall also be capable of incorporating the following sub-modes:
 - a. Eco
- 3. Basic The Basic mode shall disable the VRT control of the outdoor unit and allow the system to operate with constant Te and Tc values.

F. Flexible Design -

- Systems shall be capable of up to 394ft (120m) of linear piping (492ft / 150m equivalent length) between the condensing unit and furthest located indoor unit.
- 2. Systems shall be capable of up to 984ft (300m) total "one-way" piping in the piping network.
- 3. Systems shall have a vertical (height) separation of up to 164 ft between the condensing unit and the indoor unit units.
- 4. The outdoor unit shall connect an indoor evaporator capacity up to 130% of the outdoor condensing unit capacity.
- G. Simple Wiring Systems shall use 2 wire, multi-stranded, non-shielded and non-polarized daisy chain control wiring.
- H. Space Saving Each system shall have a condensing unit module footprint of the following dimensions:

RXTQ36TBVJ9A: 39"H x 37"W x 12-5/8"D RXTQ48TBVJUA: 39"H x 37"W x 12-5/8"D

RXTQ60TBVJUA: 52-15/16"H x 35-7/16"W x 12-5/8"D

- I. Advanced Diagnostics Systems shall include a self diagnostic, auto-check function to detect a malfunction and display the type and location.
- J. Advanced Controls Each system shall have at least one remote controller capable of controlling up to 16 indoor unit units.

2.02 QUALITY ASSURANCE

- A. The units shall be tested by a Nationally Recognized Testing Laboratory (NRTL), in accordance with ANSI/UL 1995 Heating and Cooling Equipment and bear the Listed Mark.
- B. All wiring shall be in accordance with the National Electric Code (NEC).
- C. Each combination shall be rated in accordance with Air Conditioning, Heating and Refrigeration Institute's (AHRI) Standard 210/240 and bear the AHRI label.
- D. The system will be produced in an ISO 9001 and ISO 14001 facility, which are standards set by the International Standard Organization (ISO). The system shall be factory tested for safety and function.
- E. The outdoor unit will be factory charged with R-410A.

2.03 DELIVERY, STORAGE AND HANDLING

A. Unit shall be stored and handled according to the manufacturer's recommendations.

2.04 INDOOR/EVAPORATOR UNITS

See separate specification.

Part 3 – PERFORMANCE

3.01 The VRVIV-S RXTQ system performance shall be in accordance with AHRI 210/240 test conditions as shown in the performance table below.

System	Combined with	Nominal Cooling Capacity Btu/hr	EER2	SEER2	Nominal Heating Capacity Btu/hr	COP 47°F	Low Heating Capacity Btu/hr	COP	HSPF2
	Non-Ducted		12.00	18.2		4.10	23,600	3.00	9.0
RXTQ36TBVJ*	Ducted	36,000	9.20	15.3	40,000	3.25	24,600	2.55	8.5
-	Mixed		10.60	16.8	· _ ·	3.68	24,200	2.78	8.8
Non-Duc	Non-Ducted		10.30	18.6		4.00	32,200	3.00	8.5
RXTQ48TBVJ*	Ducted	48,000	7.90	14.6	52,000	3.30	30,200	2.55	8.3
	Mixed	.,.	9.10	16.6		3.65	31,200	2.78	8.4
RXTQ60TBVJ*	Non-Ducted	57,500	9.80	18.6		4.30	37,000	3.20	8.5
	Ducted		8.50	15.5	57,000	3.50	36,400	2.65	8.5
	Mixed	1	9.15	17.1		3.90	36,800	2.93	8.5

Performance Conditions:

Cooling: indoor temp. of 80°F DB, 67°F WB and outdoor temp. of 95°F DB. Heating: indoor temp. of 70°F DB and outdoor temp. of 47°F DB, 43°F WB. Equivalent piping length: 25ft

3.02 OPERATING RANGE

The operating range in cooling will be 23°F DB to 122°F DB (-5°C – 50°C). The operating range in heating will be -4°F WB to 60°F WB (-20°C – 15.5°C). Cooling mode indoor room temperature range will be 57°F-77°F WB (14°C – 25°C).

Heating mode indoor room temperature range will be 59°F-80°F DB (15°C – 26.6°C)

3.03 REFRIGERANT PIPING

Model RXTQ36TBVJ9A - The system shall be capable of refrigerant piping up to 164 actual feet (50m) or 213 equivalent feet (65m) from the outdoor unit to the furthest indoor unit, a total combined liquid line length of 820 feet (250m) piping between the condensing and indoor units, and with 98 feet (30m) maximum vertical difference between the outdoor unit and indoor units without any oil traps. The system shall be capable of 33 feet (10m) vertical separation between indoor units on the same system.

Model RXTQ48TBVJUA – The system shall be capable of refrigerant piping up to 230 actual feet (70m) or 295 equivalent feet (90m) from the outdoor unit to the furthest indoor unit, a total combined liquid line length of 984 feet (300m) piping between the condensing unit and indoor units, and with 98 feet (30m) maximum vertical difference between the outdoor unit and indoor units without any oil traps. The system shall be capable of 49 feet (15m) vertical separation between indoor units on the same system.

Model RXTQ60TBVJUA – The system shall be capable of refrigerant piping up to 394 actual feet (120m) or 492 equivalent feet (150m) from the outdoor unit to the furthest indoor unit, a total combined liquid line length of 984 feet (300m) piping between the condensing unit and indoor units. The system shall be capable of 164 feet (50m) maximum vertical difference when outdoor unit is above indoor units or 131 feet (40m) when outdoor unit is below indoor units without any oil traps and 49 feet (15m) vertical separation between indoor units on the same system.

REFNET™ piping joints and headers shall be used to ensure proper refrigerant balance and flow for optimum system capacity and performance. T style joints

shall not be acceptable as this will negatively impact proper refrigerant balance and flow for optimum system capacity and performance.

3.04 DESIGN BASIS

The HVAC equipment basis of design is Daikin. All bidders shall furnish the minimum system standards as defined by the base bid model numbers, model families or as otherwise specified herein (see Key General Specifications Alternate Supplier Checklist). In any event, the contractor shall be responsible for all specified items and intents of this document without further compensation.

3.05 OUTDOOR UNIT

- A. General: The outdoor unit is designed specifically for use with VRV series components.
 - The outdoor unit shall be factory assembled and pre-wired with all necessary electronic and refrigerant controls. The refrigeration circuit of the condensing unit shall consist of a Daikin swing compressor, motors, fans, condenser coil, electronic expansion valves, solenoid valves, 4-way valve, distribution headers, capillaries, filters, shut off valves, oil separator, service ports and suction line accumulator.
 Liquid and suction lines must be individually insulated between the
 - Liquid and suction lines must be individually insulated between the outdoor and indoor units.
 - 2. The outdoor unit can be wired and piped with outdoor unit access from the left, right, rear or bottom.
 - 3. The connection ratio of indoor units to outdoor unit shall be permitted up to 130%.
 - 4. The outdoor system shall be able to support the connection of up to 9 indoor units dependent on the model of the outdoor unit.
 - 5. The sound pressure level standard shall be that value as listed in the Daikin engineering manual for the specified models at 3 feet from the front of the unit. The outdoor unit shall be capable of operating automatically at further reduced noise during night time.
 - 6. The system will automatically restart operation after a power failure and will not cause any settings to be lost, thus eliminating the need for reprogramming.
 - 7. The outdoor unit shall allow for side-by-side installation with minimum spacing.
 - 8. The following safety devices shall be included on the condensing unit; high pressure switch, low pressure sensor, control circuit fuses, crankcase heaters, fusible plug, overload relay, inverter overload protector, thermal protectors for compressor and fan motors, over current protection for the inverter and anti-recycling timers.
 - To ensure the liquid refrigerant does not flash when supplying to the various indoor unit units, the circuit shall be provided with a sub-cooling feature.
 - 10. Oil recovery cycle shall be automatic occurring 2 hours after start of operation and then every 8 hours of operation.

11. The outdoor unit shall be capable of heating operation at 0°F dry bulb ambient temperature without additional low ambient controls.

B. Unit Cabinet:

1. The outdoor unit shall be completely weatherproof and corrosion resistant. The unit shall be constructed from rust-proofed mild steel panels coated with a baked enamel finish.

C. Fan:

 The condensing unit fan(s) shall consist of propeller type, directdrive fan motors that have multiple speed operation via a DC (digitally commutating) inverter.

Model Number	Fan Motor Output (W) & Quantity
RXTQ36TBVJ9A	200 x 1

- 2. The fan shall be a horizontal discharge configuration with a nominal airflow maximum range of up to 3,740 CFM.
- 3. Nominal sound pressure levels shall be as shown below.

Model Number	Sound Pressure Level dB(A) Cooling / Heating Modes
RXTQ36TBVJ9A	58 / 61

- 4. The fan motor shall have inherent protection and permanently lubricated bearings and be mounted.
- 5. The fan motor shall be provided with a fan guard to prevent contact with moving parts.

D. Condenser Coil:

- 1. The condenser coil shall be manufactured from copper tubes expanded into aluminum fins to form a mechanical bond.
- 2. The heat exchanger coil shall be of a waffle louver fin and rifled bore tube design to ensure high efficiency performance.
- 3. The heat exchanger on the condensing units shall be manufactured from Hi-X seamless copper tube.
- 4. The fins are to be covered with an anti-corrosion acrylic resin and hydrophilic film type E1.

E. Compressor:

- 1. The Daikin inverter scroll compressor shall be variable speed (PAM inverter) controlled which is capable of changing the speed to follow the variations in total cooling and heating load as determined by the suction gas pressure as measured in the condensing unit. In addition, samplings of evaporator and condenser temperatures shall be made so that the high/low pressures detected are read every 20 seconds and calculated. With each reading, the compressor capacity shall be controlled to eliminate deviation from target value.
- The inverter driven compressor in each condensing unit shall be of highly efficient reluctance DC (digitally commutating), hermetically sealed swing type.

- 3. Neodymium magnets shall be adopted in the rotor construction to yield a higher torque and efficiency in the compressor instead of the normal ferrite magnet type. At complete stop of the compressor, the neodymium magnets will position the rotor into the optimum position for a low torque start.
- 4. The capacity control range shall be 14% to 100%.
- 5. The compressor shall be equipped with a crankcase heater, high pressure safety switch, and internal thermal overload protector.
- 6. Oil separators shall be standard with the equipment together with an intelligent oil management system.
- 7. The compressor shall be mounted on vibration dampening rubber grommets to minimize the transmission of vibration, eliminating the standard need for external spring isolation.

F. Electrical:

1. The power supply to the outdoor unit shall be 208/230 volts, 1 phase, 60 hertz +/- 10%.

Power Supply Voltage	Voltage Range	
208-230V/1/60	187V-253V	

Model	Model MCA		Compressor RLA	
RXTQ36TBVJ9A	16.5	20	15.3	

- 2. The control voltage between the indoor and outdoor unit shall be 18VDC non-shielded, stranded 2 conductor cable.
- The control wiring shall be a two-wire multiplex transmission system, making it possible to connect multiple indoor units to one outdoor unit with one 2-cable wire, thus simplifying the wiring operation.

3.05 EXECUTION

A. Installation of equipment shall be in accordance with the manufacturers' written instructions, these specifications and plans, latest ASHRAE and NEC standards, and 2020 Mechanical Code of New York State.

15710 - WALL MOUNTED DUCTLESS HVAC UNIT

Part 1 – GENERAL

VARIABLE REFRIGERANT VOLUME (VRV / VRV-S) SPLIT SYSTEM AIR CONDITIONING – Heat Recovery/Heat Pump Indoor Unit. Size Range 3 to 5 tons nominal

1.01 QUALITY ASSURANCE

- A. The units shall be tested by a Nationally Recognized Testing Laboratory (NRTL), in accordance with ANSI/UL 1995/CAN/CSA-C22.2 No. 236-05 (R2009) Heating and Cooling Equipment and bear the Listed Mark.
- B. All wiring shall be in accordance with the National Electric Code (NEC)/Canadian Electrical Code (CEC).
- C. The system will be produced in an ISO 9001 and ISO 14001 facility, which are standards set by the International Standard Organization (ISO). The system shall be factory tested for safety and function.
- D. The outdoor unit will be factory charged with R-410A.

1.02 DELIVERY, STORAGE AND HANDLING

A. Unit shall be stored and handled according to the manufacturer's recommendations.

1.03 WARRANTY

- A. Manufacturer shall warranty original owner of the non-residential building, in which the products are installed that under normal use and maintenance for comfort cooling and conditioning applications such products (the "Products") will be free from defects in material and workmanship. This warranty applies to compressor and all parts and is limited in duration to ten (10) years starting from the "installation date" which is one of the two dates below:
- B. The installation date is the date that the unit is originally commissioned, but no later than 18 months after the manufacture date noted on the unit's rating plate.
- C. If the date the unit is originally commissioned cannot be verified, the installation date is three months after the manufacture date.

1.04 DESIGN BASIS

The HVAC equipment basis of design is Daikin. All bidders shall furnish the minimum system standards as defined by the base bid model numbers, model families or as otherwise specified herein (see Key General Specifications Alternate Supplier Checklist). In any event the contractor shall be responsible for all specified items and intents of this document without further compensation.

Part 2 - PRODUCTS

2.01 WALL MOUNTED UNIT

A. General: Wall mounted units shall be Daikin indoor unit FXAQ or approved equal and shall be a wall mounted fan coil unit, operable with refrigerant R-410A, equipped with an electronic expansion valve, for installation onto a wall within a conditioned space. Unit shall have a compact design with finished white casing and shall be available in capacities from 7,500 Btu/h to 24,000 Btu/h. Daiken model numbers shall be FXAQ07PVJU, FXAQ09PVJU, and FXAQ24PVJU. Computerized PID control shall be used to control superheat to deliver a comfortable room temperature condition. The unit shall be equipped with a programmed drying mechanism that

dehumidifies while limiting changes in room temperature when used with Daikin remote control BRC1E73. A mildew-proof, polystyrene condensate drain pan and resin net mold resistant filter shall be included as standard equipment. The indoor units sound pressure shall range from 31 dB(A) to 41 dB(A) at low speed measured at 3.3 feet below and from the unit.

B. Performance: Each unit's performance is based on nominal operating conditions:

Model Number	Cooling (Indoor 80°F DB / 67°F WB, Outdoor 95°F DB, 25 ft pipe length)	Heating (Indoor 70°F DB	
FXAQ07PVJU	Outdoor 95°F DB, 25 ft pipe length) 7,500	Outdoor 47F / 43F, 25 ft pipe length) 8,500	
FXAQ09PVJU	9,500	10,500	
FXAQ24PVJU	24,000	26,500	

C. Indoor Unit:

- 1. The Daikin indoor unit FXAQ shall be completely factory assembled and tested. Included in the unit is factory wiring, piping, electronic proportional expansion valve, control circuit board, fan motor thermal protector, flare connections, condensate drain pan, self-diagnostics, auto-restart function, 3-minute fused time delay, and test run switch. The unit shall have an auto-swing louver which ensures efficient air distribution, which closes automatically when the unit stops. The remote controller shall be able to set five (5) steps of discharge angle. The front grille shall be easily removed for washing. The discharge angle shall automatically set at the same angle as the previous operation upon restart. The drain pipe can be fitted to from either left or right sides.
- 2. Indoor unit and refrigerant pipes will be charged with dehydrated air prior to shipment from the factory.
- 3. Both refrigerant lines shall be insulated from the outdoor unit.
- 4. Return air shall be through a resin net mold resistant filter.
- 5. The indoor units shall be equipped with a condensate pan.
- 6. The indoor units shall be equipped with a return air thermistor.
- 7. The indoor unit will be separately powered with 208~230V/1-phase/60Hz.
- 8. The voltage range will be 253 volts maximum and 187 volts minimum.

D. Unit Cabinet:

- 1. The cabinet shall be affixed to a factory supplied wall mounting template and located in the conditioned space.
- 2. The cabinet shall be constructed with sound absorbing foamed polystyrene and polyethylene insulation.

E. Fan:

- 1. The fan shall be a direct-drive cross-flow fan, statically and dynamically balanced impeller with high and low fan speeds available.
- 2. The fan motor shall operate on 208/230 volts, 1 phase, 60 hertz with a motor output range 0.054 to 0.058 HP.
- 3. The airflow rate shall be available in high and low settings.
- 4. The fan motor shall be thermally protected.

F. Coil:

- 1. Coils shall be of the direct expansion type constructed from copper tubes expanded into aluminum fins to form a mechanical bond.
- 2. The coil shall be of a waffle louver fin and high heat exchange, rifled bore tube design to ensure highly efficient performance.
- 3. The coil shall be a 2-row cross fin copper evaporator coil with 14 fpi design completely factory tested.
- 4. The refrigerant connections shall be flare connections and the

- condensate will be 11/16 inch outside diameter PVC.
- 5. A thermistor will be located on the liquid and gas line.
- 6. A condensate pan shall be located in the unit.

G. Electrical:

- 1. A separate power supply will be required of 208/230 volts, 1 phase, 60 hertz. The acceptable voltage range shall be 187 to 253 volts.
- 2. Transmission (control) wiring between the indoor and outdoor unit shall be a maximum of 3,280 feet (total 6,560 feet).
- 3. Transmission (control) wiring between the indoor unit and remote controller shall be a maximum distance of 1,640 feet.

H. Control:

- 1. The unit shall have controls provided by Daikin to perform input functions necessary to operate the system.
- 2. The unit shall be compatible with interfacing with a BMS system via optional LonWorks or BACnet gateways.
- 3. The unit shall be compatible with a Daikin Intelligent Touch Manager advanced multi-zone controller.

Accessories:

1. A condensate pump (Daiken DACA-CP3-1) shall be provided for each unit where needed to pump condensate to rear exterior of building at ground level.

PART 3 EXECUTION

3.01 Installation of equipment shall be in accordance with the manufacturers' written instructions, these specifications and plans, latest ASHRAE and NEC standards, and 2020 Mechanical Code of New York State.