Fire Alarm Upgrades The Pines Healthcare Machias, New York 14101

BID NO. 56

Prepared by: Cattaraugus County Department of Public Works

8810 Route 242 Little Valley, NY 14755



General Provisions and Bid Proposal Booklet

July 2019

CATTARAUGUS COUNTY DEPARMENT OF PUBLIC WORKS

Instructions to Bidders,

Specifications and Related Documents

For

Fire Alarm Upgrades The Pines Healthcare - Machias

Cattaraugus County Department of Public Works

8810 Route 242

Little Valley, New York 14755

Tel. (716) 938-9121

Fax (716) 938-2754



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* To be completed by <u>All Bidders</u> and returned with bid.

CATTARAUGUS COUNTY DEPARTMENT OF PUBLIC WORKS

Development – Progress – Workmanship

Kathleen M. Ellis, Commissioner Devin M. Blue, Deputy Commissioner Mark C. Burr, PE, Director of Engineering



8810 Route 242, Jack Ellis Drive Little Valley, New York 14755 Phone (716) 938 9121 / Fax (716) 938 2754

ADVERTISEMENT FOR BID

Sealed bids for **Fire Alarm Upgrades at The Pines Healthcare Center, Machias,** according to specifications, will be received by the undersigned, at the Department of Public Works Facility, 8810 Route 242, Little Valley, New York, until **Friday, August 9, 2019 at 1:45 P.M.** after which they will be publicly opened at **2:00 P.M.** (at the *same location*), by the undersigned, under the direction of the Public Works Committee of the Cattaraugus County Legislature. Each bid, at the time it is received, will be stamped showing date and time of receipt. All bids must be sealed and clearly marked as follows: (Any bid not clearly marked will not be considered.)

DPW BID #56 - Fire Alarm Upgrades at The Pines Healthcare, Machias

Contractors can view the site by contacting Chris Klemann at 716-488-5255 to schedule a time.

Final Request for Information shall be 4:00 P.M. <u>Friday, August 2, 2019.</u> Final addendum shall be issued <u>Monday, August 5, 2019</u> at 2:00 P.M.

Copies of the proposed Contract Documents, Plans, Specifications and Instructions to Bidders will be available Friday, July 12, 2019, and may be secured at Cattaraugus County Department of Public Works, 8810 Route 242, Little Valley, New York 14755. Phone Dawn Smith at 938-9121, ext. 2465. All questions and RFI's to be directed to Wendel; 375 Essjay Road, Suite 200, Williamsville, NY 14221@ 716-688-0766 Attn: Peter T. vom Scheidt, pvomscheidt@wendelcompanies.com. The specifications for this project will be available for examination at the office of Southern Tier Builders Association, 65 West Main St., Falconer, NY 14733, & on website https://bxstier.com/) their web site. (STBA at: Login Page: http://login.onlineplanservice.com/SP/code.aspx Password: NYBX19-03020-056

Cattaraugus County Local Law 12-2012 as amended by Local Law 5-2015 requires that the County provide a copy of the Cattaraugus County Vendor Responsibility Form to the low bidder. The low bidder will have 5 business days to return the completed form unless the form was mailed by the county to the vendor, in which case they will have 10 business days from the date of the mailing to return the form. Failure by the low bidder to submit the form within the above time frame will lead to the automatic rejection of their bid. The contractor must also ensure that all subcontractors who contract to work on the Project for consideration in the amount of \$35,000 or greater, complete this form and submit it to the County for approval within 5 days of the preconstruction meeting. The contractor must also submit, in writing, a request for waiver for any subcontractors whose contract is for less than \$35,000. Failure to do so may lead to the rejection of the subcontractor at the County's discretion.

Currently the Commissioner of Public Works has approved the CCA-2 (New York State Vendor Responsibility Questionnaire For-Profit Construction) with attachments A, B, and C to serve as the Cattaraugus County Vendor Responsibility Form.

All bids must be sent or delivered to Cattaraugus County Department of Public Works, 8810 Route 242, Little Valley, NY 14755. Attention: Dawn Smith.

All bids must be accompanied by a NON-COLLUSIVE BIDDING CERTIFICATE and Bid Bond in the amount of 5% of bid total. All substitutions are to be submitted at time of bid as per the contract documents. No substitutions will be considered after the bid date. Any bid submitted without such certification and bid bond will not be accepted. Any bid not meeting <u>ALL</u> specifications will not be considered. Cattaraugus County reserves the right to reject any or all bids, to waive any informalities, and to accept the lowest responsible bid.

John Searles County Administrator County Center - 303 Court Street Little Valley, New York 14755

SECTION A

LUMP SUM PRICE BID SCHEDULE

The Contractor shall furnish all materials, equipment, tools and labor of every kind required to complete the **Fire Alarm Upgrades - The Pines Healthcare, Machias** and perform all other work and incidental work in the most substantial and workmanlike manner, and do everything required by the Contract Documents as defined herein.

The total bid price shall be the sum of all materials, installation and labor costs as defined herein. Lump sum bid price shall be entered both in words and numerically in the spaces provided. In the event of a discrepancy the words will be used for tabulation purposes.

BID FORMS OMITTED FROM SPECIFICATION BOOKS

TO OBTAIN BID FORMS PLEASE CONTACT

DAWN SMITH AT 716-938-9121 EXT. 2465

OR SEND EMAIL REQUEST TO:

dasmith@cattco.org

BID BOND

Sec. 38 – Highway law

KNOW ALL MEN BY THESE PRESENTS, TI	hat
	(Name of Contractor)
(hereinafter called the "Principal") and the	(Address)
a corporation created and existing under the office in the City of Cattaraugus County (hereinafter called the "C and lawful money of the United States of Am be made and done, the said Principal binds t	laws of the State of, having its principal
Signed, sealed and dated this	20A.D.
WHEREAS, the said Principal has su bid for	bmitted to the Cattaraugus County Commissioner of Public Works, a (Description of Project)
such faithful performance or other bonds as ma proposal. NOW, THEREFORE, the condition of the execute and submit, and the Commissioner o including such faithful performance bond or oth Principal's said proposal, then this obligation sh IN TESTIMONY WHEREOF, the said Pri- has caused this instrument to be signed by its	rincipal will execute all required contract proposal documents and furnish by be required by law in accordance with the terms of the Principal's said the foregoing obligation is such, that if the said Principal shall promptly of Public Works shall accept, all required contract proposal documents her bonds as may be required by law in accordance with the terms of the hall be null and void, otherwise to remain in full force and virtue. incipal has hereunto set his/her (their, its) hand and seal and the said Surety
Signed, sealed and delivered in the presence of (Corporate seal of Principal if a corporation)	E
(Corporate seal of Surety Co.)	<u>Principai</u> Company
	of By
	(Title of Officer)
	Attest (Title of Officer)

(Acknowledgment by principal, unless it is a corporation) STATE OF NEW YORK SS: COUNTY OF, to me known and known to me to be the person described in and who executed the foregoing instrument, and acknowledged that he/she executed the same. Notary Public County (Acknowledgment by principal, if a corporation) STATE OF NEW YORK SS: COUNTY OF, to me known who being by me duly sworn, did depose and say that he/she resides in ; that he/she is the of the ; the corporation described in and which executed the foregoing instrument; that he/she knew the seal of said corporation; that the seal affixed to said instrument was such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that he/she signed his/her name thereto by like order. Notary Public County (Acknowledgment by Surety Company) STATE OF NEW YORK SS: COUNTY OF On this day of 20....., before me personally came, to me known, who being by me duly sworn, did depose and say that he/she resides in ; that he/she is the of the ; the corporation described in and which executed the within instrument; that he/she knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by the order of the Board of Directors of said corporation, and that he/she signed his/her name there to by like order.

.....

Notary Public County

BIDDER INFORMATION SHEET

ADDRESS:	
PHONE NUMBER:	
TYPE OF ENTITY: CORPORAT	TION PARTNERSHIP INDIVIDUAL
IF A NON-PUBLICLY OWNED	OCORPORATION:
NAME OF CORPORATION:	
LIST OF PRINCIPAL STOCKHO SHARES):	OLDERS (HOLDING OVER 5% OF OUTSTANDING
LIST OF OFFICERS:	
DATE OF ORGANIZATION:	
IF A PARTNERSHIP:	
PARTNERS:	
NAME OF PARTNERSHIP:	
DATE OF ORGANIZATION:	
	ONDUCTED UNDER AN ASSUMED NAME, A COPY RED TO BE FILED UNDER THE NEW YORK GENER T BE ATTACHED

NON-COLLUSIVE BIDDING CERTIFICATION

REQUIRED BY SECTION 103-D OF GEN. MUNICIPAL LAW

Section 103-d, GML, "Statement of non-collusion in bids and proposals to political subdivision of the state."

Every bid or proposal hereafter made to a political subdivision of the state or any public department, agency or official thereof where competitive bidding is required by statute, rule, regulation or local law, for work or services performed or to be performed or goods sold or to be sold, shall contain the following statement subscribed by the bidder and affirmed by such bidder as true under the penalties of perjury: Non-collusive bidding certification.

"(a) 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 penalty of perjury, that to the best of knowledge and belief:

- (1) 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;
- (2) 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
- (3) 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."
- (b) A bid shall not be considered for award nor shall any award be made where (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 which sets forth in detail the reasons therefore. Where (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 political subdivision, public department, agency or official thereof to which the bid is made, or his/her designee, determines that such disclosure was not made for the purpose of restricting competition.

The fact that a bidder (a) has published price lists, rates, or tariffs covering items being procured, (b) has informed prospective customers of proposed or pending publication of new or revised price lists for such items, or (c) has sold the same items to other customers at the same prices being bid, does not constitute, without more, a disclosure within the meaning of subparagraph one (a).

2.* Any bid hereafter made to any political subdivision of the state or any public department, agency or official thereof by a corporate bidder for work or services performed or to be performed or goods sold or to be sold, where competitive bidding is required by statute, rule, regulation, or local law, and where such bid contains the certification referred to in subdivision one of this section, shall be deemed to have been authorized by the board of directors of the bidder, and such authorization shall be deemed to include the signing and submission of the bid and the inclusion therein of the certificate as to non-collusion as the act and deed of the corporation.

* So in original, No subd. 1 has been designated.

NON-COLLUSIVE BIDDING CERTIFICATION

BY EXECUTING THIS DOCUMENT, THE CONTRACTOR AGREES TO:

- 1. Perform all work listed in accordance with the Contract Documents at the lump sum price.
- 2. All the terms and conditions of the non-collusive bidding certifications required by Section 103-d of the General Municipal Law;
- 3. Certification of Specialty Items category selected, if contained in this proposal;
- 4. Certification of any other clauses required by this proposal and contained herein.

			Da	te:				
(Legal Name of Person, Con is Submitting Bid or Pro	•	hich						
BY:								
BY:(Signature of Person	n Representing Abo	ve)						
AS:								
AS:(Official Title of Sigr	nator in Above Firm)							
(Acknowledgment by Indivic	lual Contractor, If a (Corporation)					
STATE OF NEW YORK)) SS:							
COUNTY OF)							
On this	day of				, 20	, before m	ie persc	onally
came		, to	me kno	wn and k	nown to r	me to be the	person	ı who
executed the above instrum	ent, who being duly	sworn by m	e, did de	epose and	d say that	t he/she res	ides at	
			,	and	that	he/she	is	the
		of th	e corpor	ation des	cribed in	and which	execute	d the
above instrument, and that	he/she signed his/h	er name the	ereto on	behalf of	f said Co	prporation by	y order	of the

Board of Directors of said Corporation.

Notary Public

(Acknowledgment by Co-Partnership Contractor)

STATE OF NEW YORK)		
COUNTY OF) SS:)	
depose and say that he/she is consisting of himself/herself and foregoing instrument in the firm and that he/she had authority	a member of the firm of nd n name of to sign same, and did duly ackn	, 20, before me personally o me known and known to me to be the person ng duly sworn by me, did for himself/herself , , and that he/she executed the owledge to me that he/she executed same as for the uses and purposes
		Notary Public
(Acknowledgment by Individua	al Contractor)	
STATE OF NEW YORK)) SS:	
COUNTY OF)	
came	. to	, 20, before me personally me known and known to me to be described in knowledged that he/she executed the same.

Notary Public

NON-COLLUSIVE BIDDING CERTIFICATION BIDDER INFORMATION

Bidder to provide information listed below:				
Bidder Address:	Street or P.O. Box No.			
	City			
	State	Zip		
Federal Identification	No.:			
Name of Contact Pers	son:			
Phone # of Contact P	erson:			
If Bidder is a Corpor	ration:			
President's Name & A	Address:			
Secretary's Name & A	Address:			
Treasurer's Name & /	Address:			
If Bidder is a Partne	rship:			
Partner's Name & Ad	dress:			
Partner's Name & Ado	dress:			
If Bidder is a Sole P	roprietorship:			
Owner's Name & Add	Iress:			

REPORTING VIOLATIONS OF NON-COLLUSIVE BIDDING PROCEDURES, MISCONDUCT, OR OTHER PROHIBITED CONTRACT ACTIVITIES

NEW YORK STATE INSPECTOR GENERAL HOTLINE. Reports of New York State Governmental Misconduct may be made in strict confidence to the New York State Inspector General on the Toll Free Statewide HOTLINE or by writing to the Office of the Inspector General. The Toll Free Statewide HOTLINE telephone number is 1-800-367-4448 and calls will be answered between 9:00 A.M. and 5:00 P.M., Monday thru Friday. The address of the Office of the State Inspector General is the State Capitol, Executive Chamber, Albany, New York 12224.

REFERENCE SHEET

All bidders are required to complete this form providing three references of past performance. References should involve projects and/or service situations of similar size, scope, and character of work to this Bid. References must have had dealings with the Bidder within the last thirty-six (36) months. The County reserves the right to contact any or all of the references supplied for an evaluation of past performance in order to establish the responsibility of the Bidder <u>before</u> the actual award of the Bid and/or Contract. Completion of the Reference Form is required.

BIDDER'S NAME:		
DATE FILED:		
REFERENCE'S NAME:		
	CONTACT PERSON:	
REFERENCE'S NAME:		
ADDRESS:		
	CONTACT PERSON:	
REFERENCE'S NAME:		
ADDRESS:		
	CONTACT PERSON:	

LOCAL LAW NUMBER 12- 2012 AMENDED BY LOCAL LAW NUMBER 5- 2015 COUNTY OF CATTARAUGUS, NEW YORK

Pursuant to Section 10 of the Municipal Home Rule Law and Section 103 of the General Municipal Law.

A LOCAL LAW ESTABLISHING UNIFORM GUIDELINES FOR DETERMINING THE RESPONSIBILITY OF BIDDERS

BE IT ENACTED by the Legislature of the County of Cattaraugus ("the County"), as follows:

Section 1. Legislative Intent. It is the intent of this Local Law to enhance the County's ability to identify the lowest "responsible bidder" on public works construction projects by instituting more comprehensive submission requirements and an evaluation system which is in compliance with New York State General Municipal Law. The County, based upon its experience, has determined that quality workmanship, efficient operation, safety, and timely completion of projects are not necessarily assured by awarding a public works contract solely on the basis of the low price. This Local Law establishing uniformity of guidelines for determining the responsibility of apparent low bidders will assure efficient use of taxpayer dollars, will promote public safety, and is in the public interest.

Section 2. Applicability. This Local Law shall apply to construction projects subject to the competitive bidding requirements of General Municipal Law §103 and advertised for bids on or after the effective date.

Section 3. Public Works. For purposes of this Local Law, the term "public works" shall mean the following: any constructing, altering, reconstructing, repairing, rehabilitating, refinishing, refurbishing, remodeling, remediating, renovating, custom fabricating, maintenance, landscaping, improving, moving, wrecking, painting, decorating, demolishing, and adding to or subtracting from any public building, structure, highway, roadway, street, alley, bridge, sewer, drain, ditch, sewage disposal plant, water work, parking facility, railroad, excavation, or other project, development, real property, or improvement, or to any part thereof, whether or not the performance of the work herein described involves the addition to, or fabrication into, any structure, project or development, real property or improvement herein described of any material or article of merchandise, which is paid for out of public funds in an amount exceeding the threshold for bidding established by the General Municipal Law. The term also includes any public works leased by the County under a lease containing an option to purchase exceeding the threshold for bidding public works projects established by the General Municipal Law.

Section 4. Cattaraugus County Vendor Responsibility Form and Procedure.

- A. A questionnaire (which shall be titled the "Cattaraugus County Vendor Responsibility Form"), hereinafter "the Form", shall be prepared and, as he/she may deem appropriate, revised by the Cattaraugus County Commissioner of Public Works ("Commissioner").
- B. The Commissioner shall provide the Form to the apparent low bidder on all County public works projects.
- C. The County shall promptly notify the apparent low bidder of its status as such and provide such entity with a copy of the Form either in electronic or paper format. The most current version of the Form shall also be posted on the Cattaraugus County website.
- D. The apparent low bidder shall file the Form in in the Office of the Commissioner not more than five (5) business days after receiving it or, if the form is mailed to the apparent

- E. Low bidder, within ten (10) business days after the date of mailing.
- E. In the event that the apparent low bidder fails to file the fully completed Form in the Commissioner's Office within the required time, its bid will be rejected and any bid bond submitted may, at the County's sole discretion, be forfeited.
- F. If the apparent low bidder is deemed not responsible, or fails to submit the Form within the required time, then the next lowest bidder will be deemed the apparent low bidder and so on until the lowest bidder is deemed responsible and selected as the lowest responsible bidder.
- G. Not later than five (5) calendar days prior to a final determination that the apparent low bidder is not responsible, the County will notify the bidder of same, in writing, and by certified mail, return receipt, stating the reasons. Except in the case of the rejection of an apparent low bid solely because the vendor failed to timely submit a completed Form, such notice shall set forth a time, date and place for the apparent low bidder to appear and be heard, not less than five (5) business days after such notice is served.
- H. Subcontractors proposed to be used on a project must also complete and submit the Form within five (5) days after the preconstruction meeting before the subcontractor is approved by the County. Failure by a subcontractor to submit the Form or unsatisfactory responses to questions may lead to rejection of the bid of the subcontractor at the County's discretion.
- I. If the bid of the apparent low bidder appears disproportionately low when compared with estimates obtained by or on behalf of the County and/or compared to other bids submitted (10% or greater disparity), the County reserves the right to inquire further of the apparent low bidder to determine whether the bid contains mathematical errors, omissions and/or erroneous assumptions, and whether the apparent low bidder has the capability to perform and complete the contract for the bid amount.
- J. If a bidder is found to have willfully violated New York Labor Law §220 within the previous five (5) years, that bidder shall automatically be deemed "not responsible" and its bid shall be rejected unless the Commissioner, subject to review by the Public Works Committee of the Cattaraugus County Legislature, determines otherwise. In all other cases, based on all of the information collected pursuant to this local law and any other factor deemed relevant, the Commissioner, or other department heads soliciting public works bids, shall determine if the apparent lowest bidder is in fact "responsible."

Section 5. Additional Requirements.

- K. Contractors and all subcontractors shall classify their workers as employees rather than as independent contractors, unless those workers meet the definition of "independent contractor" as defined by the Internal Revenue Service, and shall treat said employees accordingly for purposes of workers' compensation insurance coverage, unemployment insurance, employment taxes, and social security taxes.
- L. The contractors and all subcontractors shall submit certified payrolls to the Commissioner.

Section 6. Procedure. Cattaraugus County will make its own determinations of responsibility for low bidders. A bidder recognized by the state as a responsible vendor must still satisfy the requirements of this local law by submitting the required Cattaraugus County Vendor Responsibility Form within the required time frame.

Section 7. Incomplete Submissions by Bidders and Subcontractors. It is the sole responsibility of the contractor to comply with all submission requirements to the County. The submission requirements also apply to all subcontractors, except that the contractor shall submit all subcontractor questionnaires to the County of Cattaraugus for approval. Failure to submit the Form may lead to the rejection of the bid of the subcontractor at the County's discretion.

Contractor submissions deemed non-responsive will result in automatic rejection of the bid.

<u>Section 8. Materiality.</u> The requirements of this Local Law are a material part of the bid documents and the contract and the successful bidder shall insert this Local Law in all subcontracts.

<u>Section 9. Severability.</u> If any clause, sentence, paragraph, subdivision, section or part of this Local law or the application thereof, to any person, individual, corporation, firm, partnership, entity or circumstance, shall be adjudged by any court of competent jurisdiction to be invalid or unconstitutional such order of Judgment shall not affect, impair, or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, subdivision, section or part of this Local law or in its application to the person, individual, corporation, firm, partnership, entity, or circumstance directly involved In the controversy in which such judgment or order shall be rendered.

<u>Section 10. Other Local Laws.</u> Any prior Local Law or portion thereof in conflict with this Local Law is hereby repealed.

<u>Section 11. Effective Date.</u> This Local Law shall take effect upon filing in the Office of the Secretary of State, in accordance with Section 27 of the New York State Municipal Home Rule Law.

BID FOR PERFORMANCE OF CONTRACT WITH CATTARAUGUS COUNTY LEGISLATURE LITTLE VALLEY, NEW YORK

TO: Cattaraugus County Legislature, Little Valley, New York, herein after called the County.

The undersigned, desiring to interpose a bid to provide services for **Fire Alarm Upgrades** – **The Pines Healthcare, Machias**, for Cattaraugus County Department of Public Works, does hereby accept all terms, conditions, and agreements contained and set forth in the, Minimum Specifications, Non-Collusive Bidding Certification, Legal Status Information and Bid for Performance of Contract with Cattaraugus County Legislature and does hereby certify, agree and propose as follows:

The undersigned declares that he/she has examined all of the attached documents, and hereby proposes and agrees that, if this bid is accepted, he/she will contract with the County, such contract incorporating the provisions of the documents attached hereto, to furnish all the materials and services and do all the work specified in the attached documents in the manner and time herein specified and according to the requirements as herein set forth, and to take in full payment therefore the bid prices set forth on the preceding specification sheets.

If this proposal is accepted by the County and the undersigned fails to contract as aforesaid, within ten days (not including Sunday) from the date of notice from the County to him/her, then the County may at its option, determine that the bidder has abandoned his/her right to enter into the contract and thereupon the bid and acceptance shall be null and void.

The full name and residences of all persons and parties interested in the foregoing bid as principals are as follows: (Individuals or partnership bids only)

INDIVIDUAL, PARTNERSHIP OR CORPORATE USE

The undersigned certifies, under penalty of perjury, that he is fully authorized to sign this bid.

Name and Address of Bidder:

Authorized Signature and Title:

Signature

Title

Date

"Iran Divestment Act of 2012"

"Iranian Energy Sector Divestment"

Pursuant to State Finance Law § 165-a, the Commissioner of General Services is required to develop a list of persons it determines engage in investment activities in Iran, which is defined as provision of goods, services or credit of \$20,000,000 or more, relating to the energy sector.

General Municipal Law § 103-g(4) states as follows:

Every bid or proposal hereafter made to a political subdivision of the state or any public department, agency or official thereof where competitive bidding is required by statute, rule, regulation or local law, for work or service performed or to be performed or good sold or to be sold, shall contain the following statement subscribed by the bidder and affirmed by such bidder as true under penalties of perjury:

The below signed bidder affirms the following as true under penalties of perjury:

a. "By submission of this bid, the bidder identified herein and each person signing on behalf of the bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that this bidder is not on the list created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the state finance law."

Corporate or Company Name

By: ______Signature

Title

Sworn to before me this

Day of , 20

Notary Public

CATTARAUGUS COUNTY DEPARTMENT OF PUBLIC WORKS

Development – Progress – Workmanship

Kathleen M. Ellis, Commissioner Devin M. Blue, Deputy Commissioner Mark C. Burr, PE, Director of Engineering



8810 Route 242, Jack Ellis Drive Little Valley, New York 14755 Phone (716) 938 9121 / Fax (716) 938 2754

PROJECT TITLE: Fire Alarm Upgrades, The Pines Healthcare, Machias, New York 14101

AFFIDAVIT OF COMPLIANCE AND RECEIPT OF PREVAILING WAGE SCHEDULE

The Contractor named below certifies receipt of Prevailing Wage Rate Schedule and is in compliance with all labor laws and regulations of the State of New York and the United States of America including the following:

1) <u>PREVAILING WAGE RATE</u>:

The contractor agrees to comply with the schedule of wages applicable to the performance of the said contract and the statutory requirements and rules of the State of New York. The Contractor named below certifies that they have received the Prevailing Wage Rate Schedule <u>PRC# 2019009051</u>.

2) <u>SOCIAL SECURITY TAXES</u>:

The contractor promises and agrees to pay the taxes measured by the wages of their employees required by the Federal Social Security Act and all amendments thereto, and to accept the exclusive liability for said taxes.

Company			
Print Name	Title		
Signature		Date	
State of New York)) ss:			
County of)			
Subscribed and Sworn to before	me this	day of	20
Ву			
Notary Public,			

Th<u>is AGREEMENT made as of the day of</u> in the year 20 by and between the County of Cattaraugus, a municipal corporation hereinafter called the "County" and hereinafter called the "Contractor".

WITNESSETH that the County and Contractor in consideration of the mutual covenants hereinafter set forth, agree as follows:

Article 1. WORK. The Contractor will perform all Work as shown in the Contract Documents for the completion of the Project generally described as **Fire Alarm Upgrades** -**The Pines Healthcare, Machias,** Cattaraugus County, New York.

(a) The Contractor shall furnish all of the materials and do all the Work required for the replacement of the structure and all other incidental work detailed in the contract documents.

Article 2. ENGINEER. The Project has been designed by Cattaraugus County. Cattaraugus County will hire an Engineer to represent the County in connection with implementation of the Project and is hereinafter called the ENGINEER. The County and the ENGINEER will provide all on-site observation services, and County observation personnel will also be referred to as the ENGINEER.

Article 3. CONTRACT TIME. Time of beginning, rate of progress and time of completion are essential conditions of the Contract. The Contractor shall commence work within ten (10) days of the effective date of the Contract, unless written consent is given by the County to begin at a later date. All work shall be completed on or before **December 31, 2019**.

Article 4. CONTRACT PRICE. The County shall pay the Contractor for the performance of the Work in accordance with the Lump Sum Bid indicated in the bid documents.

Article 5. PAYMENTS. The County shall make payments on the account of the Contract as follows:

- (a) Upon request from the Contractor, the Engineer and the County will review and approve statements prepared by the Contractor for the total quantity of work properly completed by the Contractor as of a specified date noted on the statement. No such statement, however, will be reviewed by the Engineer and County within one month after the start of Work under contract, or at intervals of less than one month. The County will pay the Contractor 95% of the amount of each statement, less prior payments, forty-five (45) days after approval of the statement. Neither statement nor payment shall mean that any Work is accepted. The statements should be based on the percent complete of each subtask noted in the Unit Price schedule.
- (b) The 5% of the value of completed Work withheld from the Contractor will be paid to the Contractor by the County upon: (1) the completion of all Work to the satisfaction of the Engineer and the County; and (2) the Contractor has filed with the County a certification of payment of all labor and materials and certificate of release of liens in connection with this agreement.

- (c) The acceptance by the Contractor of the final payment of amounts withheld from the Engineer's statements shall be and shall operate as a release to the County and the Engineer of all claims and of all liability to the Contractor for all things done or furnished in connection with this Work and for every act and neglect of the County and Engineer and others relating to or arising out of this Work.
- (d) The County reserves the right, at any time, to modify or change the Plans or Specifications as deemed necessary and the Agreement shall not be invalidated thereby however;
- (e) If the Contractor considers that he/she is being required to perform extra work for which no Change Order has been issued, then he/she shall serve Written Notice upon the County prior to such extra work is performed. On failure to serve this Notice, all rights of the Contractor to be paid therefore shall be forfeited.

Article 6. CONTRACT DOCUMENTS. The Contract Documents which comprise the Contract between the Owner and the Contractor are attached hereto and made a part hereof and consist of the following:

(a) The General Provisions and Proposal Booklet titled "Fire Alarm Upgrades -The Pines Healthcare, Machias."

- (b) Drawings and Plans
- (c) Any Modifications, including Addenda, duly delivered before the execution of this Agreement, and Change Orders incorporated after the Agreement is signed.
- (d) Bonds and Insurance instruments.

Article 7. MISCELLANEOUS.

(a) Terms used in this Agreement shall have the same meanings which are defined in this bid package.

- (b) The Contractor shall furnish a faithful performance surety bond on a form approved by the County in an amount equal to 100 percent of the Contract Price, and shall have as a surety thereon a surety company or companies authorized to do business in New York State. He/She likewise will furnish a Labor and Material Bond to guarantee the payment of all labor and materials supplied in connection with this Agreement.
- (c) Neither the County nor the Contractor shall, without the prior written consent of the other, assign or sublet in whole or in part his/her interest under any of the Contract Documents and,
- (d) Specifically, the Contractor shall not assign any monies due or to become due without the prior written consent of the County.

- (e) The County and the Contractor each binds himself/herself, his/her partners, successors, assigns and legal representatives to the other party hereto in respect of all covenants, agreements and obligations contained in the Contract Documents.
- (f) The Contract Documents constitute the entire agreement between the County and the Contractor and may only be altered, amended or repealed by a duly executed written instrument.

Article 8. CONTRACTOR REPRESENTATIONS. The Contractor is experienced in the use and interpretation of plans and specifications such as those included in these Contract Documents. He/She has carefully reviewed these and all of the Contract Documents and has found them free of ambiguity and sufficient for bid purposes. He/She has based his/her bid solely on these documents not relying on any explanation or interpretation, oral or written, from any other source.

Article 9. CONTRACT PROVISIONS. The parties to the attached contract, license, lease, amendment or other agreement of any kind (hereinafter, "the contract" or "this contract") agree to be bound by the following clauses which are hereby made a part of the contract (the word "Contractor" herein refers to any party other than the County of Cattaraugus, whether a contractor, licensor, licensee, lessor, lessee or any other party). In the event of a conflict between the terms of the contract (including any and all attachments thereto and amendments thereof) and the terms of this Article, the terms of this Article shall control.

(a) <u>Non-Assignment Clause</u>

In accordance with Section 109 of the <u>General Municipal Law</u>, this contract may not be assigned by the Contractor, or its right, title or interest therein assigned, transferred, conveyed, sublet or otherwise disposed of without the previous consent, in writing, of the County and any attempts to assign the contract without the County's written consent are null and void.

(b) <u>Workers' Compensation Benefits</u>

In accordance with Section 108 of the <u>General Municipal Law</u>, this contract shall be void and of no force and effect unless the Contractor shall provide and maintain coverage during the life of this contract for the benefit of such employees as are required to be covered by the provisions of the <u>Workers' Compensation Law</u>.

(c) <u>Non-Discrimination Requirements</u>

In accordance with Article 15 of the <u>Executive Law</u> (also known as the <u>Human Rights</u> <u>Law</u>) and all other State and Federal statutory and constitutional non-discrimination provisions, the Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex, national origin, age, disability or marital status. Furthermore, in accordance with Section 220-e of the <u>Labor Law</u>, if this is a contract for the construction, alteration or repair of any public building or

public work or for the manufacture, sale or distribution of materials, equipment or supplies, and to the extent that this contract shall be performed within the State of New York, Contractor agrees that neither it nor its subcontractors shall, by reason of race, creed, color, disability, sex or national origin: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. If this is a building service contract as defined in Section 230 of the Labor Law, then, in accordance with Section 239 thereof, Contractor agrees that neither it nor its subcontractors shall, by reason of race, creed, color, national origin, age, sex or disability (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of state citizen who is qualified and available to perform the work; or (b) discriminate or its subcontractors shall, by reason of race, creed, color, national origin, age, sex or disability (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. Contractor is subject to fines of \$50.00 per person per day for any violation of Section 220-e or Section 239 as well as possible termination of this contract and forfeiture of all monies due hereunder for a second or subsequent violation.

(d) <u>Wage and Hours Provisions</u>

If this is a public work contract covered by Article 8 of the <u>Labor Law</u> or a building service contract covered by Article 9 thereof, neither Contractor's employees nor the employees of its subcontractors may be required or permitted to work more than the number of hours or days stated in said statute, except as otherwise provided in the <u>Labor Law</u> and as set forth in prevailing wage and supplement schedules issued by the State Labor Department. Furthermore, Contractor and its subcontractors must pay at least the prevailing wage rate and pay or provide the prevailing supplements, including the premium rates for overtime pay, as determined by the State Labor Department in accordance with the <u>Labor Law</u>.

(e) <u>Non-Collusive Bidding Requirement</u>

In accordance with Section 103-d of the <u>General Municipal Law</u>, if this contract was awarded based upon the submission of bids, Contractor warrants, under penalty of perjury, that its bid was arrived at independently and without collusion aimed at restricting competition. Contractor further warrants that, at the time Contractor submitted its bid, an authorized and responsible person executed and delivered to the County a non-collusive bidding certification on Contractor's behalf.

(f) <u>Set-Off Rights</u>

The County shall have all of its common law and statutory rights of set-off. These rights shall include, but not be limited to, the County's option to withhold for the purposes of set-off any monies due to the Contractor under this contract up to any amounts due and owing to the County with regard to this contract.

(g) <u>Record-Keeping Requirement</u>

The Contractor shall establish and maintain complete and accurate books, records, documents, accounts and other evidence directly pertinent to performance under this contract for a period of six (6) years following final payment or the termination of this contract, whichever is later, and any extensions thereto. The County Treasurer or County Administrator or any other person or entity authorized to conduct an

examination, as well as the agency or agencies involved in this contract, shall have access to such books, records, documents, accounts and other evidential material during the contract term, extensions thereof and said such (6) year period thereafter for the purposes of inspection, auditing and copying. "Termination of this contract", shall mean the later of completion of the work of the contract or the end date of the term stated in the contract.

(h) <u>Governing Law</u>

This contract shall be governed by the laws of the State of New York except where the Federal supremacy clause requires otherwise.

(i) <u>No Arbitration and Service of Process</u>

Disputes involving this contract, including the breach or alleged breach thereof, may not be submitted to binding arbitration (except where statutorily authorized) but must, instead, be heard in a court of competent jurisdiction of the State of New York. Contractor hereby consents to service of process upon it by registered or certified mail, return receipt requested.

(j) Approval by County Legislature

This contract is subject to, and conditioned upon, approval by the Cattaraugus County Legislature.

(k) <u>Postponement, Suspension, Abandonment or Termination of Contract</u>

The County shall have the right to postpone, suspend, abandon or terminate this contract, and such actions shall in no event be deemed a breach of contract. In the event of any termination, postponement, delay, suspension or abandonment, the Contractor shall deliver to the County all data, reports, plans, or other documentation related to the performance of this contract, including but not limited to guarantees, warranties, as-built plans and shop drawings. In any of these events, the County shall make settlement with the Contractor upon an equitable basis as determined by the County which shall fix the value of the work which was performed by the Contractor prior to the postponement, suspension, abandonment or termination of this contract. This clause shall not apply to this contract if the contract contains other provisions applicable to postponement, suspension or termination of the contract.

(l) <u>Indemnification</u>

The Contractor shall defend, indemnify, and save harmless against Cattaraugus County, its officers, employees, and the Engineer from all suits, actions, or claims of any character brought because of any injuries or damage received or sustained by any person, persons, or property on account of the operations of such Contractor; or on account of or in consequence of any neglect in safeguarding the work; or through use of unacceptable materials in constructing the work; or because of any act of omission, neglect, or misconduct of the Contractor; or because of any claims or amounts recovered from any infringements of patent, trademark, or copyright; or from any claims on amounts arising or recovered under the Workers' Compensation Law, or any other law, ordinance, order, or decree; and so much of the money due the Contractor under and by virtue of his Contract as shall be considered necessary by the County for such purpose, may be retained for the use of the County; or, in case no money is due, his/her surety may be held until such suit or suits, action or actions, claim or claims for injuries or damages as aforesaid shall have been settled and suitable evidence to that effect furnished to the County; except that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that he/she is adequately protected by public liability and property damage insurance.

The Contractor agrees to make no claim for damages for delay in the performance of this contract occasioned by any act or omission to act of the County or the Engineer or any of its representatives, and the Contractor agrees that any such claim shall be fully compensated for by an extension of time to complete the performance of work as provided herein. This indemnification shall include all costs and disbursements incurred by the County and the Engineer in defending any suit, including attorney's fees.

(m) <u>Conflict of Interest</u>

- (1) The Contractor warrants that to the best of the Contractor's knowledge and belief, there are no relevant facts or circumstances which could give rise to an organizational conflict of interest, as herein defined, or that the Contractor has disclosed all such relevant information to the County.
- (2) An organizational conflict of interest exists when the nature of the work to be performed under this contract may, without some restriction on future activities, either result in an unfair competitive advantage to the Contractor or impair the Contractor's objectivity in performing the work for the County.
- (3) The Contractor agrees that if an actual or potential organizational conflict of interest is discovered after award, the Contractor will make a full disclosure in writing to the County. This disclosure shall include a description of actions which the Contractor has taken or proposes to take, after consultation with the County, to avoid, mitigate, or minimize the actual or potential conflict.
- (4) The County may terminate this contract in whole or in part, if it deems such termination necessary to avoid an organizational conflict of interest. If the Contractor was aware of a potential organizational conflict of interest prior to award, or discovered an actual or potential conflict after award and did not disclose or misrepresented relevant information to the County, then the County may terminate the contract, or pursue such other remedies as may be permitted by law or this contract. The terms of Clause (k) of this Section or other applicable contract provision regarding termination shall apply to termination by the County pursuant to this clause.
- (5) The Contractor further agrees to insert in any subcontract hereunder, provisions which shall conform to the language of this clause.

(n) <u>Requests for Payment</u>

All requests for payment by the Contractor must be submitted on forms supplied and approved by the County. Each payment request must contain such items of information and supporting documentation as required by the County, and shall be all inclusive for the period of time covered by the payment request.

(o) <u>Performance of Work Required</u>

The Contractor agrees that during the performance of the work required pursuant to this Agreement, the Contractor and all officers, employees, agents or representatives working under the Contractor's direction shall strictly comply with all local, state or federal laws, ordinances, rules or regulations controlling or limiting in any way the performance of the work required by this Agreement. Furthermore, each and every provision of law required to be inserted in this Agreement shall be deemed so inserted, and the Agreement shall be read and enforced as if such provisions were so inserted.

The Contractor further agrees to insert in any subcontract hereunder, provisions which shall conform substantially to the language of this clause, including this paragraph.

(p) Independent Contractor Status

It is understood that the Contractor is an independent Contractor and shall not be considered an agent of the County nor shall any of the Contractor's employees or agents be considered sub-agents for the County. The final contract will be between the County and the Contractor and is not intended and shall not be construed to create the relationship of agent, servant, employee, partnership, joint venture, or association between County and Contractor. The employees and agents of one party are not the employees or agents of the other party for any purpose whatsoever. The Contractor understands and agrees that all persons performing work pursuant to the final contract are for purposes of workers' compensation liability, solely employees of the Contractor and not employees of the County. The Contractor shall be solely liable and responsible for furnishing any and all workers' compensation benefits to any person as a result of any injuries arising from or connected with any work performed by or on behalf of the Contractor hereunder. The employees and agents of each party shall while on the premises of the other party, comply with all rules and regulations of the premises including, but not limited to security requirements. The Contractor agrees to comply with the non-discrimination employment policies as required by applicable state and federal laws and regulations regarding employment discrimination. The Contractor assures the County that in accordance with applicable law it does not, and agrees that it will not, discriminate in any manner on the basis of age, color, creed, national origin, race, religious belief, sexual preference, or handicap.

(q) <u>No-Waiver</u>

In the event that the terms and conditions of the Agreement are not strictly enforced by the County, such non-enforcement shall not act as or be deemed to act as a waiver or modification of this Agreement, nor shall such non-enforcement prevent the County from enforcing each and every term of this Agreement thereafter.

(r) <u>Severability</u>

If any provision of this Agreement is held invalid by a court of law, the remainder of this Agreement shall not be affected thereby if such remainder would then continue to conform to the laws of the State of New York.

(s) Liquidated Damages

The contractor shall be assessed a penalty of <u>\$300 per day</u> and any additional inspection and engineering costs for work not complete within the specified time

IN WITNESS WHEREOF, the parties hereto have executed this AGREEMENT the day and year first above written.

County

Attest

By:

Attest

By:

Contractor

ACKNOWLEDGMENT OF COUNTY

STATE OF NEW YORK)SS COUNTY OF CATTARAUGUS)

On this _____day of ______20___, before me, the undersigned, a Notary Public in and for said State, personally appeared ______, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Notary Public

ACKNOWLEDGMENT OF CONTRACTOR (OUTSIDE NEW YORK STATE)

STATE OF _____)SS: COUNTY OF _____)

On this	day of	20	, before me, the undersigned, a Notary Public in and
for said St	ate, personally appeared		, personally known to
me or prov	ved to me on the basis of s	atisfactor	ry evidence to be the individual(s) whose name(s) is
subscribed	to the within instrument	and ackno	owledged to me that he/she/they executed the same in
his/her/the	ir capacity(ies), and that l	y his/her	/their signature(s) on the instrument, the individual(s),
or the pers	on upon behalf of which	he indivi	dual(s) acted, executed the instrument and that such
individual	made such appearance be	fore the u	indersigned in the City/Town of
		in State of	

in State of

(SEAL) Notary Public

ACKNOWLEDGMENT OF CONTRACTOR (WITHIN NEW YORK STATE)

STATE OF NEW YORK)SS:COUNTY OF ______)

On this day of 20, before me, the undersigned, a Notary Public in and for said State, personally appeared , personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

(SEAL) Notary Public

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PART 1 BIDDING REQUIREMENTS AND CONDITIONS

1.1 NOTICE TO BIDDERS (ADVERTISEMENT)

Sealed bids for the **Fire Alarm Upgrades, The Pines Healthcare - Machias, Machias, New York 14101**, will be received under the direction of the County Administrator at the Cattaraugus County Department of Public Works Facility, 8810 Route 242, Little Valley, New York until **August 9, 2019 at 1:45 p.m.**, after which they will be publicly opened at **2:00 p.m.** (at the same location), under the direction of the Public Works Committee of the Cattaraugus County Legislature. Each bid, at the time received, will be stamped by a clock showing date and time of receipt.

Copies of the Contract Plans and Documents may be examined at no expense at the following location:

Cattaraugus County Department of Public Works 8810 Route 242 Little Valley, New York 14755 (716) 938-9121

Copies of the Contract Plans and Documents may be obtained at the Cattaraugus County Department of Public Works.

All questions and RFI's to be directed to Wendel; 375 Essjay Road, Suite 200, Williamsville, NY 14221@ 716-688-0766 Attn: Peter T. vom Scheidt, pvomscheidt@wendelcompanies.com.

All bids must be written in ink on the forms provided. The bid must be accompanied by a certified check, cashier's check, or bid bond made payable to "Treasurer, Cattaraugus County", in the amount of 5% of the bid, as a guarantee that if the Contract is awarded to the bidder, he/she will sign the Contract and furnish a satisfactory performance bond. If a bidder should fail to sign the Contract and deliver the performance bond within ten (10) calendar days after he/she has received the Contract, then he/she shall forfeit the proposal guaranty.

In compliance with the provisions of Section 115 (Prevailing Rate of Wage), Public Law 627, the minimum wages paid laborers and mechanics are included in wage schedules that are set out in the bid proposal.

The County of Cattaraugus reserves the right to reject any or all bids, to waive any informality in any bids, and to award the Contract in the County's best interest. The County reserves the right to make the award within forty-five (45) calendar days after the date of the bid opening during which period bids shall not be withdrawn.

1.2 CATTARAUGUS COUNTY VENDOR RESPONSIBILITY FORM

Cattaraugus County Local Law 12-2012 as amended by Local Law 5-2015 requires that the County provide a copy of the Cattaraugus County Vendor Responsibility Form to the low bidder. The low bidder will have 5 business days to return the completed form unless the form was mailed by the county to the vendor, in which case they will have 10 business days from the date of the mailing to return the form. Failure by the low bidder to submit the form within the above time frame will lead to the automatic rejection of their bid. The contractor must also ensure that all subcontractors who contract to work on the Project for consideration in the amount of \$35,000 or greater, complete this form and submit it to the County for approval within 5 days of the preconstruction meeting. The contractor must also

submit, in writing, a request for waiver for any subcontractors whose contract is for less than \$35,000. Failure to do so may lead to the rejection of the subcontractor at the County's discretion.

Currently the Commissioner of Public Works has approved the CCA-2 (New York State Vendor Responsibility Questionnaire For-Profit Construction) with attachments A, B, and C to serve as the Cattaraugus County Vendor Responsibility Form.

1.3 PROPOSAL GUARANTY

Proposals shall be accompanied by a proposal guaranty in the form of a certified check, cashier's check, or bid bond in the amount of five percent (5%) of the total amount bid. It shall be made payable to "Treasurer, Cattaraugus County".

1.4 DELIVERY OF PROPOSALS

Each proposal must be submitted in a sealed envelope clearly marked to indicate its contents. Sealed proposals must be delivered to the Cattaraugus County Commissioner of Public Works at or before the date, time and location specified herein. No responsibility shall be attached to the Commissioner of Public Works or his representatives for the premature opening of any proposal not properly labeled. Bidders assume all responsibilities and risks associated with mail or courier delivery. When sent by mail, the sealed proposal must be addressed to the County at the address and in care of the official in whose office the bids are to be received. All proposals shall be filed prior to the time and at the place specified in the "Notice to Bidders". Proposals received after the time for opening of bids will be returned to the bidder unopened.

1.5 NOTICE OF SPECIAL CONDITIONS

The contractor's attention is particularly called to those parts of the contract documents and specifications which deal with the following:

- A. Insurance requirements Item 6.4
- B. Prevailing wage rates required by N.Y.S. Labor Law Section E

1.6 DISQUALIFICATION OF BIDDERS

Any one or more of the following may be considered as sufficient cause for the disqualification of a bidder and the rejection of his/her proposal.

- (a) More than one proposal for the same work from an individual, firm or corporation under the same or different names.
- (b) Evidence of collusion among bidders. Participants in such collusion will receive no recognition as bidders for any future work with the County until any such participant shall have been reinstated as a qualified bidder.
- (c) Lack of competency and adequate machinery, plant and other equipment, as revealed by the financial statements and experience questionnaire.
- (d) Unsatisfactory performance record as shown by past work for any owner judged from the standpoint of workmanship and progress.

- (e) Uncompleted work which, in the judgment of the County, might hinder or prevent the prompt completion of this work if awarded.
- (f) Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contracts in force at the time of letting.
- (g) Violation of New York Labor Law §220 within the previous five (5) years.
- (h) Failure to submit form CCA-2 (New York State Vendor Responsibility Questionnaire For-Profit Construction) with attachments A, B, and C or substantive omissions on the submitted form and attachments.
- (i) Failure to comply with any qualification regulations of the County.

PART 2 AWARD AND EXECUTION OF CONTRACT

2.1 CONSIDERATION OF PROPOSALS

In accordance with General Municipal Law, after the proposals are opened and read, they will be compared on the basis the current gross summary in a manner hereafter described for which the work will be performed according to the plans and specifications together with the unit price for each of the separate items as called for. The lowest bid shall be determined by the County on the basis of the gross lump sum for which the entire work will be performed, arrived at by a correct computation of all items specified in the proposal therefore at the unit prices stated in the proposal (if any). If a conflict arises within the bid proposal, then the words will be used for the final tabulation.

The right is reserved to reject any or all proposals, to waive technicalities, to advertise for new proposals, or to proceed to do the work otherwise, if in the judgment of the Commissioner the best interests of the County will be promoted thereby.

2.2 CANCELLATION OF AWARD

The County reserves the right to cancel the award of any Contract at any time before the execution of the Contract by all parties without any liability against the County.

2.3 RETURN OF PROPOSAL GUARANTY

All proposal guaranties, except those of the three lowest bidders, will be returned immediately following the opening and checking of the proposals. That of the successful bidder will be returned after a satisfactory bond has been furnished and the Contract has been executed. The remaining two guaranties will be returned within ten (10) calendar days following the award of the Contract.

2.4 BONDS

The successful bidder shall at the time of the execution of the Contract, furnish a performance bond and a payment bond each in an amount equal to the full amount of the Contract. The purpose of such bonds is to assure the faithful performance of this Contract as well as the payment of all persons performing labor and furnishing materials in connection with this Contract. The form of the bonds and the security shall be acceptable to the County. Negotiable securities, satisfactory to the County, in an amount equal to that specified for the Contract bond, may be deposited with the County in lieu of such Contract bond and shall be subject to all the conditions of such bond and to such agreements as may be required by the County.

2.5 FAILURE TO EXECUTE CONTRACT

Failure of the Contractor to execute the Agreement and file acceptable performance and payment bonds within ten (10) calendar days from the date of the *Notice of Award* (see form on Page D-19) after he/she has received the Contract form shall be just cause for the annulment of the award, and for the forfeiture of the proposal guaranty. The proposal guaranty shall become the property of the County, not as a penalty, but in liquidation of damages sustained. Award may then be made to the next lowest responsible bidder or the work may be re-advertised and constructed under a new Contract or otherwise as the County may decide.

PART 3 SCOPE OF WORK

3.1 RESPONSIBILITY OF THE CONTRACTOR

The Contractor will be held responsible for the execution of a satisfactory and complete piece of work, in accordance with the true intent of the drawings and specifications. He/She shall provide, without extra charge, all incidental items required as a part of his work including layout and survey, even though not particularly specified or indicated. If he/she has good reason for objecting to the use of any material, appliance, or method of construction as shown or specified, then he/she shall report such objections to the Engineer, and if approved by the Engineer, shall obtain proper adjustment before the Contract is made, and then shall proceed with the work with the understanding that a satisfactory job will be required. The Contractor is solely responsible for site safety and adherence to OSHA regulations.

General Scope of Work:

- Demo existing Fire Alarm System
- Install New Fire Alarm System
- Fire caulk as necessary
- Maintain one or both systems at all times

3.2 ONE-CALL NOTIFICATION TRAINING CERTIFICATION

The Contractor certifies that its excavator(s), operator(s), and/or subcontractor(s), if any, have completed the training and education program provided by the One-Call Notification System pursuant to Article 36 of the NYS General Business Law and any other provider authorized by the Public Service Commission to administer such training and education program. The Contractor shall submit certificates of training with its bid.

PART 4 CONTROL OF WORK

4.1 AUTHORITY OF ENGINEER

The Commissioner of Public Works will be represented by the Engineer who will observe the work done under the Contract on a part time basis throughout construction.

The Engineer shall inspect work performed, review materials to be used, and stop and reject work and materials found to be not in accordance with the plans and specifications. His/Her authority shall cover all phases of the work. In the event that questions should arise concerning the interpretation or changes of plans and specifications or to the acceptability of the work, the Contractor shall submit his/her questions, in writing, to the Engineer. These questions shall be forwarded to the Commissioner of Public Works along with the Engineer's recommendations.

The Engineer may place on the job other personnel who shall observe the work as his/her direct representatives. Their authority shall consist of observing the work under the Contract, rejecting any defective material used and temporarily suspending any work improperly performed. They will not have any authority to make changes or alterations in the plans and specifications, nor be permitted to act as foremen for the Contractor.

Any work done or materials used without scheduling suitable observation by the Engineer or his/her authorized representative as noted may be ordered removed and replaced at the Contractor's expense.

4.2 SUBSTANTIAL COMPLETION AND FINAL ACCEPTANCE OF WORK

When in the opinion of the Engineer the Contractor has substantially completed the project or a specified area of a project so that the County can occupy or utilize the project for the use it was intended, the Engineer shall recommend to the Commissioner of Public Works to issue a Certificate of Substantial Completion (See form on page D-18).

When in the opinion of the Engineer the Contractor has fully performed the work under the Contract, the Engineer shall recommend to the Commissioner of Public Works the acceptance of the work so completed. If the Commissioner of Public Works accepts the recommendation of the Engineer, then he/she shall notify the Contractor by letter of such acceptance, and copies of such acceptance shall be sent to other interested parties.

4.3 GENERAL GUARANTY:

Neither the final certificate of payment nor any provision in the contract documents nor partial or entire occupancy of the premises by the County shall constitute acceptance of work not done in accordance with the contract documents or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship.

The Contractor shall remedy any defects in the work and pay for any damage to other work resulting there from, which shall appear within a period of two (2) years from the date of substantial completion. The County will give notice of observed defects with reasonable promptness.

4.4 CONTRACTOR'S PERSONNEL

The Contractor shall place in charge of the work a competent and reliable English-speaking Superintendent, who shall have the authority to act for the Contractor and who shall be acceptable to the Engineer. This Superintendent must be present at all times during the working day to receive directions and orders given by the Engineer or his/her representatives. All workers must have sufficient skill and experience to properly perform the work assigned to them. Any person employed by the Contractor who the Engineer may deem incompetent or unfit to perform the work shall at once be discharged and shall not again be employed on projects for the County at that specific task.

4.5 COOPERATION WITH UTILITIES

It shall be the Contractor's duty to notify all utility companies or other parties affected within a time frame as not to affect the schedule prior to all necessary adjustment of the public or private utility fixtures and other appurtenances within or adjacent to the limits of construction. The Contractor shall notify the Engineer in writing describing the need for, and extent of, utility adjustments and the anticipated schedule.

It is understood and agreed upon that the Contractor has considered in his/her bid all of the permanent and temporary utility appurtenances in their present or relocated positions as shown on the plans and that no additional compensation will be allowed for any delays, inconveniences, or damage sustained by him due to any interference from the utility appurtenances or the operation of moving them by the utility owners. The Contractor will be responsible for any fees required by the utility owners for temporary locations.

PART 5 CONTROL OF MATERIALS

5.1 CERTIFICATE OF ACCEPTABILITY

All certificates of acceptability of materials required by the specifications shall be supplied by the Contractor at no expense to the County. The Engineer shall have the right to approve of the laboratories or fabricators that will issue the certificates.

The cost of the inspection by the Engineer of any plants not approved by the County shall be borne by the Contractor. This shall include, but not be limited to, plants employed to provide mobile concrete and steel reinforcement.

PART 6 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

6.1 SUBCONTRACTORS, MATERIALMEN AND LABORERS

The Contractor shall furnish the Engineer, before final payment is authorized; an affidavit that all labor and material associated with the work in any way is paid for in full. The Contractor shall indemnify and hold the County and the Engineer harmless from any lien or claim which may be made or filed after such payment by any subcontractor, material man or laborer in connection with work performed hereunder.

6.2 RESPONSIBILITY FOR DAMAGE CLAIMS

The Contractor shall indemnify and save harmless Cattaraugus County, its officers, employees and the Engineer, from all suits, actions, or claims of any character brought because of any injuries or damage received or sustained by any person, persons, or property on account of the operations of the Contractor; or on account of or in consequence of any neglect in safeguarding the work; or through use of unacceptable materials in constructing the work; or because of any act or omission, neglect, or misconduct of the Contractor; or because of any claims or amounts recovered from any infringements of patent, trademark, or copyright; or from any claims on amounts arising or recovered under the Workers' Compensation Law, or any other law, ordinance, order, or decree; and so much of the money due the Contractor under and by virtue of his/her Contract as shall be considered necessary by the County for such purpose, may be retained for the use of the County; or, in case no money is due, his/her surety may be held until such suit or suits, action or actions, claim or claims for injuries or damages as aforesaid shall have been settled and suitable evidence to that effect furnished to the County; except that money due the Contractor will not be withheld when the

Contractor produces satisfactory evidence that he/she is adequately protected by public liability and property damage insurance.

The Contractor agrees to make no claim for damages for delay in the performance of this contract occasioned by any act or omission to act of the County or the Engineer, or any of its representatives, and the Contractor agrees that any such claim shall be fully compensated for by an extension of time to complete the performance of work as provided herein.

6.3 NO WAIVER OF LEGAL RIGHTS

The County shall not be precluded or stopped by a measurement, estimate or certificate made either before or after the completion and acceptance of the work and payment therefore, from showing the true amount and character of the work performed and materials furnished by the Contractor, nor from showing that any such measurement, from recovering from the Contractor or his/her sureties, or both, such damage as it may sustain by reason of his/her failure to comply with the terms of the Contract. Neither the acceptance by the County, or any representative of the County, nor any extension of time, nor any possession taken by the County shall operate as a waiver of any portion of the Contract or of any power herein reserved, or of any right to damages. A waiver of any breach of the Contract shall not be held to be a waiver of any other or subsequent breach.

6.4 INSURANCE

The Contractor shall procure and maintain at its own expense and without expense to the County, until final acceptance by the County, of the work covered by the contract, insurance for liability for damages imposed by law, of the kinds and in the amounts hereinafter provided, with insurance companies authorized to do such business in the County covering all operations under the contract whether performed by it or its subcontractors. Within ten (10) days of the Notice to Award and prior to the commencement of any work the Contractor shall furnish to the Cattaraugus County Human Resources a certificate or certificates of insurance in form satisfactory to the Cattaraugus County Personnel Officer showing that it has complied with this Section, which certificate or certificates shall provide that the policies shall not be changed or canceled until thirty (30) days written notice has been given to the Cattaraugus County Human Services Department. Failure to supply a satisfactory certificate with ten (10)

days after the Notice of Award may result in the cancellation of award and for the forfeiture of the Contractor's bid security, in the sole discretion of the County. The types of insurance are as follows:

- A. Workers' Compensation Insurance. A policy covering the obligations of the Contractor in accordance with the provisions of the Workers' Compensation Law, covering all operations under the contract, whether performed by it or its subcontractor and also under the Disability Benefits Law. The contract, shall be void and of no effect unless the person or corporation making or executing same shall secure compensation and disability benefits coverage for the benefit of, and keep insured during the life of the contract, such employees in compliance with the provisions of the Workers' Compensation Law.
- B. Liability and Property Damage Insurance. Policies following the 1986 Insurance Services Office formats shall be provided. Unless otherwise specifically required by special provision, each policy shall not be amended or contain deductible clauses or coverage exclusions of any nature and shall have limits not less than shown on the sample Certificate of Liability Insurance (Column A – Construction & Maintenance) on page D-14.

For all damages arising during the policy period, shall be furnished in the types (al.) through (e.) as described below. An umbrella type policy, dedicated to this contract, may be used to meet these limits.

- a1. Contractor's Liability Insurance issued to and covering the liability for damages imposed by law upon the Contractor with respect to all work performed by him under the agreement;
- a2. Contractor's Liability Insurance issued to and covering the liability for damages imposed by law upon EACH SUBCONTRACTOR with respect to all work performed by said subcontractor under the agreement;
- b. Contractor's Protective Liability Insurance issued to and covering the liability for damages imposed by law upon the Contractor with respect to all work under the agreement performed for the Contractor by subcontractors;
- c. Completed Operations' Liability Insurance issued to and covering the liability for damages imposed by law upon the Contractor and each subcontractor arising between the date of final cessation of the work and the date of final acceptance thereof, out of that part of the work performed by each;
- d. Protective Liability Insurance issued to and covering the liability for damages imposed by law upon Cattaraugus County and the Commissioner of Public Works and all employees of the County both officially and personally, any municipality in which the work is being performed, and/or any public benefit corporation, railroad, or public utility whose property or facilities are affected by the work or any consultant inspecting engineer or inspector working for or on the project, and their agents or employees,, with respect to all operations under the agreement by the Contractor or its subcontractors, including

omissions and supervisory acts of the State, municipality, public benefit corporation or consultant. Specifically, this includes, but is not necessarily limited to the parties listed below.

Failure to list a firm, organization or municipality, etc. does not eliminate the requirement to provide such coverage.

If the Contractor elects to use the same policy for more than one project, then it must provide with the insurance certificate the Aggregate Limits of Insurance (per project) Endorsement indicating the specific project site and contract number;

e. Commercial General Liability (Premises, Existence, Hazard) Liability Insurance (formerly called Owner's, Landlord's and Tenant's Liability Insurance) issued to and covering the liability for damages imposed by law upon Cattaraugus County and the Commissioner of Public Works and all employees of the County both officially and personally, any municipality in which the work is being performed, and/or any public benefit corporation, railroad, or public utility whose property or facilities are affected by the work or any consultant inspecting engineer or inspector working for or on the project, and their agents or employees, with respect to temporarily opening any portion of the County construction project under this agreement, until the construction or reconstruction pursuant to the agreement has been accepted

by the County. Specifically, this includes, but is not necessarily limited to the parties listed on page D-13.

Failure to list a firm, organization or municipality, etc. does not eliminate the requirement to provide such coverage. This coverage will not be required for contracts involving only turf establishment, landscaping, or traffic signals, which do not involve work on the roadway.

C. Automobile Liability and Property Damage Insurance. A policy covering the use in connection with the work covered by the Contract Documents of all owned, non-owned and hired vehicles bearing, or, under the circumstances under which they are being used, required by the Motor Vehicle Laws of the State of New York to bear license plates."

List of Additional Insured Parties

County of Cattaraugus, 303 Court Street, Little Valley, NY 14755

6.5 LITIGATION

In the event any litigation shall arise from this contract, the laws of the State of New York shall control any litigation, regardless of which party shall institute such action.

COUNTY OF CATTARAUGUS STANDARD INSURANCE REQUIREMENTS

The insurance companies providing these coverages acknowledge that the Named Insured is entaring into a contract with the County of Cattaraugus in which the Named Insured agrees to defend, hold hamiless, and indemnify the County, its officials, employees, and agents against all claims resulting from work performed, material handled, and services rendered. In some circumstances it will be necessary to require alternate coverage and limits which will be defined in the bid specifications, contract, lease or agreement. The alternate coverage and limits should be evidenced on the certificate in lieu of the standards printed below.

Minimum Coverage Limits a	its are as Follows:	w					
	A	Аа	υ	D	H	9	Ga
	Construction & Maintenance	Low Risk Construction & Maintenance	Professional	Property Leased to Others or Use of Facilities	Livery	All Purpose Public Entity, Concessionaire	Low Risk All Purpose Public Entity
COMMERCIAL GENERAL LIABILITY	\$2,000,000 Agg. \$1,000,000 Occ.	\$1,000,000 Agg. \$ 500,000 Occ.	\$2,000,000 Apg. \$1,000,000 Occ.	\$2,000,000 Agg. \$1,000,000 Occ.	\$2,000,000 Agg. \$1,000,000 Occ.	\$2,000,000 Agg. \$1,000,000 Occ.	\$1,000,000 Agg. \$ 500,000 Occ.
Prem Ops.	Include	Include	Include	Include	Include	Include	Include
Prods Compl. Ops.	Include	Include	Include	Include	Include	Include	Include
Indep. Contractor	Include	Include	Include	Include	Include	Include	Include
Contractual	Include	Include	Include	Include	Include	Include	Include
BF Property Damage	Include	Include		Include			
X,C,U	Include	Include					
Personal Injury	Include	Include	Include	Include	Include	Include	Include
Liquor Law				Include			
Host Liquor				Include			
- AUTO LIABILITY	\$1,000,000 CSL	\$1,000,000 CSL	\$1,000,000 CSL	\$1,000,000 CSL	\$1,000,000 CSL	\$1,000,000 CSL	\$1,000,000 CSL
Owned	Include	Include	Include	Include	Include	Include	Include
Hired	include	Include	Include	Include	Include	Include	Include
Non-Owned	Include	Include	Include	Include	Inciude	Include	Include
··· EXCESS LIABILITY	\$3,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$3,000,000	\$1,000,000	
WORKERS' COMP. DISABILITY	Per attached information sheet	Per attached information sheet	Per attached information sheet	Per attached information sheet	Per attached information sheet	Per attached information sheet	Per attached information sheet
EMPLOYER'S LIABILITY	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
*** PROFESSIONAL LIAB.			\$3,000,000 Agg. \$1,000,000 Occ.				9

The Comprehensive/Commercial General Liability limits can be met by one or more policies, or in combination with an Excess and/or Umbrella Liability policy. The COI must indicate if the coverage trigger in an 'Occurrence' form or a 'Claims-made' form.

All "Claims-made' policies shall continue to provide evidence of coverage three (3) years after completion of work or product delivery.

** Cattaraugus County MUST be named as Additional Insured for all acts of Named Insured pursuant to this contract

*** Professional Liability policies are not required to have the County as Additional Insured

Each policy, as allowed by law, shall be endorsed stating that the contractor's insurers agree to waive any rights of subrogation against the County of Cattaraugus because of payments for any injury or damages arising out of work performed under this contract.

PART 7 PROSECUTION AND PROGRESS

7.1 NOTICE TO PROCEED

The "Notice to Proceed" (see form on page D-20) will stipulate the date on which it is expected the Contractor will begin the work. Commencement of work by the Contractor shall be deemed and taken as a waiver of this notice on his part. In no case, however, shall the Contractor begin work prior to the date of the signing of the Contract.

7.2 PROSECUTION OF WORK

The Contractor shall start construction operations on the part of the project approved by the Engineer, or set forth in the approved Progress Schedule. The work shall be conducted in such manner and with sufficient materials, equipment, and labor as are considered necessary to insure its completion in accordance with the plans and specifications as interpreted by the Engineer, by the date set forth in the Agreement. Should the prosecution of the work for any reason be discontinued, the Contractor shall notify the Engineer at least 24 hours in advance of resuming operations.

7.3 TEMPORARY SUSPENSION OF WORK

The Engineer shall have the authority to suspend the work wholly or in part by written order for such period as he/she may deem necessary due to unsuitable weather, to conditions considered unfavorable for the suitable prosecution of the work, or to carry out orders given or to perform any provisions of the Contract.

7.4 DATE OF COMPLETION OF CONTRACT WORK

The Contractor shall perform fully, entirely, and in a satisfactory and acceptable manner the work contracted, by the date stipulated in the Agreement.

In adjusting the Agreement date for the completion of the project, all strikes, lock-outs, unusual delays in transportation, or any condition over which the Contractor has no control, and also any suspensions ordered by the Engineer for causes not the fault of the Contractor, shall be excluded from the computation of the contract time for completion of the work. No allowance will be made for delays or suspensions of the prosecution of the work due to the fault of the Contractor.

7.5 TERMINATION OF CONTRACT

If the Contractor is adjudged bankrupt or makes an assignment for the benefit of creditors or a receiver is appointed for the Contractor or any insolvency arrangement proceedings are instituted by or against him, or if the Contractor fails after seven (7) days' notice to supply enough properly skilled workers or proper materials or fails to prosecute the work with such diligence as will insure its completion by the Agreement date or shall in any other respect commit a breach of his/her Agreement and fail to remedy the same within seven (7) days after notice thereof, then the County may, by twenty-four (24) hours written notice, terminate the Contractor's right to proceed with the balance of the work or with any portion thereof and may take possession of the work and complete it by Contract or otherwise. The County may utilize such materials, plant and equipment as may be on the site of the work.

7.6 FAILURE TO COMPLETE WORK ON TIME

When the work embraced in the Contract is not completed on or before the date specified therein, engineering and inspection expenses incurred by the County upon the work from the completion date originally fixed in the Agreement to the final date of completion of the work may be charged to the Contractor and be deducted by the County from any payment due the Contractor. Consideration of any extra work or supplemental Contract work added to the original Contract as well as extenuating circumstances beyond the control of the Contractor, will be given due consideration by the County before assessing engineering and inspection charges against the Contractor. The Contractor will be responsible for any delays resulting from causes within the Contractor's control, including inefficient operations, and the Commissioner of Public Works shall be the sole judge of whether such charges shall be assessed against the Contractor.

7.7 ASSIGNMENT

Assignment of the contract shall be in accordance with Section 109 of the General Municipal Law as follows:

§109. Assignment of public contracts

1. A clause shall be inserted in all specifications or contracts hereafter made or awarded by any officer, board or agency of a political subdivision, or of any district therein, prohibiting any contractor, to whom any contract shall be let, granted or awarded, as required by law, from assigning, transferring, conveying, subletting or otherwise disposing of the same, or of his/her right, title, or interest therein, or his/her power to execute such contract, to any other person or corporation without the previous consent in writing of the officer, board or agency awarding the contract.

If any contractor, to whom any contract is let, granted or 2. awarded, as required by law, by any officer, board or agency of a political subdivision, or of any district therein, shall without the previous written consent specified in subdivision one of this section, assign, transfer, convey, sublet or otherwise dispose of such contract, or his/her right, title, or interest therein, or his/her power to execute such contract, to any other person or corporation, the officer, board or agency which let, made, granted or awarded such contract shall revoke and annul such contract, and the political subdivision or district therein, as the case may be, and such officer, board or agency shall be relieved and discharged from any and all liability and obligations growing out of such contract to such contractor, and to the person or corporation to which such contract shall have been assigned, transferred, conveyed, sublet or otherwise disposed of, and such contractor, and his/her assignees, transferees or sublessees shall forfeit and lose all moneys theretofore earned under such contract, except so much as may be required to pay his/her employees. The provisions of this section shall not hinder, prevent, or affect an assignment by any such contractor for the benefit of his/her creditors made pursuant to the laws of this state.

PART 8 MEASUREMENT, PAYMENT, AND RECORD KEEPING

8.1 PAYMENTS ON CONTRACT

Payments to the Contractor for work satisfactorily completed will be made monthly in the amount of 95% of the work completed. No monthly payment will be rendered for less than 10% of the Contract amount or \$1,000, whichever is less. The payments will be based on the completed percentage of each unit bid as shown in the Itemized schedule.

The attention of persons intending to make proposals is specifically called to the provisions of Section 70 and 71 of the Lien Law in relation to funds being received by a Contractor for a public improvement. These provisions declare that the funds received by the Contractor shall constitute trust funds in the hands of such Contractor to be applied first to the payment of certain claims.

No certificate approving or authorizing the first partial payment, or in the event taxes shall be found due in accordance with this Section after the first payment to the Contractor, then no certificates approving or authorizing any final payment shall be made to a foreign Contractor unless such Contractor furnishes satisfactory proof that all taxes due by such Contractor under the provisions of Articles 9, 9A, 16, and 16A of the Tax Law have been paid. The certificate of the State Tax Commission to the effect that all such taxes have been paid shall be conclusive proof of the payment of such taxes.

The term "Foreign Contractor" as used in the preceding paragraph means in the case of an individual, a person who is a legal resident of another state or foreign country; and in the case of a firm or co-partnership, one having one or more partners who is a legal resident of another State or foreign country and in the case of a corporation, one having its principal place of business in another State or foreign country.

8.2 DIFFERING SITE CONDITIONS

The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Engineer of (1) subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or (2) unknown physical conditions at the site of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract.

The Engineer shall investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, then an equitable adjustment shall be made under this clause and the contract modified in writing accordingly.

No request by the Contractor for an equitable adjustment to the contract under this clause shall be allowed, unless the Contractor has given the written notice required; provided, that the time prescribed above for giving written notice may be extended by the Engineer.

8.3 RECORD KEEPING

In conformance with Cattaraugus County Local Law 12-2012 and 5-2015, the contractor and all its subcontractors will submit the following payroll related information to the County on a biweekly basis. Such information shall include, at a minimum, name of employee, title of employee, time reported for work and time left work for each day.

This information is separate from the certified payrolls required for projects governed by Article 8 of the Labor Law.

NOTICE OF AWARD

TO:			

PROJECT Description:

Fire Alarm Upgrades, The Pines Healthcare – Machias, Machias, New York 14101

The County has considered the Bid submitted by you for the above-described work in response to its Advertisement for Bid No. 54 opened on <u>Friday</u>, August 9, 2019.

You are hereby notified that your Bid has been accepted in the amount of \$ _____.

You are required by the General Provisions to execute the Agreement and furnish the required Contractor's Performance Bond and Payment Bond within ten (10) calendar days from the date of this Notice of Award.

If you fail to execute such Agreement and to furnish the Bonds within the ten (10) days from the date of this Notice, then the County will be entitled to consider all your rights arising out of Cattaraugus County's acceptance of your Bid as abandoned and as a forfeiture of your Bid Bond. Cattaraugus County will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this Notice of Award to Cattaraugus County.

OWNER: <u>Cattaraugus County</u>

BY: _____

TITLE: _____

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged by

Dated this	day of	in the year
Ву:		
Title:		

NOTICE TO PROCEED

DATE:

PROJECT: Fire Alarm Upgrades, The Pines Healthcare – Machias, Machias, New York 14101 Cattaraugus County

TO:_____

You are hereby notified to commence work in accordance with the Agreement dated ______, 2019 on ______. All work shall be completed on or before **December 31, 2019** and final payment shall be submitted within 45 calendar days of completion of work.

You are required to return an acknowledged copy of this Notice of Proceed to Cattaraugus County

CATTARAUGUS COUNTY Owner

By: _____

Title:

ACCEPTANCE OF THIS NOTICE

Receipt of the above Notice to Proceed is hereby acknowledged by

Dated this _____ day of _____ in the year _____.

By:	
/	

Title: _____

CERTIFICATE OF SUBSTANTIAL COMPLETION

DATE:

PROJECT: Fire Alarm Upgrades, The Pines Healthcare – Machias, Machias, New York 14101 Cattaraugus County

TO: _____

The performed under this contract has been inspected by authorized representatives of the County, Contractor and Engineer and the Project was found to be substantially completed in accordance with the contract documents.

DEFINITION OF SUBSTANTIAL COMPLETION

The date of substantial completion of a project or a specified area of a project is the date when the construction is sufficiently completed, in accordance with the contract documents, as modified by any change orders agreed to by the parties, so that the County can occupy or utilize the project or specified area of the project for the use it was intended.

A tentative list of items to be completed or corrected is attached hereto. This list may not be exhaustive, and the failure to include an item on it does not alter the responsibility of the Contractor to complete all the work in accordance with the contract documents

By	
Engineer	Authorized Representative
Date	
The Contractor accepts the above Certificate of Subst complete and correct the items on the tentative list wi	
By	
Contractor	Authorized Representative
Date	
The County Accepts the project or specified area of the complete and will assume full possession of the project at(time), on(date).	ct or specified are of the project
Cattaraugus County By	Authorized Representative
Date	
D - 18	3

SECTION E

DEPARTMENT OF LABOR CONTRACT REQUIREMENTS AND PREVAILING WAGE RATE SCHEDULES

Labor classifications not appearing on the following rate sheets can be used only with the consent of the Commissioner of Public Works and then the rate to be paid will be given by the Commissioner of Public Works after advising with the State Department of Labor.

All requests for minimum wage rates for additional occupations shall be directed through the County.

The bidder shall take into account in his/her bid all changes in wage rates and supplements that may be forthcoming during the time the contract is in force.

The Contractor in the execution of the work under the contract in accordance with the provisions of the specifications and the special provisions to the specifications may submit job orders to and may also request the referral of lists of qualified applicants for the work of the NEW YORK STATE EMPLOYMENT SERVICE.

Roberta Reardon, Commissioner



Andrew M. Cuomo, Governor

Cattaraugus County DPW

Dawn Smith, Procurement Specialist 8810 Route 242 Little Valley NY 14755

Schedule Year 2019 Date Requested 07/15/2019 PRC#

2019009051

Location The Pines Healthcare - Machias Project ID# FireAlarmUpgrade Project Type Replacement of the existing fire alarm system consisting of hardware, software, devices, components, programming and wiring

PREVAILING WAGE SCHEDULE FOR ARTICLE 8 PUBLIC WORK PROJECT

Attached is the current schedule(s) of the prevailing wage rates and prevailing hourly supplements for the project referenced above. A unique Prevailing Wage Case Number (PRC#) has been assigned to the schedule(s) for your project.

The schedule is effective from July 2019 through June 2020. All updates, corrections, posted on the 1st business day of each month, and future copies of the annual determination are available on the Department's website www.labor.ny.gov. Updated PDF copies of your schedule can be accessed by entering your assigned PRC# at the proper location on the website.

It is the responsibility of the contracting agency or its agent to annex and make part, the attached schedule, to the specifications for this project, when it is advertised for bids and /or to forward said schedules to the successful bidder(s), immediately upon receipt, in order to insure the proper payment of wages.

Please refer to the "General Provisions of Laws Covering Workers on Public Work Contracts" provided with this schedule, for the specific details relating to other responsibilities of the Department of Jurisdiction.

Upon completion or cancellation of this project, enter the required information and mail **OR** fax this form to the office shown at the bottom of this notice. **OR** fill out the electronic version via the NYSDOL website.

NOTICE OF COMPLETION / CANCELLATION OF PROJECT

Date Completed:

Date Cancelled:

Name & Title of Representative:

Phone: (518) 457-5589 Fax: (518) 485-1870 W. Averell Harriman State Office Campus, Bldg. 12, Room 130, Albany, NY 12240

General Provisions of Laws Covering Workers on Article 8 Public Work Contracts

Introduction

The Labor Law requires public work contractors and subcontractors to pay laborers, workers, or mechanics employed in the performance of a public work contract not less than the prevailing rate of wage and supplements (fringe benefits) in the locality where the work is performed.

Responsibilities of the Department of Jurisdiction

A Department of Jurisdiction (Contracting Agency) includes a state department, agency, board or commission: a county, city, town or village; a school district, board of education or board of cooperative educational services; a sewer, water, fire, improvement and other district corporation; a public benefit corporation; and a public authority awarding a public work contract.

The Department of Jurisdiction (Contracting Agency) awarding a public work contract MUST obtain a Prevailing Rate Schedule listing the hourly rates of wages and supplements due the workers to be employed on a public work project. This schedule may be obtained by completing and forwarding a "Request for wage and Supplement Information" form (PW 39) to the Bureau of Public Work. The Prevailing Rate Schedule MUST be included in the specifications for the contract to be awarded and is deemed part of the public work contract.

Upon the awarding of the contract, the law requires that the Department of Jurisdiction (Contracting Agency) furnish the following information to the Bureau: the name and address of the contractor, the date the contract was let and the approximate dollar value of the contract. To facilitate compliance with this provision of the Labor Law, a copy of the Department's "Notice of Contract Award" form (PW 16) is provided with the original Prevailing Rate Schedule.

The Department of Jurisdiction (Contracting Agency) is required to notify the Bureau of the completion or cancellation of any public work project. The Department's PW 200 form is provided for that purpose.

Both the PW 16 and PW 200 forms are available for completion online.

Hours

No laborer, worker, or mechanic in the employ of a contractor or subcontractor engaged in the performance of any public work project shall be permitted to work more than eight hours in any day or more than five days in any week, except in cases of extraordinary emergency. The contractor and the Department of Jurisdiction (Contracting Agency) may apply to the Bureau of Public Work for a dispensation permitting workers to work additional hours or days per week on a particular public work project.

There are very few exceptions to this rule. Complete information regarding these exceptions is available on the "4 Day / 10 Hour Work Schedule" form (PW 30.1).

Wages and Supplements

The wages and supplements to be paid and/or provided to laborers, workers, and mechanics employed on a public work project shall be not less than those listed in the current Prevailing Rate Schedule for the locality where the work is performed. If a prime contractor on a public work project has not been provided with a Prevailing Rate Schedule, the contractor must notify the Department of Jurisdiction (Contracting Agency) who in turn must request an original Prevailing Rate Schedule form the Bureau of Public Work. Requests may be submitted by: mail to NYSDOL, Bureau of Public Work, State Office Bldg. Campus, Bldg. 12, Rm. 130, Albany, NY 12240; Fax to Bureau of Public Work (518) 485-1870; or electronically at the NYSDOL website www.labor.ny.gov.

Upon receiving the original schedule, the Department of Jurisdiction (Contracting Agency) is REQUIRED to provide complete copies to all prime contractors who in turn MUST, by law, provide copies of all applicable county schedules to each subcontractor and obtain from each subcontractor, an affidavit certifying such schedules were received. If the original schedule expired, the contractor may obtain a copy of the new annual determination from the NYSDOL website www.labor.ny.gov.

The Commissioner of Labor makes an annual determination of the prevailing rates. This determination is in effect from July 1st through June 30th of the following year. The annual determination is available on the NYSDOL website www.labor.ny.gov.

Payrolls and Payroll Records

Every contractor and subcontractor MUST keep original payrolls or transcripts subscribed and affirmed as true under penalty of perjury. Payrolls must be maintained for at least three (3) years from the project's date of completion. At a minimum, payrolls must show the following information for each person employed on a public work project: Name, Address, Last 4 Digits of Social Security Number, Classification(s) in which the worker was employed, Hourly wage rate(s) paid, Supplements paid or provided, and Daily and weekly number of hours worked in each classification.

The filing of payrolls to the Department of Jurisdiction is a condition of payment. Every contractor and subcontractor shall submit to the Department of Jurisdiction (Contracting Agency), within thirty (30) days after issuance of its first payroll and every thirty (30) days thereafter, a transcript of the original payrolls, subscribed and affirmed as true under penalty of perjury. The Department of Jurisdiction (Contracting Agency) shall collect, review for facial validity, and maintain such payrolls.

In addition, the Commissioner of Labor may require contractors to furnish, with ten (10) days of a request, payroll records sworn to as their validity and accuracy for public work and private work. Payroll records include, by are not limited to time cards, work description sheets, proof that supplements were provided, cancelled payroll checks and payrolls. Failure to provide the requested information within the allotted ten (10) days will result in the withholding of up to 25% of the contract, not to exceed \$100,000.00. If the contractor or subcontractor does not maintain a place of business in New York State and the amount of the contract exceeds \$25,000.00, payroll records and certifications must be kept on the project worksite.

The prime contractor is responsible for any underpayments of prevailing wages or supplements by any subcontractor.

All contractors or their subcontractors shall provide to their subcontractors a copy of the Prevailing Rate Schedule specified in the public work contract as well as any subsequently issued schedules. A failure to provide these schedules by a contractor or subcontractor is a violation of Article 8, Section 220-a of the Labor Law.

All subcontractors engaged by a public work project contractor or its subcontractor, upon receipt of the original schedule and any subsequently issued schedules, shall provide to such contractor a verified statement attesting that the subcontractor has received the Prevailing Rate Schedule and will pay or provide the applicable rates of wages and supplements specified therein. (See NYS Labor Laws, Article 8. Section 220-a).

Determination of Prevailing Wage and Supplement Rate Updates Applicable to All Counties

The wages and supplements contained in the annual determination become effective July 1st whether or not the new determination has been received by a given contractor. Care should be taken to review the rates for obvious errors. Any corrections should be brought to the Department's attention immediately. It is the responsibility of the public work contractor to use the proper rates. If there is a question on the proper classification to be used, please call the district office located nearest the project. Any errors in the annual determination will be corrected and posted to the NYSDOL website on the first business day of each month. Contractors are responsible for paying these updated rates as well, retroactive to July 1st.

When you review the schedule for a particular occupation, your attention should be directed to the dates above the column of rates. These are the dates for which a given set of rates is effective. To the extent possible, the Department posts rates in its possession that cover periods of time beyond the July 1st to June 30th time frame covered by a particular annual determination. Rates that extend beyond that instant time period are informational ONLY and may be updated in future annual determinations that actually cover the then appropriate July 1st to June 30th time period.

Withholding of Payments

When a complaint is filed with the Commissioner of Labor alleging the failure of a contractor or subcontractor to pay or provide the prevailing wages or supplements, or when the Commissioner of Labor believes that unpaid wages or supplements may be due, payments on the public work contract shall be withheld from the prime contractor in a sufficient amount to satisfy the alleged unpaid wages and supplements, including interest and civil penalty, pending a final determination.

When the Bureau of Public Work finds that a contractor or subcontractor on a public work project failed to pay or provide the requisite prevailing wages or supplements, the Bureau is authorized by Sections 220-b and 235.2 of the Labor Law to so notify the financial officer of the Department of Jurisdiction (Contracting Agency) that awarded the public work contract. Such officer MUST then withhold or cause to be withheld from any payment due the prime contractor on account of such contract the amount indicated by the Bureau as sufficient to satisfy the unpaid wages and supplements, including interest and any civil penalty that may be assessed by the Commissioner of Labor. The withholding continues until there is a final determination of the underpayment by the Commissioner of Labor or by the court in the event a legal proceeding is instituted for review of the determination of the Commissioner of Labor.

The Department of Jurisdiction (Contracting Agency) shall comply with this order of the Commissioner of Labor or of the court with respect to the release of the funds so withheld.

Summary of Notice Posting Requirements

The current Prevailing Rate Schedule must be posted in a prominent and accessible place on the site of the public work project. The prevailing wage schedule must be encased in, or constructed of, materials capable of withstanding adverse weather conditions and be titled "PREVAILING RATE OF WAGES" in letters no smaller than two (2) inches by two (2) inches.

The "Public Work Project" notice must be posted at the beginning of the performance of every public work contract, on each job site.

Every employer providing workers. compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers. Compensation Board in a conspicuous place on the jobsite.

Every employer subject to the NYS Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers, notices furnished by the State Division of Human Rights.

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the NYS Department of Labor.

Apprentices

Employees cannot be paid apprentice rates unless they are individually registered in a program registered with the NYS Commissioner of Labor. The allowable ratio of apprentices to journeyworkers in any craft classification can be no greater than the statewide building trade ratios promulgated by the Department of Labor and included with the Prevailing Rate Schedule. An employee listed on a payroll as an apprentice who is not registered as above or is performing work outside the classification of work for which the apprentice is indentured, must be paid the prevailing journeyworker's wage rate for the classification of work the employee is actually performing.

NYSDOL Labor Law, Article 8, Section 220-3, require that only apprentices individually registered with the NYS Department of Labor may be paid apprenticeship rates on a public work project. No other Federal or State Agency of office registers apprentices in New York State.

Persons wishing to verify the apprentice registration of any person must do so in writing by mail, to the NYSDOL Office of Employability Development / Apprenticeship Training, State Office Bldg. Campus, Bldg. 12, Albany, NY 12240 or by Fax to NYSDOL Apprenticeship Training (518) 457-7154. All requests for verification must include the name and social security number of the person for whom the information is requested.

The only conclusive proof of individual apprentice registration is written verification from the NYSDOL Apprenticeship Training Albany Central office. Neither Federal nor State Apprenticeship Training offices outside of Albany can provide conclusive registration information.

It should be noted that the existence of a registered apprenticeship program is not conclusive proof that any person is registered in that program. Furthermore, the existence or possession of wallet cards, identification cards, or copies of state forms is not conclusive proof of the registration of any person as an apprentice.

Interest and Penalties

In the event that an underpayment of wages and/or supplements is found:

- Interest shall be assessed at the rate then in effect as prescribed by the Superintendent of Banks pursuant to section 14-a of the Banking Law, per annum from the date of underpayment to the date restitution is made.
- A Civil Penalty may also be assessed, not to exceed 25% of the total of wages, supplements, and interest due.

Debarment

Any contractor or subcontractor and/or its successor shall be ineligible to submit a bid on or be awarded any public work contract or subcontract with any state, municipal corporation or public body for a period of five (5) years when:

- Two (2) willful determinations have been rendered against that contractor or subcontractor and/or its successor within any consecutive six (6) year period.
- There is any willful determination that involves the falsification of payroll records or the kickback of wages or supplements.

Criminal Sanctions

Willful violations of the Prevailing Wage Law (Article 8 of the Labor Law) may be a felony punishable by fine or imprisonment of up to 15 years, or both.

Discrimination

No employee or applicant for employment may be discriminated against on account of age, race, creed, color, national origin, sex, disability or marital status.

No contractor, subcontractor nor any person acting on its behalf, shall by reason of race, creed, color, disability, sex or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the work to which the employment relates (NYS Labor Law, Article 8, Section 220-e(a)).

No contractor, subcontractor, nor any person acting on its behalf, shall in any manner, discriminate against or intimidate any employee on account of race, creed, color, disability, sex, or national origin (NYS Labor Law, Article 8, Section 220-

e(b)).

The Human Rights Law also prohibits discrimination in employment because of age, marital status, or religion.

There may be deducted from the amount payable to the contractor under the contract a penalty of \$50.00 for each calendar day during which such person was discriminated against or intimidated in violation of the provision of the contract (NYS Labor Law, Article 8, Section 220-e(c)).

The contract may be cancelled or terminated by the State or municipality. All monies due or to become due thereunder may be forfeited for a second or any subsequent violation of the terms or conditions of the anti-discrimination sections of the contract (NYS Labor Law, Article 8, Section 220-e(d)).

Every employer subject to the New York State Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers notices furnished by the State Division of Human Rights.

Workers' Compensation

In accordance with Section 142 of the State Finance Law, the contractor shall maintain coverage during the life of the contract for the benefit of such employees as required by the provisions of the New York State Workers' Compensation Law.

A contractor who is awarded a public work contract must provide proof of workers' compensation coverage prior to being allowed to begin work.

The insurance policy must be issued by a company authorized to provide workers' compensation coverage in New York State. Proof of coverage must be on form C-105.2 (Certificate of Workers' Compensation Insurance) and must name this agency as a certificate holder.

If New York State coverage is added to an existing out-of-state policy, it can only be added to a policy from a company authorized to write workers' compensation coverage in this state. The coverage must be listed under item 3A of the information page.

The contractor must maintain proof that subcontractors doing work covered under this contract secured and maintained a workers' compensation policy for all employees working in New York State.

Every employer providing worker's compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers' Compensation Board in a conspicuous place on the jobsite.

Unemployment Insurance

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the New York State Department of Labor.

Roberta Reardon, Commissioner



Andrew M. Cuomo, Governor

Cattaraugus County DPW

Dawn Smith, Procurement Specialist 8810 Route 242 Little Valley NY 14755 Schedule Year2019Date Requested07/15/2PRC#201900

2019 07/15/2019 2019009051

LocationThe Pines Healthcare - MachiasProject ID#FireAlarmUpgradeProject TypeReplacement of the existing fire alarm system consisting of hardware, software, devices, components, programming and wiring

Notice of Contract Award

New York State Labor Law, Article 8, Section 220.3a requires that certain information regarding the awarding of public work contracts, be furnished to the Commissioner of Labor. One "Notice of Contract Award" (PW 16, which may be photocopied), **MUST** be completed for **EACH** prime contractor on the above referenced project.

Upon notifying the successful bidder(s) of this contract, enter the required information and mail **OR** fax this form to the office shown at the bottom of this notice, **OR** fill out the electronic version via the NYSDOL website.

Federal Employer Identification N	umber:		
Name:			
City:		State:	Zip:
Amount of Contract:	\$		Contract Type:
Approximate Starting Date:	//		 [] (01) General Construction [] (02) Heating/Ventilation [] (02) Electrical
Approximate Completion Date:	//		 [] (03) Electrical [] (04) Plumbing [] (05) Other :

Contractor Information All information must be supplied

Phone: (518) 457-5589 Fax: (518) 485-1870 W. Averell Harriman State Office Campus, Bldg. 12, Room 130, Albany, NY 12240

IMPORTANT NOTICE

FOR

CONTRACTORS & CONTRACTING AGENCIES

Social Security Numbers on Certified Payrolls

The Department of Labor is cognizant of the concerns of the potential for misuse or inadvertent disclosure of social security numbers. Identity theft is a growing problem and we are sympathetic to contractors' concerns with regard to inclusion of this information on payrolls if another identifier will suffice.

For these reasons, the substitution of the use of the <u>last four digits</u> of the social security number on certified payrolls submitted to contracting agencies on public work projects is now acceptable to the Department of Labor.

NOTE: This change does not affect the Department's ability to request and receive the entire social security number from employers during the course of its public work / prevailing wage investigations.

To all State Departments, Agency Heads and Public Benefit Corporations IMPORTANT NOTICE REGARDING PUBLIC WORK ENFORCEMENT FUND

Budget Policy & Reporting Manual

B-610

Public Work Enforcement Fund

effective date December 7, 2005

1. Purpose and Scope:

This Item describes the Public Work Enforcement Fund (the Fund, PWEF) and its relevance to State agencies and public benefit corporations engaged in construction or reconstruction contracts, maintenance and repair, and announces the recently-enacted increase to the percentage of the dollar value of such contracts that must be deposited into the Fund. This item also describes the roles of the following entities with respect to the Fund:

- New York State Department of Labor (DOL),
- The Office of the State of Comptroller (OSC), and
- State agencies and public benefit corporations.

2. Background and Statutory References:

DOL uses the Fund to enforce the State's Labor Law as it relates to contracts for construction or reconstruction, maintenance and repair, as defined in subdivision two of Section 220 of the Labor Law. State agencies and public benefit corporations participating in such contracts are required to make payments to the Fund.

Chapter 511 of the Laws of 1995 (as amended by Chapter 513 of the Laws of 1997, Chapter 655 of the Laws of 1999, Chapter 376 of the Laws of 2003 and Chapter 407 of the Laws of 2005) established the Fund.

3. Procedures and Agency Responsibilities:

The Fund is supported by transfers and deposits based on the value of contracts for construction and reconstruction, maintenance and repair, as defined in subdivision two of Section 220 of the Labor Law, into which all State agencies and public benefit corporations enter.

Chapter 407 of the Laws of 2005 increased the amount required to be provided to this fund to .10 of one-percent of the total cost of each such contract, to be calculated at the time agencies or public benefit corporations enter into a new contract or if a contract is amended. The provisions of this bill became effective August 2, 2005.

To all State Departments, Agency Heads and Public Benefit Corporations IMPORTANT NOTICE REGARDING PUBLIC WORK ENFORCEMENT FUND

OSC will report to DOL on all construction-related ("D") contracts approved during the month, including contract amendments, and then DOL will bill agencies the appropriate assessment monthly. An agency may then make a determination if any of the billed contracts are exempt and so note on the bill submitted back to DOL. For any instance where an agency is unsure if a contract is or is not exempt, they can call the Bureau of Public Work at the number noted below for a determination. Payment by check or journal voucher is due to DOL within thirty days from the date of the billing. DOL will verify the amounts and forward them to OSC for processing.

For those contracts which are not approved or administered by the Comptroller, monthly reports and payments for deposit into the Public Work Enforcement Fund must be provided to the Administrative Finance Bureau at the DOL within 30 days of the end of each month or on a payment schedule mutually agreed upon with DOL.

Reports should contain the following information:

- Name and billing address of State agency or public benefit corporation;
- State agency or public benefit corporation contact and phone number;
- Name and address of contractor receiving the award;
- Contract number and effective dates;
- Contract amount and PWEF assessment charge (if contract amount has been amended, reflect increase or decrease to original contract and the adjustment in the PWEF charge); and
- Brief description of the work to be performed under each contract.

Checks and Journal Vouchers, payable to the "New York State Department of Labor" should be sent to:

Department of Labor Administrative Finance Bureau-PWEF Unit Building 12, Room 464 State Office Campus Albany, NY 12240

Any questions regarding billing should be directed to NYSDOL's Administrative Finance Bureau-PWEF Unit at (518) 457-3624 and any questions regarding Public Work Contracts should be directed to the Bureau of Public Work at (518) 457-5589.

Construction Industry Fair Play Act

Required Posting For Labor Law Article 25-B § 861-d

Construction industry employers must post the "Construction Industry Fair Play Act" notice in a prominent and accessible place on the job site.

Failure to post the notice can result in penalties of up to \$1,500 for a first offense and up to \$5,000 for a second offense.

The posting is included as part of this wage schedule. Additional copies may be obtained from the NYS DOL website, <u>www.labor.ny.gov</u>.

If you have any questions concerning the Fair Play Act, please call the State Labor Department toll-free at 1-866-435-1499 or email us at: dol.misclassified@labor.state.ny.us. New York State Department of Labor Required Notice under Article 25-B of the Labor Law



ATTENTION ALL EMPLOYEES, CONTRACTORS AND SUBCONTRACTORS: YOU ARE COVERED BY THE CONSTRUCTION INDUSTRY FAIR PLAY ACT

The law says that you are an employee unless:

- You are free from direction and control in performing your job AND
- You perform work that is not part of the usual work done by the business that hired you AND
- You have an independently established business

Your employer cannot consider you to be an independent contractor unless all three of these facts apply to your work.

IT IS AGAINST THE LAW FOR AN EMPLOYER TO MISCLASSIFY EMPLOYEES AS INDEPENDENT CONTRACTORS OR PAY EMPLOYEES OFF-THE-BOOKS.

Employee rights. If you are an employee:

- You are entitled to state and federal worker protections such as
 - unemployment benefits, if unemployed through no fault of your own, able to work, and otherwise qualified
 - o workers' compensation benefits for on-the-job injuries
 - o payment for wages earned, minimum wage, and overtime (under certain conditions)
 - o prevailing wages on public work projects
 - o the provisions of the National Labor Relations Act and
 - o a safe work environment
- It is a violation of this law for employers to retaliate against anyone who asserts their rights under the law. Retaliation subjects an employer to civil penalties, a private lawsuit or both.

Independent Contractors: If you are an independent contractor:

• You must pay all taxes required by New York State and Federal Law.

Penalties for paying off-the-books or improperly treating employees as independent contractors:

- **Civil Penalty** First Offense: up to \$2,500 per employee. Subsequent Offense(s): up to \$5,000 per employee.
- Criminal Penalty
 First Offense: Misdemeanor up to 30 days in jail, up to a \$25,000 fine and debarment from performing Public Work for up to one year. Subsequent Offense(s): Misdemeanor - up to 60 days in jail, up to a \$50,000 fine and debarment from performing Public Work for up to 5 years.

If you have questions about your employment status or believe that your employer may have violated your rights and you want to file a complaint, call the Department of Labor at 1(866)435-1499 or send an email to <u>dol.misclassified@labor.ny.gov</u>. All complaints of fraud and violations are taken seriously and you can remain anonymous.

Employer Name:

IA 999 (09/10)

WORKER NOTIFICATION

(Labor Law §220, paragraph a of subdivision 3-a)

Effective February 24, 2008

This provision is an addition to the existing prevailing wage rate law, Labor Law §220, paragraph a of subdivision 3-a. It requires contractors and subcontractors to provide written notice to all laborers, workers or mechanics of the *prevailing wage rate* for their particular job classification on each pay stub*. It also requires contractors and subcontractors to *post a notice* at the beginning of the performance of every public work contract on each job site that includes the telephone number and address for the Department of Labor and a statement informing laborers, workers or mechanics of their right to contact the Department of Labor if he/she is not receiving the proper prevailing rate of wages and/or supplements for his/her particular job classification. The required notification will be provided with each wage schedule, may be downloaded from our website www.labor.ny.gov or made available upon request by contacting the Bureau of Public Work at 518-457-5589.

^{*} In the event that the required information will not fit on the pay stub, an accompanying sheet or attachment of the information will suffice.

New York State Department of Labor Bureau of Public Work

Attention Employees

THIS IS A:

PUBLIC WORK PROJECT

If you are employed on this project as a **worker, laborer, or mechanic** you are entitled to receive the **prevailing wage and supplements rate** for the classification at which you are working.

Chapter 629 of the Labor Laws of 2007: These wages are set by law and must be posted at the work site. They can also be found at: <u>www.labor.ny.gov</u>

If you feel that you have not received proper wages or benefits, please call our nearest office.*

Albany Binghamton Buffalo Garden City New York City Newburgh

(518) 457-2744 (607) 721-8005 (716) 847-7159 (516) 228-3915 (212) 932-2419 (845) 568-5156 Patchogue Rochester Syracuse Utica White Plains

(631) 687-4882 (585) 258-4505 (315) 428-4056 (315) 793-2314 (914) 997-9507

 For New York City government agency construction projects, please contact the Office of the NYC Comptroller at (212) 669-4443, or <u>www.comptroller.nyc.gov</u> – click on Bureau of Labor Law.

Contractor Name:

Project Location:

OSHA 10-hour Construction Safety and Health Course – S1537-A

Effective July 18, 2008

This provision is an addition to the existing prevailing wage rate law, Labor Law §220, section 220-h. It requires that on all public work projects of at least \$250,000.00, all laborers, workers and mechanics working on the site, be certified as having successfully completed the OSHA 10-hour construction safety and health course. It further requires that the advertised bids and contracts for every public work contract of at least \$250,000.00, contain a provision of this requirement.

NOTE: The OSHA 10 Legislation only applies to workers on a public work project that are required, under Article 8, to receive the prevailing wage.

Where to find OSHA 10-hour Construction Course

- NYS Department of Labor website for scheduled outreach training at: <u>https://labor.ny.gov/workerprotection/safetyhealth/dosh_training.shtm</u>
- 2. OSHA Training Institute Education Centers:

Rochester Institute of Technology OSHA Education Center Rochester, NY Donna Winter Fax (585) 475-6292 e-mail: <u>dlwtpo@rit.edu</u> (866) 385-7470 Ext. 2919 www.rit.edu/~outreach/course.php3?CourseID=54

Atlantic OSHA Training Center

UMDNJ – School of Public Health Piscataway, NJ Janet Crooks Fax (732) 235-9460 e-mail: <u>crooksje@umdnj.edu</u> (732) 235-9455 https://ophp.umdnj.edu/wconnect/ShowSchedule.awp?~~GROUP~AOTCON~10~

Atlantic OSHA Training Center

University at Buffalo Buffalo, New York Joe Syracuse Fax (716) 829-2806 e-mail:<u>mailto:japs@buffalo.edu</u> (716) 829-2125 http://www.smbs.buffalo.edu/CENTERS/trc/schedule_OSHA.php

Keene State College

Manchester, NH Leslie Singleton e-mail: <u>lsingletin@keene.edu</u> (800) 449-6742 www.keene.edu/courses/print/courses_osha.cfm

3. List of trainers and training schedules for OSHA outreach training at:

www.OutreachTrainers.org

Requirements for OSHA 10 Compliance

Chapter 282 of the Laws of 2007, codified as Labor Law 220-h took effect on July 18, 2008. The statute provides as follows:

The advertised specifications for every contract for public work of \$250,000.00 or more must contain a provision requiring that every worker employed in the performance of a public work contract shall be certified as having completed an OSHA 10 safety training course. The clear intent of this provision is to require that all employees of public work contractors, required to be paid prevailing rates, receive such training "prior to the performing any work on the project."

The Bureau will enforce the statute as follows:

All contractors and sub contractors must attach a copy of proof of completion of the OSHA 10 course to the first certified payroll submitted to the contracting agency and on each succeeding payroll where any new or additional employee is first listed.

Proof of completion may include but is not limited to:

- Copies of bona fide course completion card (*Note: Completion cards do not have an expiration date.*)
- Training roster, attendance record of other documentation from the certified trainer pending the issuance of the card.
- Other valid proof

**A certification by the employer attesting that all employees have completed such a course is not sufficient proof that the course has been completed.

Any questions regarding this statute may be directed to the New York State Department of Labor, Bureau of Public Work at 518-485-5696.

WICKS Reform 2008

(For all contracts advertised or solicited for bid on or after 7/1/08)

- Raises the threshold for public work projects subject to the Wicks Law requiring separate specifications and bidding for the plumbing, heating and electrical work. The total project's threshold would increase from \$50,000 to: \$3 million in Bronx, Kings, New York, Queens and Richmond counties; \$1.5 million in Nassau, Suffolk and Westchester counties; and \$500,000 in all other counties.
- For projects below the monetary threshold, bidders must submit a sealed list naming each subcontractor for the plumbing, HVAC and electrical work and the amount to be paid to each. The list may not be changed unless the public owner finds a legitimate construction need, including a change in specifications or costs or use of a Project Labor Agreement (PLA), and must be open to public inspection.
- Allows the state and local agencies and authorities to waive the Wicks Law and use a PLA if it will provide the best work at the lowest possible price. If a PLA is used, all contractors shall participate in apprentice training programs in the trades of work it employs that have been approved by the Department of Labor (DOL) for not less than three years. They shall also have at least one graduate in the last three years and use affirmative efforts to retain minority apprentices. PLA's would be exempt from Wicks, but deemed to be public work subject to prevailing wage enforcement.
- The Commissioner of Labor shall have the power to enforce separate specification requirements on projects, and may issue stop-bid orders against public owners for non-compliance.
- Other new monetary thresholds, and similar sealed bidding for non-Wicks projects, would apply to certain public authorities including municipal housing authorities, NYC Construction Fund, Yonkers Educational Construction Fund, NYC Municipal Water Finance Authority, Buffalo Municipal Water Finance Authority, Westchester County Health Care Association, Nassau County Health Care Corp., Clifton-Fine Health Care Corp., Erie County Medical Center Corp., NYC Solid Waste Management Facilities, and the Dormitory Authority.
- Reduces from 15 to 7 days the period in which contractors must pay subcontractors.

IMPORTANT INFORMATION

Regarding Use of Form PW30.1 (Previously 30R)

"Employer Registration for Use of 4 Day / 10 Hour Work Schedule"

To use the '4 Day / 10 Hour Work Schedule':

There MUST be a *Dispensation of Hours (PW30)* in place on the project

AND

You MUST register your intent to work 4 / 10 hour days, by completing the PW30.1 Form.

REMEMBER

The '4 Day / 10 Hour Work Schedule' applies ONLY to Job Classifications and Counties listed on the PW30.1 Form.

Do not write in any additional Classifications or Counties.

(**Please note** : For each Job Classification check the individual wage schedule for specific details regarding their 4/10 hour day posting.)

Instructions for Completing Form PW30.1

(Previously 30R)

"Employer Registration for Use of 4 Day / 10 Hour Work Schedule"

Before completing Form PW30.1 check to be sure ...

- There is a *Dispensation of Hours* in place on the project.
- The 4 Day / 10 Hour Work Schedule applies to the Job Classifications you will be using.
- The 4 Day / 10 Hour Work Schedule applies to the County / Counties where the work will take place.

Instructions (Type or Print legibly):

Contractor Information:

- Enter the Legal Name of the business, FEIN, Street Address, City, State, Zip Code; the Company's Phone and Fax numbers; and the Company's email address (if applicable)
- Enter the Name of a Contact Person for the Company along with their Phone and Fax numbers, and the personal email address (if applicable)

Project Information:

- Enter the Prevailing Rate Case number (PRC#) assigned to this project
- Enter the Project Name / Type (i.e. Smithtown CSD Replacement of HS Roof)
- Enter the Exact Location of Project (i.e. Smithtown HS, 143 County Route #2, Smithtown,NY; Bldgs. 1 & 2)
- If you are a Subcontractor, enter the name of the Prime Contractor for which you work
- On the Checklist of Job Classifications -
 - Go to pages 2 and 3 of the form
 - Place a checkmark in the box to the right of the Job Classification you are choosing
 - Mark all Job Classifications that apply
 - ***Do not write in any additional Classifications or Counties.***

Requestor Information:

• Enter the name of the person submitting the registration, their title with the company , and the date the registration is filled out

Return Completed Form:

- Mail the completed PW30.1 form to: NYSDOL Bureau of Public Work, SOBC Bldg.12 Rm.130, Albany, NY 12240 -OR -
- Fax the completed PW30.1 form to: NYSDOL Bureau of Public Work at (518)485-1870



Bureau of Public Work Harriman State Office Campus Building 12, Room 130 Albany, New York 12240 Phone: (518) 457-5589 | Fax: (518) 485-1870 www.labor.ny.gov

Employer Registration for Use of 4 Day / 10 Hour Work Schedule

Before completing this form, make sure that:

- There is a **Dispensation of Hours** in place on the project.
- The 4 Day / 10 Hour Work Schedule applies to the Job Classifications you will be using.
- The 4 Day / 10 Hour Work Schedule applies to the County / Counties where the work will take place.

Please type or print the requested information and then mail or fax to the address above.

Contractor Information

Company Name:			FEIN:
Address:			
Phone No:	Fax No:	Email:	
Contact Person:			
Phone No:	Fax No:	Email:	
Project Informatio	n		
Project PRC#:		Project Name/Type:	
Exact Location of Project:		County:	
(If you are Subcontractor) Prime Contractor Na	ame:		
Job Classification(s) t	o Work 4/10 Schedule:	(Choose all that apply on Job Class *** Do not write in any additional Cl	
Requestor Informa	tion		
Name:			
Title:		Date:	

Please use the list below with the number assigned to each county as a reference to the corresponding numbers listed in the following pages under **Entire Counties & Partial Counties**.

1.	Albany County	33.	Oneida County
2.	Allegany County	34.	Onondaga County
3.	Bronx County	35.	Ontario County
4.	Broome County	36.	Orange County
5.	Cattaraugus County	37.	Orleans County
6.	Cayuga County	38.	Oswego County
7.	Chautauqua County	39.	Otsego County
8.	Chemung County	40.	Putnam County
9.	Chenango County	41.	Queens County
10.	Clinton County	42.	Rensselaer County
11.	Columbia County	43.	Richmond County (Staten Island)
12.	Cortland County	44.	Rockland County
13.	Delaware County	45.	Saint Lawrence County
14.	Dutchess County	46.	Saratoga County
15.	Erie County	47.	Schenectady County
16.	Essex County	48.	Schoharie County
17.	Franklin County	49.	Schuyler County
18.	Fulton County		
19.	Genesee County	50.	Seneca County
20.	Greene County	51.	Steuben County
21.	Hamilton County	52.	Suffolk County
22.	Herkimer County	53.	Sullivan County
23.	Jefferson County	54.	Tioga County
24.	Kings County (Brooklyn)	55.	Tompkins County
25.	Lewis County	56.	Ulster County
26.	Livingston County	57.	Warren County
27.	Madison County	58.	Washington County
28.	Monroe County	59.	Wayne County
29.	Montgomery County	60.	Westchester County
30.	Nassau County	61.	Wyoming County
31.	New York County (Manhattan)	62.	Yates County
32.	Niagara County		

(Place a checkmark by all classifications that will be using the 4/10 schedule)

Job Classification	Tag #	Entire Counties	Partial Counties	Check Box
Carpenter – Building	276B-All	7	2 ,5	
Carpenter – Building	276B-Cat	15	5	
Carpenter – Building	276-B-LIV	26, 28, 35, 59	61	
Carpenter – Building	276B-Gen	19, 32, 37	61	
Carpenter – Heavy & Highway	276HH-All	2, 5, 7		
Carpenter – Heavy & Highway	276HH-Erie	15		
Carpenter – Heavy & Highway	276HH- Gen	19, 32, 37, 61		
Carpenter – Heavy & Highway	276HH-Liv	26, 28, 35, 59		
Carpenter – Residential	276R-All	7	2, 5	
Carpenter – Building	277B-Bro	4, 54		
Carpenter – Building	277B-CAY	6, 50, 62		
Carpenter – Building	277B-CS	8, 12, 49, 51, 55	2	
Carpenter – Building	277 JLS	23, 25, 45		
Carpenter – Building	277 omh	22, 27, 33		
Carpenter – Building	277 On	34		
Carpenter – Building	277 Os	38		
Carpenter – Building	277CDO Bldg	9, 13, 39		
Carpenter – Heavy & Highway	277CDO HH	9, 13, 39		
Carpenter – Heavy & Highway	277HH-BRO	4, 6, 8, 12, ,22, 23, 25, 27, 33, 34, 38, 45, 49, 50, 51, 54, 55, 62		
Carpenter – Building	291B-Alb	1, 18, 20, 29, 42, 47, 48		
Carpenter – Building	291B-Cli	10, 16, 17		
Carpenter – Building	291B-Ham	21, 57, 58		
Carpenter – Building	291B-Sar	46		
Carpenter – Heavy & Highway	291HH-Alb	1, 10, 16, 17,18, 20, 21, 29, 42, 46, 47, 48, 57, 58		
Electrician	25m	30, 52		
Electrician – Teledata Cable Splicer	43	12, 22, 27, 33, 38	6, 9, 34, 39, 55, 59	

(Place a checkmark by all classifications that will be using the 4/10 schedule)

Job Classification	Tag #	Entire Counties	Partial Counties	Check Box
Electrician	86	26, 28	19, 35, 37, 59, 61	
Electrician	840 Teledata and 840 Z1	62	6, 34, 35, 50, 59	
Electrician	910	10, 16, 17, 23, 25, 45		
Electrical Lineman	1049Line/Gas	30, 41, 52		
Electrical Lineman	1249a	1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 29, 32, 33, 34, 35, 36, 37, 38, 39, 40, 42, 44, 46, 47, 48, 49, 50, 45, 51, 53, 54, 55, 56, 57, 58, 59, 61, 62		
Electrical Lineman	1249a West	60		
Electrical Lineman	1249a-LT	1, 2, 4, 5, 6, 7, 8, 9, 10, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 29, 32, 33, 34, 35, 37, 38, 39, 42, 46, 47, 48, 49, 50, 45, 51, 53, 54, 55, 57, 58, 59, 61, 62		
Electrical Lineman	1249aREG8LT	11, 14, 36, 40, 44, 56		
Electrical Lineman	1249aWestLT	60		
Elevator Constructor	138	11, 14, 20, 36, 40, 53, 56	13, 44, 60	
Elevator Constructor	14	2, 5, 7, 15, 19, 32, 37, 61		
Elevator Constructor	27	8, 26, 28, 35, 49, 50, 51, 59, 62		
Elevator Constructor	35	1, 10, 16, 18, 21, 22, 29, 39, 42, 46, 47, 48, 57, 58		
Elevator Constructor	62.1	4, 6, 9, 12, 23, 25, 27, 33, 34, 38, 45, 54, 55	13	
Glazier	201	1, 10, 11, 16, 17, 18, 20, 21, 29, 42, 46, 47, 48, 57, 58		
Glazier	660r	2, 5, 7, 15, 19, 32, 37, 61		
Glazier	660	2, 5, 7, 15, 19, 32, 37, 61		
Glazier	677.1	23, 25, 26, 28, 35, 45, 50, 59, 62		
Glazier	677Z-2	6, 12, 22, 27, 33, 34, 38		
Glazier	677z3	4, 8, 9, 13, 39, 49, 51, 54, 55		
Glazier	677r.2	6, 12, 22, 27, 33, 34, 38		
Insulator – Heat & Frost	30-Syracuse	4, 6, 8, 9, 12, 22, 23, 25, 27, 33, 34, 38, 39, 49, 50, 45, 54, 55		
Laborer – Building	621b	2, 7	5	
Laborer – Building	633 bON	34		

(Place a checkmark by all classifications that will be using the 4/10 schedule)

Job Classification	Tag #	Entire Counties	Partial Counties	Check Box
Laborer – Building	633b Cay	6		
Laborer – Building	633bOS	38		
Laborer – Building	785(7)	4	9, 13, 54	
Laborer – Building	785B-CS	8, 51	49	
Laborer – Building	7-785b	12, 55	49, 54	
Laborers – Heavy & Highway	157h/h	47	18, 29, 46	
Laborers – Heavy & Highway	190 h/h	1, 42, 58	11, 20, 46	
Laborers – Heavy & Highway	35/2h	21, 22, 27, 33	18, 29	
Laborer – Residential	621r	2, 7	5	
Laborers – Tunnel	157	47	18, 29, 46	
Laborers – Tunnel	35T	21, 22, 27, 33	18, 29	
Laborers – Tunnel	190	1, 42, 58	11, 20, 46	
Mason – Building	2TS.1	1, 10,11, 16, 17, 18, 20, 21, 29, 42, 46, 47, 48, 57, 58		
Mason – Building	2TS.2	22, 23, 25, 33, 45	27	
Mason – Building	2TS.3	6, 34, 38	27	
Mason – Building	2b-on	34		
Mason – Building	2b.1	1, 11, 18, 20, 21, 29, 42, 46, 47, 48, 58	57	
Mason – Building	2b.2	22, 33	25	
Mason – Building	2b.3	6, 34	27	
Mason – Building	2b.4	38		
Mason – Building	2b.5	23	25	
Mason – Building	2b.6	45		
Mason – Building	2b.8	10, 16, 17	57	
Mason – Building	3b-Co-Z2	8, 49, 51	2	
Mason – Building	3B-Z1	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Building – Residential	3B-Z1R	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Building	3B-Bing-Z2	4, 9, 13, 39, 54		
Mason – Building	3B-lth-Z2	12, 55		

(Place a checkmark by all classifications that will be using the 4/10 schedule)

Job Classification	Tag #	Entire Counties	Partial Counties	Check Box
Mason – Building	3B-Jam-Z2	7	2, 5	
Mason – Building – Residential	3B-Jam-Z2R	2, 4, 8, 7, 9, 12, 39, 13, 49, 51, 54, 55	5	
Mason – Building	3B-Z3	15, 32	5	
Mason – Building	3B-Z3.Orleans	37		
Mason – Residential	3B-Z3R	15, 32	5	
Mason – Residential	3B- z3R.Orleans	37		
Mason - Heavy & Highway	3h	2, 4, 8, 7, 9, 12, 13, 19, 26, 28, 35, 37, 39, 49, 50, 51, 54, 55, 59, 61, 62	5, 15, 32	
Mason – Tile Finisher	3TF-Z1	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Tile Finisher	3TF-Z2	2, 4, 8, 7, 9, 12, 13, 39, 49, 51, 54, 55	5	
Mason – Tile Finisher	3TF-Z3	15, 32, 37	5	
Mason – Tile Finisher	3TF-Z1R	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Tile Finisher	3TF-Z2R	2, 4, 7, 9, 12, 13, 39, 49, 51, 54, 55	5	
Mason – Tile Finisher	3TF-Z3R	15, 32, 37	5	
Mason – Tile Setter	3TS-Z1	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Tile Setter Residential	3TS-Z1R	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Tile Setter	3TS-Z2	2, 4, 7, 8, 9, 12, 13, 39, 49, 51, 54, 55	5	
Mason – Tile Setter Residential	3TS-Z2R	2, 4, 7, 8, 9, 12, 13, 39, 49, 51, 54, 55	5	
Mason – Tile Setter	3TS-Z3	15, 32, 37	5	
Mason – Tile Setter Residential	3TS-Z3R	15, 32, 37	5	
Mason – Building/Heavy & Highway	780	3, 24, 30, 31, 41, 43, 52		
Operating Engineer - Heavy & Highway	137H/H	40, 60	14	
Operating Engineer – Heavy & Highway	158-832H	2, 8, 26, 28, 35, 49, 51, 59, 62	19	
Operating Engineer – Heavy & Highway	158-H/H	1, 4, 9, 10, 11, 14, 16, 17, 18, 20, 21, 22, 29, 39, 42, 46, 47, 48, 54, 57, 58		
Operating Engineer – Heavy & Highway	158-545h	6, 12, 23, 25, 27, 33, 38, 45, 50, 55		
Painter	1456-LS	1, 3, 10, 11, 14, 16, 17, 18, 20, 21, 24, 29, 30, 31, 36, 40, 41, 42, 43, 44, 46, 47, 48, 52, 53, 56, 57, 58, 60		
Painter	150	28, 59, 62	26, 35	

(Place a checkmark by all classifications that will be using the 4/10 schedule)

*** Do not write in any additional Classifications or Counties***

Job Classification	Tag #	Entire Counties	Partial Counties	Check Box
Painter	178 B	4, 9, 54		
Painter	178 E	8, 49	51	
Painter	178 I	12, 55		
Painter	178 O	13, 39		
Painter	31	6, 22, 27, 33, 34, 50	25, 35, 38	
Painter	38.O		38	
Painter	38.W	23, 45	25	
Painter	4- Buf,Nia,Olean	2, 15, 19, 32, 37, 61	5, 7, 26, 51	
Painter	4-Jamestown		5, 7	
Sheetmetal Worker	46	26, 28, 35, 50, 59, 62		
Sheetmetal Worker	46r	26, 28, 35, 50, 59, 62		
Teamsters – Heavy & Highway	294h/h	1, 11, 18, 20, 29, 42, 46, 47, 48, 58	57	
Teamsters – Heavy & Highway	317bhh	6, 12, 50, 51, 55, 62	2	
Teamsters - Building/Heavy & Highway	456	40, 60		

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Introduction to the Prevailing Rate Schedule

Information About Prevailing Rate Schedule

This information is provided to assist you in the interpretation of particular requirements for each classification of worker contained in the attached Schedule of Prevailing Rates.

Classification

It is the duty of the Commissioner of Labor to make the proper classification of workers taking into account whether the work is heavy and highway, building, sewer and water, tunnel work, or residential, and to make a determination of wages and supplements to be paid or provided. It is the responsibility of the public work contractor to use the proper rate. If there is a question on the proper classification to be used, please call the district office located nearest the project. District office locations and phone numbers are listed below.

Prevailing Wage Schedules are issued separately for "General Construction Projects" and "Residential Construction Projects" on a countyby-county basis.

General Construction Rates apply to projects such as: Buildings, Heavy & Highway, and Tunnel and Water & Sewer rates.

Residential Construction Rates generally apply to construction, reconstruction, repair, alteration, or demolition of one family, two family, row housing, or rental type units intended for residential use.

Some rates listed in the Residential Construction Rate Schedule have a very limited applicability listed along with the rate. Rates for occupations or locations not shown on the residential schedule must be obtained from the General Construction Rate Schedule. Please contact the local Bureau of Public Work office before using Residential Rate Schedules, to ensure that the project meets the required criteria.

Payrolls and Payroll Records

Contractors and subcontractors are required to establish, maintain, and preserve for not less that six (6) years, contemporaneous, true, and accurate payroll records.

Every contractor and subcontractor shall submit to the Department of Jurisdiction (Contracting Agency), within thirty (30) days after issuance of its first payroll and every thirty (30) days thereafter, a transcript of the original payrolls, subscribed and affirmed as true under penalty of perjury.

Paid Holidays

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

Overtime

At a minimum, all work performed on a public work project in excess of eight hours in any one day or more than five days in any workweek is overtime. However, the specific overtime requirements for each trade or occupation on a public work project may differ. Specific overtime requirements for each trade or occupation are contained in the prevailing rate schedules.

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays.

The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

Supplemental Benefits

Particular attention should be given to the supplemental benefit requirements. Although in most cases the payment or provision of supplements is straight time for all hours worked, some classifications require the payment or provision of supplements, or a portion of the supplements, to be paid or provided at a premium rate for premium hours worked. Supplements may also be required to be paid or provided on paid holidays, regardless of whether the day is worked. The Overtime Codes and Notes listed on the particular wage classification will indicate these conditions as required.

Effective Dates

When you review the schedule for a particular occupation, your attention should be directed to the dates above the column of rates. These are the dates for which a given set of rates is effective. The rate listed is valid until the next effective rate change or until the new annual determination which takes effect on July 1 of each year. All contractors and subcontractors are required to pay the current prevailing rates of wages and supplements. If you have any questions please contact the Bureau of Public Work or visit the New York State Department of Labor website (www.labor.ny.gov) for current wage rate information.

Apprentice Training Ratios

The following are the allowable ratios of registered Apprentices to Journey-workers.

For example, the ratio 1:1,1:3 indicates the allowable initial ratio is one Apprentice to one Journeyworker. The Journeyworker must be in place on the project before an Apprentice is allowed. Then three additional Journeyworkers are needed before a second Apprentice is allowed. The last ratio repeats indefinitely. Therefore, three more Journeyworkers must be present before a third Apprentice can be hired, and so on.

Please call Apprentice Training Central Office at (518) 457-6820 if you have any questions.

Title (Trade)	Ratio
Boilermaker (Construction)	1:1,1:4
Boilermaker (Shop)	1:1,1:3
Carpenter (Bldg.,H&H, Pile Driver/Dockbuilder)	1:1,1:4
Carpenter (Residential)	1:1,1:3
Electrical (Outside) Lineman	1:1,1:2
Electrician (Inside)	1:1,1:3
Elevator/Escalator Construction & Modernizer	1:1,1:2
Glazier	1:1,1:3
Insulation & Asbestos Worker	1:1,1:3
Iron Worker	1:1,1:4
Laborer	1:1,1:3
Mason	1:1,1:4
Millwright	1:1,1:4
Op Engineer	1:1,1:5
Painter	1:1,1:3
Plumber & Steamfitter	1:1,1:3
Roofer	1:1,1:2
Sheet Metal Worker	1:1,1:3
Sprinkler Fitter	1:1,1:2

If you have any questions concerning the attached schedule or would like additional information, please contact the nearest BUREAU of PUBLIC WORK District Office or write to:

New York State Department of Labor Bureau of Public Work State Office Campus, Bldg. 12 Albany, NY 12240

District Office Locations:	Telephone #	FAX #
Bureau of Public Work - Albany	518-457-2744	518-485-0240
Bureau of Public Work - Binghamton	607-721-8005	607-721-8004
Bureau of Public Work - Buffalo	716-847-7159	716-847-7650
Bureau of Public Work - Garden City	516-228-3915	516-794-3518
Bureau of Public Work - Newburgh	845-568-5287	845-568-5332
Bureau of Public Work - New York City	212-932-2419	212-775-3579
Bureau of Public Work - Patchogue	631-687-4882	631-687-4902
Bureau of Public Work - Rochester	585-258-4505	585-258-4708
Bureau of Public Work - Syracuse	315-428-4056	315-428-4671
Bureau of Public Work - Utica	315-793-2314	315-793-2514
Bureau of Public Work - White Plains	914-997-9507	914-997-9523
Bureau of Public Work - Central Office	518-457-5589	518-485-1870

Cattaraugus County General Construction

Boilermaker

JOB DESCRIPTION Boilermaker

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07/01/2019

ENTIRE COUNTIES

Allegany, Cattaraugus, Chautauqua, Chemung, Erie, Genesee, Livingston, Monroe, Niagara, Ontario, Orleans, Schuyler, Steuben, Wayne, Wyoming, Yates

WAGES

Per hours:	07/01/2019	01/01/2020
		Additional
Boilermaker	\$ 34.10	\$ 1.25

The wage rate will be 90% of the above for Maintenance work on boilers less than 100,000 pph.

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:	\$ 30.15*
Per nour.	ຈ ວບ. ເວ

*NOTE: \$28.91 of this amount is for every Hour "Paid"

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE	

HOLIDAY	
Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

1st Term at	12 Months				
Terms 3-8 a	t 6 Months				
Per Hour:					
1st 65%					
3rd 70%	4th 75%	5th 80%	6th 85%	7th 90%	8th 95%

Supplemental Benefits per hour:

1st to 6th	\$ 29.15**
7th to 8th	\$30.15***

**NOTE: \$27.91 of this amount is for every Hour "Paid"

***NOTE: \$28.91 of this amount is for every Hour "Paid"

Carpenter - Building

JOB DESCRIPTION Carpenter - Building

ENTIRE COUNTIES Chautauqua

PARTIAL COUNTIES

Allegany: Entire county except the Township of Alfred. Cattaraugus: Entire county except the Township of Perrysburg and the Village of Gowanda.

WAGES Per hour:

Carpenter	\$ 27.10
Floorlayer	27.10
Certified Welder	28.10
Hazardous Waste Worker	28.60
Diver-Dry Day	28.10
Dive Tender	28.10
Diver-Wet Day**	61.25

07/01/2019

DISTRICT 12

07/01/2019

12-7

Hazardous Waste Worker: Hazardous sites requiring personal protective equipment.

** Diver rate applies to all hours worked on the day of dive.

Depth pay for divers:	0' to 80' 81' to 100' 101' to 150' 151' and deeper	no additional fee additional \$0.50 per foot additional \$0.75 per foot additional \$1.25 per foot
Penetration pay:	0' to 50' 51' to 100' 101' and deeper	no additional fee additional \$0.75 per foot additional \$1.00 per foot

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work Schedule,' as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour worked:

Carpenter(s)	\$ 19.45
Diver Wet	19.45
Diver Dry & Tender	19.45

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY	
Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One year terms at the following percentage of Journeyman's base wage: Indentured Prior to 1/1/2016

1st	2nd	3rd	4th
50%	60%	70%	80%

Indentured After 01/01/2016

1st	2nd	3rd	4th	5th
50%	60%	65%	70%	80%

Supplemental benefits per hour worked:

1st	2nd	3rd	4th	5th
\$11.69	\$11.69	\$14.29	\$14.29	\$14.29

Carpenter - Building

JOB DESCRIPTION	Carpenter - Building
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ENTIRE COUNTIES

Erie

PARTIAL COUNTIES

Cattaraugus: Townships of Persia and Perrysburg

WAGES Per hour: Building:	07/01/2019
Carpenter	\$ 32.40
FloorLayer	32.40
Certified Welder	33.40
Hazardous Waste Worker	33.90
Diver-Dry Day	33.40
Diver Tender	33.40
Diver-Wet Day***	61.25

DISTRICT 12

07/01/2019

Hazardous Waste Worker: Hazardous sites requiring personal protective equipment.

*** Diver rate applies to all hours worked on the day of dive.

Depth pay for divers:	0' to 80' 81' to 100' 101' to 150' 151' and deeper	no additional fee additional \$0.50 per foot additional \$0.75 per foot additional \$1.25 per foot
Penetration pay:	0' to 50' 51' to 100' 101' and deeper	no additional fee additional \$0.75 per foot additional \$1.00 per foot

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule' as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour worked:

Carpenter(s)	\$ 28.18
Diver(s)	28.18

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One year terms at the following percentage of Journeyman's base wage: Indentured Prior to 01/01/2016

1st	2nd	3rd	4th
50%	60%	70%	80%

Indentured After 01/01/2016

1st	2nd	3rd	4th	5th
50%	60%	65%	70%	80%

Supplemental Benefits per hour worked:

1st	2nd	3rd	4th	5th
\$11.75	\$11.75	\$14.35	\$14.35	\$14.35

Carpenter - Building / Heavy&Highway

JOB DESCRIPTION Carpenter - Building / Heavy&Highway

ENTIRE COUNTIES

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates

PARTIAL COUNTIES

Orange: The area lying on Northern side of Orange County demarcated by a line drawn from the Bear Mountain Bridge continuing east to the Bear Mountain Circle, continue North on 9W to the town of Cornwall where County Road 107 (also known as Quaker Rd) crosses under 9W, then east on County Road 107 to Route 32, then north on Route 32 to Orrs Mills Rd, then west on Orrs Mills Rd to Route 94, continue west and south on Route 94 to the Town of Chester, to the intersection of Kings Highway, continue south on Kings Highway to Bellvale Rd, west on Bellvale Rd to Bellvale Lakes Rd, then south on Bellvale Lakes Rd to Kain Rd, southeast on Kain Rd to Route 17A, then north and southeast along Route 17A to Route 210, then follow Route 210 to NJ Border.

WAGES

Wages per hour:	07/01/2019	07/01/2020	07/01/2021
		Additional	Additional
Ormanita on UNITY from			

Carpenter - ONLY for Artificial Turf/Synthetic

DISTRICT 2

07/01/2019

Note - Does not include the operation of equipment. Please see Operating Engineers rates.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$23.10

OVERTIME PAY

See (B, E, Q, X) on OVERTIME PAGE

HOLIDAY

Paid:See (5) on HOLIDAY PAGEOvertime:See (5, 6, 16) on HOLIDAY PAGENotes:See (5, 6, 16) on HOLIDAY PAGE

When a holiday falls upon a Saturday, it shall be observed on the preceding Friday. Whan a holiday falls upon a Sunday, it shall be observed on the following Monday.

An employee taking an unexcused day off the regularly scheduled day before or after a paid Holiday shall not receive Holiday pay.

REGISTERED APPRENTICES

Wages per hour:

One year terms at the following percentage of Journeyman's wage:

1st	2nd	3rd	4th
55%	60%	70%	80%

Supplemental Benefits per hour:	
1st year term	\$ 11.55
2nd year term	11.55
3rd year term	14.15
4th year term	14.15

2-42AtSS

Carpenter - Heavy&Highway			07/01/2019
JOB DESCRIPTION Carpenter - Heavy&	Highway	DISTRICT 12	
ENTIRE COUNTIES Allegany, Cattaraugus, Chautauqua			
NAGES			
Per hour:	07/01/2019		
Carpenter	\$ 31.23		
Certified Welder	32.73		
Diver-Dry Day	32.23		
Diver-Wet Day**	56.23		
Dive Tender	32.23		
lazardous Waste Worker	33.23		
ile Driver	35.11		
1illwright	33.38		
ffluent & Slurry Diver-Dry Day	48.35		
ffluent & Slurry Diver-Wet Day	84.35		
łazardous Waste Worker: Hazardous sites	requiring personal protective equi	pment.	
* Diver rate applies to all hours worked on t	the day of the dive.		
Depth pay for divers:	0' to 50'	no additional fee	
	51' to 100'	additional \$0.50 per foot	
	101' to 150'	additional \$0.75 per foot	
	151' to 200'	additional \$1.25 per foot	
Depatration nov"	0' to 50'	no additional fee	
Penetration pay:	51' to 100'	additional \$0.75 per foot	
Penetration pay.	51 10 100		

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour worked:

Carpenter(s)	\$ 23.10
Diver Wet	24.44
Diver Dry & Tender	24.44
Pile Driver	25.05
OVERTIME PAY	

See (B, E, Q) on OVERTIME PAGE

HOLIDAY	
Paid:	See (2, 17) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

 Wages per hour:

 One year terms at the following percentage of Journeyman's wage:

 Indentured Prior to 01/01/2016

 1st
 2nd

 3rd
 4th

 55%
 60%
 70%

 Indeptured After 01/01/2016

indenture		2016		
1st	2nd	3rd	4th	5th
55%	60%	65%	70%	80%

Supplemental benefits per hour worked:

1st	2nd	3rd	4th	5th
\$11.55	\$11.55	\$14.15	\$14.15	\$14.15

Electrician

JOB DESCRIPTION Electrician

ENTIRE COUNTIES

Erie

PARTIAL COUNTIES

Cattaraugus: Only the Townships of Ashford, East Otto, Ellicottville, Farmersville, Freedom, Franklinville, Lyndon, Machias, Mansfield, New Albion, Otto, Perrysburg, Persia and Yorkshire.

Genesee: Only the Townships of Alabama, Alexander, Darien, Oakfield, Pembroke and that portion of the Towns of Batavia and Elba that are west of Little Tonawanda Creek; Tonawanda Creek; the City limits of Batavia (in effect prior to Feb. 1, 1970) and State Highway 98 north of the City of Batavia, then north on Highway 98 to the Orleans County line.

Wyoming: Only the Townships of Arcade, Attica, Bennington, Eagle, Java, Orangeville, Sheldon and Wethersfield.

WAGES

Per hour:	07/01/2019	06/01/2020
		Additional
Electrician*	\$ 35.64	\$1.80

* Includes teledata work

When shift work is mandated either in the job specification or by the contracting agency the following premiums apply:

17.3% for work from 4:30PM - 1:00AM

31.4% for work from 12:30AM - 9:00AM

Additional \$0.50/hr in shafts over 25 ft. deep and in underground tunnels over 75 ft. long.

Additional \$0.75/hr for work on toothpicks, structural steel, temporary platforms, swinging scaffolds, boatswain chairs, smoke stacks or water towers 30 ft above the floor or for work on rolling scaffolds and ladders over 50 ft.

Additional \$1.50/hr for Cable Splicers on such work as lead, and shielded cable and splices or terminations on cable 5KV and above.

Additional \$1.00/hr for Hot work (Atomic plants).

Additional \$2.00/hr for work on radio, TV, light towers and floating platforms or climbing ladders in excess of 100 ft. high.

SUPPLEMENTAL BENEFITS

Per hour:

\$ 28.10*

* NOTE - add 3% of the posted straight time or applicable premium wage rate.

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY Paid:

Paid: Overtime: See (1) on HOLIDAY PAGE See (5, 6) on HOLIDAY PAGE

DISTRICT 3

12-276HH-All

07/01/2019

REGISTERED APPRENTICES

Wages per hour:

Hour terms at the following wages:

0 to 1000 to 2000 to 3500 to 5000 to 6500 to 8000 \$ 13.20 \$ 14.25 \$ 16.05 \$ 19.60 \$ 24.95 \$ 28.50

Supplemental benefits per hour:

0 to 1000 to 5000 to 8000 \$ 12.51* \$ 22.75* \$ 28.10* * NOTE - add 3% of the posted straight time or applicable premium wage rate.

Electrician

JOB DESCRIPTION Electrician

ENTIRE COUNTIES Chautauqua

PARTIAL COUNTIES

Allegany: Only the Townships of Alma, Bolivar, Centerville, Clarksville, Cuba, Friendship, Genesee, New Hudson, Rushford, Wirt and that portion of the Townships of Amity, Angelica, Belfast, Caneadea and Scio that are west of the Genesee River. Cattaraugus: Only the Townships of Allegany, Carrollton, Cold Spring, Conewango, Dayton, Great Valley, Hinsdale, Humphrey, Ischua, Leon, Little Valley, Napoli, Olean, Portville, Red House, Randolph, Salamanca and South Valley.

WAGES			
Per hour:	07/01/2019	01/01/2020	01/01/2021
		Additional	Additional
Electrician*	\$ 36.51	\$1.70	\$1.90

* Includes teledata work.

When shift work is mandated either in the job specification or by the contracting agency the following premiums apply:

17.3% for work from 4:30PM - 1:00AM

31.4% for work from 12:30AM - 9:00AM

Additional 15% above wage for work 40' above floor, or in underground mines or tunnels or from suspension-type personnel lift equipment.

SUPPLEMENTAL BENEFITS

Per hour:

\$ 22.41*

NOTE - add 3% of the posted straight time or applicable premium wage rate.

* NOTE - \$10.72 of this amount is paid at straight time, the remaining balance of \$11.69 is paid at the same premium as the wages.

OVERTIME PAY

See (B, *E, Q) on OVERTIME PAGE

* Double-time for all work on Saturday in excess of 10 hours.

HOLIDAY

Paid:See (1) on HOLIDAY PAGEOvertime:See (5, 6) on HOLIDAY PAGE

Hour terms at the following percentage of Journeyman's wage:

REGISTERED APPRENTICES

Wages per hour:

0 to 2001 to 5001 to 5751 to 6601 to 7351 to 1001 to 2751 to 3501 to 4251 to 2000 3500 8200 1000 2750 4250 5000 5750 6600 7350 40% 45% 55% 60% 65% 70% 75% 80% 85% 90% Supplemental benefits per hour: 07/01/2018 \$8.27 \$8.27 \$14.89* \$15.27* \$18.32* \$18.90* \$19.49* \$20.07* \$20.66* \$21.24*

NOTE - add 3% of the posted straight time or applicable premium wage rate to all terms.

* Note - \$10.72 of this amount is paid at straight time, the remaining balance is paid at the same premium as the wages.

07/01/2019

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07/01/2019

JOB DESCRIPTION Elevator Constructor

Published by the New York State Department of Labor PRC Number 2019009051 Cattaraugus County

3-14

DISTRICT 3

ENTIRE COUNTIES

Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Niagara, Orleans, Wyoming

WAGES	
Per hour:	07/01/2019
Elevator Constructor	\$ 49.81
Helper	34.87

** IMPORTANT NOTICE - EFFECTIVE 04/01/2009 **

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday or Tuesday thru Friday.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

....

\$ 33.71 Note - add 6% of regular hourly rate for all hours worked.

OVERTIME PAY

See (D, O) on OVERTIME PAGE

 HOLIDAY

 Paid:
 See (5, 6, 15, 16) on HOLIDAY PAGE

 Overtime:
 See (5, 6, 15, 16) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One year (1,700 hour each) terms at the following percentage of Journeyman's wage:

1st*	2nd	3rd	4th
55%	65%	70%	80%

Supplemental benefits per hour:

* Note - 0-6 months of the 1st year term is paid at 50% of Journeyman's wage with no Supplemental benefits.

\$ 33.71

Note - add 6% of regular hourly rate for all hours worked.

Glazier				07/01/2019
JOB DESCRIPTION Glazier			DISTRICT 3	
ENTIRE COUNTIES Allegany, Cattaraugus, Chautauq	ua, Erie, Genesee, Niagara, C	Drleans, Wyoming		
WAGES				
Per hour:	07/01/2019	05/01/2020 Additional	05/01/2021 Additional	
Glazier Working off Suspended	\$ 27.12	\$ 1.20	\$ 1.20	
Scaffold (Swing Stage)	28.12	1.20	1.20	
Maintenance	16.94*	0.85	0.90	

* Note - This rate to be used only for all repair and replacement work such as glass breakage, glass replacement, door repair and board ups.

** IMPORTANT NOTICE **

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

\$ 22.50
14.20

OVERTIME PAY

See (B, E2, F, R) on OVERTIME PAGE

HOLIDAY

Paid:	See (1) on HOLIDAY PAGE for Glazier and Glazier Apprentices.
Paid:	See (5, 6) on HOLIDAY PAGE for Maintenance
Overtime:	See (5, 6) on HOLIDAY PAGE.

REGISTERED APPRENTICES

Wages per hour:

Glazier: 1000 hour terms at the following percentage of Journeyman's wage:

1st	2nd	3rd	4th	5th	6th	7th	8th
50%	55%	60%	65%	70%	75%	80%	90%

Supplemental benefits per hour:

1st & 2nd terms	\$ 7.95
3rd & 4th terms	8.80
All other terms	10.20

JOB DESCRIPTION Insulator - Heat & Frost

ENTIRE COUNTIES

Insulator - Heat & Frost

Allegany, Cattaraugus, Chautauqua, Erie, Niagara, Wyoming

PARTIAL COUNTIES

Genesee: Only the Townships of Alabama, Alexander, Darien, Oakfield and Pembroke.

WAGES	
Per Hour:	07/01/2019
Heat & Frost Insulator	\$ 33.70
SUPPLEMENTAL BENEFITS	

Per hour:

\$ 23.89

OVERTIME PAY

See (B, *E, **Q) on OVERTIME PAGE

* Note - Double time after 10 hours on Saturday.

** Note - Triple time on Labor Day if WORKED.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One year terms at the following percentage of Journeyman's wage:

1st	2nd	3rd	4th
50%	60%	70%	80%

Supplemental Benefits per hour:

1st and 2nd	\$ 18.99
All other terms	\$ 23.89

Ironworker

JOB DESCRIPTION Ironworker

ENTIRE COUNTIES

Cattaraugus, Chautauqua

PARTIAL COUNTIES

Allegany: Entire county except the Towns of Birdsall, Burns and Grove.

Erie: All except the Town of Grand Island north of Whitehaven Road.

Genesee: Only the Townships of Alabama, Alexander, Darien and Pembroke

Steuben: Only the Townships of Canisteo, Freemont, Greenwood, Hartsville, Hornell, Hornellsville, Howard, Jasper, Troupsburg and West Union

Wyoming: Only the Townships of Arcade, Attica, Bennington, Eagle, Gainsville, Java, Orangeville, Pike, Sheldon, Warsaw and Wethersfield.

DISTRICT 3

DISTRICT 3

07/01/2019

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3-660

07/01/2019

WAGES

s ENEFITS TIME PAGE See (1) on H	\$ 31.10 31.10 31.10 31.10 31.10 31.10 31.10 31.10 28.75 29.67 \$ 27.15 28.65	Additional \$ 1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25	Additional \$ 1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25
ENEFITS TIME PAGE See (1) on F	31.10 31.10 31.10 31.10 31.10 31.10 28.75 29.67 \$ 27.15 28.65	1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25	1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25
ENEFITS TIME PAGE See (1) on F	31.10 31.10 31.10 31.10 31.10 31.10 28.75 29.67 \$ 27.15 28.65	1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25	1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25
ENEFITS TIME PAGE See (1) on F	31.10 31.10 31.10 31.10 28.75 29.67 \$ 27.15 28.65	1.25 1.25 1.25 1.25 1.25 1.25 1.25	1.25 1.25 1.25 1.25 1.25 1.25 1.25
ENEFITS TIME PAGE See (1) on F	31.10 31.10 31.10 28.75 29.67 \$ 27.15 28.65	1.25 1.25 1.25 1.25 1.25 1.25	1.25 1.25 1.25 1.25 1.25 1.25
ENEFITS TIME PAGE See (1) on F	31.10 31.10 28.75 29.67 \$ 27.15 28.65	1.25 1.25 1.25	1.25 1.25 1.25
ENEFITS TIME PAGE See (1) on F	31.10 28.75 29.67 \$ 27.15 28.65	1.25 1.25	1.25 1.25
TIME PAGE See (1) on F	28.75 29.67 \$ 27.15 28.65 HOLIDAY PAGE	1.25	1.25
TIME PAGE See (1) on F	29.67 \$ 27.15 28.65 HOLIDAY PAGE		
TIME PAGE See (1) on F	\$ 27.15 28.65 HOLIDAY PAGE	1.25	1.25
TIME PAGE See (1) on F	28.65 HOLIDAY PAGE		
See (1) on I	28.65 HOLIDAY PAGE		
See (1) on I	28.65 HOLIDAY PAGE		
See (1) on I	HOLIDAY PAGE		
See (5, 6) 0 ENTICES	n HOLIDAY PAGE		
ollowing wage:			
3rd	4th		
\$ 20.50	\$ 22.50		
per hour:			
3rd	4th		
5 \$ 23.02	\$ 24.39		
1 66			

ENTIRE COUNTIES

Allegany, Chautauqua

PARTIAL COUNTIES

Cattaraugus: Entire county except the Town of Perrysburg and the Village of Gowanda.

WAGES

Per hour:	07/01/2019	07/01/2020 Additional	07/01/2021 Additional
Basic and Flagman	\$ 24.27	\$ 1.00	\$ 1.10
Blaster, Nozzelman, Curb	25.27	1.00	1.10
and Flatwork Formsetter not	25.27	1.00	1.10
on structures, Pipelayer	25.27	1.00	1.10
Work 40 ft. and up	24.42	1.00	1.10
Hazardous Waste	25.77	1.00	1.10
Deleader & Asbestos Removal	26.27	1.00	1.10
OSHA Level C or	26.27	1.00	1.10
greater protective suit or	26.27	1.00	1.10
any anti-contamination	26.27	1.00	1.10
clothing is required	26.27	1.00	1.10
With supplied air respirator	27.27	1.00	1.10

** IMPORTANT NOTICE **

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. Saturday may be used as a make-up day at time and one half of the hourly rate.

07/01/2019

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DISTRICT 3

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

\$ 17.27

OVERTIME PAY See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid:See (1) on HOLIDAY PAGEOvertime:See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

1000 hour terms at the following percentage of Journeyman's wage:

1st	2nd	3rd	4th
70%	80%	85%	90%

Supplemental benefits per hour:

\$ 17.27

Laborer - Building

JOB DESCRIPTION Laborer - Building

ENTIRE COUNTIES

PARTIAL COUNTIES

Cattaraugus: Only the Townships of Perrysburg and the Village Gowanda.

WAGES

CLASS A: Basic, Safety Man, Flagman, Tool Room Man, Nurseryman, Demolition Worker, Top Man, Wrecker, IBC Barriers Except on Structures, Guard Rail, Asphalt Shovelers, Foundation Laborer over 8' in Depth, Hod Carriers, Plaster Tender, Plaster Scaffold Builder, Pneumatic Gas, Electric Tool Operator including all forms of Busters, Jackhammers and Chipping Guns, Steel Burners.

CLASS B: Mortar Mixer, Asphalt Smoothers, Pneumatic Gas, Electric Tool Operator including all forms of Busters, Jackhammers and Chipping Guns over 8' in depth.

CLASS C: Worker on any Swing Scaffold, Blaster, Plumbing Laborer, Wagon Drill Operator, Bottomman (caisson or cofferdam), Laser Setter, Asphalt Rakers, Asphalt Screed Man.

CLASS D: Stone Cutter, Curb Setter and Flag Layer.

CLASS E: Wearing of replaceable cartridge respirator.

CLASS F: Asbestos Removal, Deleader.

CLASS G: Hazardous Waste Worker.

Per hour: Building Laborer:	07/01/2019	07/01/2020 Additional
CLASS A	\$ 27.88	\$ 1.75
CLASS B	28.05	1.75
CLASS C	28.16	1.75
CLASS D	28.63	1.75
CLASS E	28.88	1.75
CLASS F	29.38	1.75
CLASS G	29.88	1.75

SUPPLEMENTAL BENEFITS

Per hour:

\$ 25.90

OVERTIME PAY See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

3-621b 07/01/2019

Paid:	See (22) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

Hour terms at the following percentage of Journeyman's wage:

0	to	500	to 1000	to	1500	to	2000	to	2500	to	3000	to	4000
	55	5%	60%	65	%	70)%	75	%	80	%	90	%

Supplemental benefits per hour:

\$ 25.90

Laborer - Heavy&Highway

JOB DESCRIPTION Laborer - Heavy&Highway

DISTRICT 3

ENTIRE COUNTIES Allegany, Cattaraugus

PARTIAL COUNTIES

Chautauqua: Only the Townships of Busti, Carroll, Chautauqua, Clymer, Ellery, Ellicott, Ellington, French Creek, Gerry, Harmony, Kiantone, Mina, North Harmony, Poland, Sherman, Stockton and the City of Jamestown.

WAGES

GROUP A: Basic, Drill Helper, Flagman, Outboard and Hand Boats. Chain Saw, Concrete Aggregate Bin, Concrete Bootmen, Gin Buggy, Hand or Machine Vibrator, Jack Hammer, Mason Tender, Mortar Mixer, Pavement Breaker, Handlers of Steel Mesh, Small Generators for Laborers' Tools, Pipe Layers, Vibrator Type Rollers, Tamper, Drill Doctor, Water Pump Operator (2" and Single Diaphragm), Nozzle (Asphalt, Gunite, Seeding, and Sand Blasting), Laborers on Chain Link Fence Erection, Rock Splitter and Power Unit, Pusher Type Concrete Saw and all other Gas, Electric, Oil and Air Tool Operators, Wrecking Laborer, Grade Checker.

GROUP B: All Rock or Drilling Machine Operators (Except Quarry Master and Similar Type), Acetylene Torch Operators and Powderman. Blasters, Curb and Flatwork Formsetters not on structures, Stone or Granite Curb Setters, Designated Asphalt Rakers (not on cold patch), Tail or Screw Operator on Asphalt Paver.

Per hour:	07/01/2019	07/01/2020	07/01/2021		
		Additional	Additional		
GROUP A	\$ 27.84	\$1.50	\$1.50		
GROUP B	28.24	\$1.50	\$1.50		
Hazardous waste removal, lead abatement, asbestos abatement add \$ 1.50					

SUPPLEMENTAL BENEFITS

Per hour:

\$ 22.15

OVERTIME PAY See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid:See (5, 6) on HOLIDAY PAGEOvertime:See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per:

1000 hour terms at the following percentage of Journeyman's wage:

1st	2nd	3rd	4th
70%	80%	85%	90%

Supplemental benefits per hour:

\$ 22.15

3-621h Zone 1

Lineman Electrician

JOB DESCRIPTION Lineman Electrician ENTIRE COUNTIES

DISTRICT 6

3-210b

07/01/2019

07/01/2019

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates

WAGES

Per hour:

NOTE: Includes Teledata Work within ten (10) feet of High Voltage Transmission Lines

Below rates applicable on all overhead and underground distribution and maintenance work, and all overhead and underground transmission line work and the installation of fiber optic cable where no other construction trades are or have been involved. (Ref #14.01.01)

	07/01/2019	05/04/2020
Lineman, Technician	\$ 52.05	\$ 53.50
Crane, Crawler Backhoe	52.05	53.50
Welder, Cable Splicer	52.05	53.50
Digging Mach. Operator	46.85	48.15
Tractor Trailer Driver	44.24	45.48
Groundman, Truck Driver	41.64	42.80
Equipment Mechanic	41.64	42.80
Flagman	31.23	32.10

Additional \$1.00 per hour for entire crew when a helicopter is used.

Below rates applicable on all electrical sub-stations, switching structures, fiber optic cable and all other work not defined as "Utility outside electrical work". (Ref #14.02.01-A)

Lineman, Technician	\$ 52.05	\$ 53.50
Crane, Crawler Backhoe	52.05	53.50
Cable Splicer	57.26	58.85
Certified Welder -		
Pipe Type Cable	54.65	56.18
Digging Mach. Operator	46.85	48.15
Tractor Trailer Driver	44.24	45.48
Groundman, Truck Driver	41.64	42.80
Equipment Mechanic	41.64	42.80
Flagman	31.23	32.10

Additional \$1.00 per hour for entire crew when a helicopter is used.

Below rates apply on switching structures, maintenance projects, railroad catenary install/maintenance third rail installation, bonding of rails and pipe type cable and installation of fiber optic cable. (Ref #14.02.01-B)

Lineman, Tech, Welder	\$ 53.37	\$ 54.82
Crane, Crawler Backhoe	53.37	54.82
Cable Splicer	58.71	60.30
Certified Welder -		
Pipe Type Cable	56.04	57.56
Digging Mach. Operator	48.03	49.34
Tractor Trailer Driver	45.36	46.60
Groundman, Truck Driver	42.70	43.86
Equipment Mechanic	42.70	43.86
Flagman	32.02	32.89

Additional \$1.00 per hour for entire crew when a helicopter is used.

Below rates applicable on all overhead and underground transmission line work & fiber optic cable where other construction trades are or have been involved. This applies to transmission line work only, not other construction. (Ref #14.03.01)

Lineman, Tech, Welder	\$ 54.56	\$ 56.01
Crane, Crawler Backhoe	54.56	56.01
Cable Splicer	54.56	56.01
Digging Mach. Operator	49.10	50.41
Tractor Trailer Driver	46.38	47.61
Groundman, Truck Driver	43.65	44.81
Equipment Mechanic	43.65	44.81
Flagman	32.74	33.61

Additional \$1.00 per hour for entire crew when a helicopter is used.

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED MULTIPLE SHIFTS OF AT LEAST FIVE (5) DAYS DURATION WORKED BETWEEN THE HOURS LISTED BELOW:

1ST SHIFT	8:00 AM to 4:30 PM REGULAR RATE
2ND SHIFT	4:30 PM to 1:00 AM REGULAR RATE PLUS 17.3 %
3RD SHIFT	12:30 AM to 9:00 AM REGULAR RATE PLUS 31.4 %

** IMPORTANT NOTICE **

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. *Effective 05/06/2013, Tuesday thru Friday may be worked with no make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour worked (also required on non-worked holidays):

The following SUPPLEMENTAL BENEFITS apply to all classification categories of CONSTRUCTION, TRANSMISSION and DISTRIBUTION.

Journeyman	\$ 24.15	\$ 24.90
	*plus 6.75% of	*plus 6.75% of
	hourly wage	hourly wage

*The 6.75% is based on the hourly wage paid, straight time rate or premium rate.

OVERTIME PAY

See (B, E, Q,) on OVERTIME PAGE. *Note* Double time for all emergency work designated by the Dept. of Jurisdiction. NOTE: WAGE CAP...Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY

PaidSee (5, 6, 8, 13, 25) on HOLIDAY PAGE plus Governor of NYS Election Day.OvertimeSee (5, 6, 8, 13, 25) on HOLIDAY PAGE plus Governor of NYS Election Day.

NOTE: All paid holidays falling on Saturday shall be observed on the preceding Friday. All paid holidays falling on Sunday shall be observed on the following Monday. Supplements for holidays paid at straight time.

REGISTERED APPRENTICES

WAGES: 1000 hour terms at the following percentage of the applicable Journeyman Lineman wage.

1st	2nd	3rd	4th	5th	6th	7th
60%	65%	70%	75%	80%	85%	90%

SUPPLEMENTAL BENEFITS: Same as Journeyman

6-1249a

07/01/2019

Lineman Electrician - Teledata

JOB DESCRIPTION Lineman Electrician - Teledata

DISTRICT 6

ENTIRE COUNTIES

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES

Per hour:

. . .

For outside work, stopping at first	07/01/2019	01/01/2020	01/01/2021
Cable Splicer	\$ 32.78	\$ 33.77	\$ 34.78
Installer, Repairman	\$ 31.12	\$ 32.05	\$ 33.01

			The Number Eeree
Teledata Lineman	\$ 31.12	\$ 32.05	\$ 33.01
Tech., Equip. Operator	\$ 31.12	\$ 32.05	\$ 33.01
Groundman	\$ 16.49	\$ 16.99	\$ 17.50

NOTE: EXCLUDES Teledata work within ten (10) feet of High Voltage (600 volts and over) transmission lines. For this work please see LINEMAN.

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED MULTIPLE SHIFTS OF AT LEAST FIVE (5) DAYS DURATION WORKED:

1ST SHIFT	REGULAR RATE
2ND SHIFT	REGULAR RATE PLUS 10%
3RD SHIFT	REGULAR RATE PLUS 15%

SUPPLEMENTAL BENEFITS

Per hour:	
-----------	--

Journeyman	\$ 4.73	\$ 4.73	\$ 4.73
	*plus 3% of	*plus 3% of	*plus 3% of
	wage paid	wage paid	wage paid

*The 3% is based on the hourly wage paid, straight time rate or premium rate.

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

NOTE: WAGE CAP...Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY	
Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6, 16) on HOLIDAY PAGE

6-1249LT - Teledata

DISTRICT 6

07/01/2019

Lineman Electrician - Traffic Signal, Lighting

JOB DESCRIPTION Lineman Electrician - Traffic Signal, Lighting

ENTIRE COUNTIES

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Cortland, Delaware, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Warren, Washington, Wayne, Wyoming, Yates

WAGES

Lineman/Technician shall perform all overhead aerial work. A Lineman/Technician on the ground will install all electrical panels, connect all grounds, install and connect all electrical conductors which includes, but is not limited to road loop wires; conduit and plastic or other type pipes that carry conductors, flex cables and connectors, and to oversee the encasement or burial of such conduits or pipes.

A Groundman/Groundman Truck Driver shall: Build and set concrete forms, handle steel mesh, set footer cages, transport concrete in a wheelbarrow, hand or machine concrete vibrator, finish concrete footers, mix mortar, grout pole bases, cover and maintain footers while curing in cold weather, operate jack hammer, operate hand pavement breaker, tamper, concrete and other motorized saws, as a drill helper, operate and maintain generators, water pumps, chainsaws, sand blasting, operate mulching and seeding machine, air tools, electric tools, gas tools, load and unload materials, hand shovel and/or broom, prepare and pour mastic and other fillers, assist digger operator equipment operator in ground excavation and restoration, landscape work and painting. Only when assisting a lineman technician, a groundman/groundman truck driver may assist in installing conduit, pipe, cables and equipment.

A flagger's duties shall consist of traffic control only. (Ref #14.01.01)

Per hour:		
	07/01/2019	05/04/2020
Lineman, Technician	\$ 45.00	\$ 46.20
Crane, Crawler Backhoe	45.00	46.20
Certified Welder	47.25	48.51
Digging Machine	40.50	41.58
Tractor Trailer Driver	38.25	39.27
Groundman, Truck Driver	36.00	36.96
Equipment Mechanic	36.00	36.96
Flagman	27.00	27.72

Above rates applicable on all Lighting and Traffic Signal Systems with the installation, testing, operation, maintenance and repair of all traffic control and illumination projects, traffic monitoring systems, road weather information systems and the installation of Fiber Optic Cable.

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED MULTIPLE SHIFTS OF AT LEAST FIVE (5) DAYS DURATION WORKED BETWEEN THE HOURS LISTED BELOW:

1ST SHIFT	8:00 AM TO 4:30 PM	REGULAR RATE
2ND SHIFT	4:30 PM TO 1:00 AM	REGULAR RATE PLUS 17.3%
3RD SHIFT	12:30 AM TO 9:00 AN	I REGULAR RATE PLUS 31.4%

** IMPORTANT NOTICE **

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. *Effective 05/06/2013, Tuesday thru Friday may be worked with no make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour worked (but also required on non-worked holidays):

Journeyman	\$ 24.15	\$ 24.90
	*plus 6.75% of	*plus 6.75% of
	hourly wage	hourly wage

*The 6.75% is based on the hourly wage paid, straight time rate or premium rate. Supplements paid at STRAIGHT TIME rate for holidays.

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE. *Note* Double time for all emergency work designated by the Dept. of Jurisdiction. NOTE: WAGE CAP...Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY

Paid: See (5, 6, 8, 13, 25) on HOLIDAY PAGE plus Governor of NYS Election Day. Overtime: See (5, 6, 8, 13, 25) on HOLIDAY PAGE plus Governor of NYS Election Day.

NOTE: All paid holidays falling on Saturday shall be observed on the preceding Friday. All paid holidays falling on Sunday shall be observed on the following Monday. Supplements for holidays paid at straight time.

REGISTERED APPRENTICES

WAGES: Per hour. 1000 hour terms.

	07/01/2019	05/04/2020
1st term	\$ 27.00	\$ 27.72
2nd term	29.25	30.03
3rd term	31.50	32.34
4th term	33.75	34.65
5th term	36.00	36.96
6th term	38.25	39.27
7th term	40.50	41.58

SUPPLEMENTAL BENEFITS: Same as Journeyman

Lineman Electrician - Tree Trimmer

JOB DESCRIPTION Lineman Electrician - Tree Trimmer

ENTIRE COUNTIES

Albany, Alegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates

WAGES

Per hour:

Applies to line clearance, tree work and right-of-way preparation on all new or existing energized overhead or underground electrical, telephone and CATV lines. This also would include stump removal near underground energized electrical lines, including telephone and CATV lines.

6-1249a-LT

DISTRICT 5

	07/01/2019
Tree Trimmer	\$ 25.79
Equipment Operator	22.81
Equipment Mechanic	22.81
Truck Driver	18.99
Groundman	15.64
Flag person	11.27

SUPPLEMENTAL BENEFITS

Per hour worked (but also required on non-worked holidays):

Journeyman	\$ 9.98
	*plus 3% of
	hourly wage

* The 3% is based on the hourly wage paid, straight time rate or premium rate.

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

NOTE: WAGE CAP...Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY

Paid: See (5, 6, 8, 15, 16, 25) on HOLIDAY PAGE Overtime: See (5, 6, 8, 15, 16, 25) on HOLIDAY PAGE NOTE: All paid holidays falling on a Saturday shall be observed on the preceding Friday. All paid holidays falling on a Sunday shall be observed on the following Monday.

6-1249TT

07/01/2019

Mason - Building

JOB DESCRIPTION Mason - Building

ENTIRE COUNTIES Chautauqua

PARTIAL COUNTIES

Allegany: Entire county except the Townships of Alfred, Almond, Andover and Burns.

Cattaraugus: Entire county except the Township of Perrysburg and the Village of Gowanda.

IIAOLU			
Per hour:	07/01/2019	07/01/2020	07/01/2021
Building:		Additional	Additional
Bricklayer Cement	\$ 31.83	\$ 1.00	\$ 1.15
Mason, Plasterer, Stone			

Mason, Tuck Pointer

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work Schedule,' as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

WAGES

Journeyman

\$ 20.87

OVERTIME PAY See (B,E,E2*,Q) on OVERTIME PAGE

*Note - Or other conditions beyond the employer's control such as fire or natural disaster.

HOLIDAY	
Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One year terms at the following percentage of Journeyman's wage:

1st	2nd	3rd	4th
\$ 19.08	\$ 21.90	\$ 25.21	\$ 28.53

Supplemental benefits per hour:

1st	2nd	3rd	4th
\$ 12.46	\$ 14.93	\$ 16.91	\$ 18.88

Mason - Building

JOB DESCRIPTION Mason - Building

ENTIRE COUNTIES Erie, Niagara

PARTIAL COUNTIES

Cattaraugus: Only the Township of Perrysburg and the Village of Gowanda.

WAGES

Per hour: 07/01/2019 Plasterer \$ 30.15

Additional \$3.00/hr for work on swing stage over 20 feet.

SUPPLEMENTAL BENEFITS

Per hour:

\$20.49

OVERTIME PAY

Exterior work only See (B, E, E2, Q) on OVERTIME PAGE. All other work See (B, E, Q) on OVERTIME PAGE.

HOLIDAY
Paid:
Overtime:

See (1) on HOLIDAY PAGE See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

Hour terms at the following dollar amounts:

0	to	1000	to	2000	to	3000	to	4000	to	4700	to	5400	to	6000	to	7000	to	8000
	\$1	2.00	\$ 1	4.00	\$ 1	5.00	\$ 1	6.00	\$ 1	7.00	\$ 1	8.00	\$ 1	9.00	\$ 2	20.00	\$ 2	21.00

Supplemental benefits per hour:

Hour terms at the following dollar amounts:

0 to 4000 to 4700 to 5400 to 6000 to 8000 \$ 2.50 \$ 3.50 \$4.50 \$ 7.50 \$ 5.50

Mason - Building

JOB DESCRIPTION Mason - Building

ENTIRE COUNTIES Erie, Niagara

PARTIAL COUNTIES

Cattaraugus: Only the Township of Perrysburg and the Village of Gowanda.

WAGES

Per Hour:	07/01/2019
Building:	
Bricklayer	\$ 31.49
Stone Mason	31.49
Tuck Pointer	31.49

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

5-3B - Jam - Z2

07/01/2019

3-9-Pltr

07/01/2019

DISTRICT 5

Mason - Heav	v&Highw	21/					07/01/2019
1st \$ 8.41	2nd \$ 11.36	3rd \$ 11.23	4th \$ 14.42	5th \$ 16.47	6th \$ 19.69		3-111Erie
Supplemental be	enefits per l	nour:					
1st \$ 15.00	2nd \$ 16.50	3rd \$ 19.50	4th \$ 22.50	5th \$ 25.50	6th \$ 28.50		
750 hour terms a		-					
REGISTERED Wages per hour:		TICES					
Paid: Overtime:		See (5, 6) on	HOLIDAY PAGE				
See (B, E, Q, V) HOLIDAY Paid:	UIUVERI		OLIDAY PAGE	:			
Per hour:		\$ 31.67					
Additional \$0.25 Additional \$1.00 SUPPLEMENT	per hr whe	n required to v			jilei.		
Cement Mason	nor hr for G	\$ 30.00	or ovtorior oo	Additional \$ 1.25	hor		
WAGES Per hour:		07/01/2019		07/01/2020			
PARTIAL COU Cattaraugus: Or		nship of Perry	sburg and the	Village of Gov	vanda.		
ENTIRE COUN Erie							
JOB DESCRIP		son - Building	/ Heavy&High	way		DISTRICT 3	
Mason - Build	ling / Heav	vy&Highway	1				07/01/2019
1st \$ 10.95	2nd \$ 16.43	3rd \$ 20.70	4th \$ 24.20				5-3B-Z3
Supplemental be	-	nour:	,				
1st \$ 24.87	2nd \$ 25.39	3rd \$ 27.12	4th \$ 29.63				
1250 hour terms	at the follo	wing wage:					
Paid: Overtime: REGISTERED Wages per hour:		See (5, 6) on	oliday page Holiday pa	<u>E</u> GE			
HOLIDAY	conditions	-			or natural disaster	r.	
OVERTIME PA See (B,E,E2*,Q)	on OVERT					_	
Journeyman		\$ 28.34					

JOB DESCRIPTION Mason - Heavy&Highway

DISTRICT 5

ENTIRE COUNTIES

Allegany, Broome, Chautauqua, Chemung, Chenango, Cortland, Delaware, Genesee, Livingston, Monroe, Ontario, Orleans, Otsego, Schuyler, Seneca, Steuben, Tioga, Tompkins, Wayne, Wyoming, Yates

PARTIAL COUNTIES

Cattaraugus: Enitre county except in the Township of Perrysburg and the Village of Gowanda only the Bricklayer classification applies. Erie: Only the Bricklayer classification applies. Niagara: Only the Bricklayer classification applies.

WAGES

INAGEO			
Per hour:	07/01/2019	07/01/2020	07/01/2021
Heavy & Highway:		Additional	Additional
Cement Mason	\$ 31.28	\$ 1.00	\$ 1.15
Bricklayer	31.28		

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman	\$ 22.23
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OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

1500 hour terms at the following percentage of Journeyman's wage:

1st	2nd	3rd	4th
50%	60%	70%	80%

Supplemental benefits per hour:

1st term	\$ 13.93
2nd - 4th term	22.23

Mason - Tile Finisher

JOB DESCRIPTION	Mason - Tile Finisher
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ENTIRE COUNTIES Chautauqua

PARTIAL COUNTIES

Allegany: Entire County with the exception of the Towns of Alfred, Almond, Andover and Burns. Cattaraugus: With the exception of the Township of Perrysburg and the Village of Gowanda.

WAGES			
Per hour:	07/01/2019	07/01/2020	07/01/2021
Building:		Additional	Additional
Marble, Slate, Terrazzo	\$ 27.00	\$ 1.00	\$ 1.15
and Tile Finisher			

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

\$17.81

OVERTIME PAY

See (B,E,E2*,Q) on OVERTIME PAGE *Note - Or other conditions beyond the employer's control such as fire or natural disaster.

HOLIDAY

Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

DISTRICT 5

5-3h

07/01/2019

1st and 2nd term 1200 hours and 3rd term 1300 hours at the following percentage of Journeyman's rate:

1st	2nd	3rd
\$ 18.03	\$ 21.37	\$ 22.28

Supplemental benefits per hour:

1st	2nd	3rd
\$ 8.78	\$ 9.94	\$ 13.53

Mason - Tile Finisher

JOB DESCRIPTION Mason - Tile Finisher

ENTIRE COUNTIES Erie, Niagara, Orleans

PARTIAL COUNTIES

Cattaraugus: Only the Township of Perrysburg and the Village of Gowanda.

WAGES Per hour:	07/01/2019
Building: Marble, Slate, Terrazzo and Tile Finisher	\$ 29.30

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

\$ 16.13

OVERTIME PAY

See (B,E,E2*,Q) on OVERTIME PAGE

*Note - Or other conditions beyond the employer's control such as fire or natural disaster.

HOLIDAY

Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

1200 hours 1st and 2nd term and 1300 hours 3rd term at the following wage:

1st	2nd	3rd
\$ 18.74	\$ 21.31	\$ 24.13

Supplemental benefits per hour:

1st	2nd	3rd
\$ 8.44	\$ 10.43	\$ 12.17

Mason - Tile Setter

JOB DESCRIPTION Mason - Tile Setter

ENTIRE COUNTIES Erie, Niagara, Orleans

PARTIAL COUNTIES

Cattaraugus: Only in the Township of Perrysburg and the Village of Gowanda.

07/01/2019

\$ 31.97

WAGES	
Dankarım	

Per hour: Building: Marble, Slate, Terrazzo and Tile Setter 5-3TF - Z3

5-3TF - Z2

07/01/2019

07/01/2019

Pag	зe	51	1

DISTRICT 5

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

\$27.36

OVERTIME PAY

See (B,E,E2*,Q) on OVERTIME PAGE

*Note - Or other conditions beyond the employer's control such as fire or natural disaster.

HOLIDAY

Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

1250 hour terms at the following wage:

1st	2nd	3rd	4th
\$ 24.65	\$ 25.12	\$ 26.89	\$ 29.93

Supplemental benefits per hour:

1st	2nd	3rd	4th
\$ 10.87	\$ 16.35	\$ 20.53	\$ 23.45

Mason - Tile Setter

JOB DESCRIPTION Mason - Tile Setter

ENTIRE COUNTIES Chautauqua

PARTIAL COUNTIES

Allegany: Entire County with the exception of the towns of Alfred, Almond, Andover and Burns. Cattaraugus: With the exception of the Township of Perrysburg and the Village of Gowanda.

Per hour:	07/01/2019	07/01/2020	07/01/2021
Building:		Additional	Additional
Marble, Slate, Terrazzo	\$ 32.19	\$ 1.00	\$ 1.15
and Tile Setter			

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman

OVERTIME PAY

\$ 18.16

See (B,E,E2*,Q) on OVERTIME PAGE

*Note - Or other conditions beyond the employer's control such as fire or natural disaster.

HOLIDAY

Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One year terms at the following percentage of Joureyman's wage:

1st	2nd	3rd	4th
\$ 20.14	\$ 23.24	\$ 26.32	\$ 29.42

5-3TS - Z3

07/01/2019

5-3TS - Z2

07/01/2019

Supplemental benefits per hour:

1st	2nd	3rd	4th
\$ 9.99	\$ 11.95	\$ 13.92	\$ 15.88

Millwright

WAGES

JOB DESCRIPTION Millwright

DISTRICT 7

ENTIRE COUNTIES

Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Herkimer, Madison, Seneca, Tioga, Yates

\$ 22.05

Per Hour	07/01/2019	07/01/2020 Additional
Building	\$ 28.18	\$ 1.60
Heavy & Highway*	30.18	1.60

*Effective 5/1/2019, all Heavy and Highway Millwright construction will be paid at the rate indicated above.

NOTE - ADDITIONAL PREMIUMS PAID FOR THE FOLLOWING WORK LISTED BELOW (amount subject to any overtime premiums): - Certified Welders shall receive \$1.75 per hour in addition to the current Millwright's rate, provided he/she is directed to perform certified welding.

- On building projects, if a work site has been declared a hazardous site by the Owner and the use of protective gear (including, as a minimum, air purifying canister-type chemical respirators) are required, then that employee shall receive a \$1.50 premium per hour.

- H/H work performed on hazardous waste sites where employees are required to wear protective gear shall receive an additional \$2.00 per hour over the Millwright H/H rate for all hours worked on the day protective gear was worn

- An employee performing the work of a machinist shall receive \$2.00 per hour in addition to the current Millwright's rate. For the purpose of this premium to apply, a "machinist" is a person who uses a lathe, Bridgeport, milling machine or similar type of tool to make or modify parts. - When performing work underground at 500 feet and below, the employee shall receive an additional \$0.50. This amount will increase to \$1.00 on 7/1/2020.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman

OVERTIME PAY

See (B, E, *E2, Q) on OVERTIME PAGE

*Note - Saturday may be used as a make-up day and worked at the straight time rate of pay during a work week when conditions such as weather, power failure, fire, or natural disaster prevent the performance of work on a regular scheduled work day.

HOLIDAY

See (1) on HOLIDAY PAGE Paid:

See (5, 6) on HOLIDAY PAGE Overtime:

NOTE: Any holiday that falls on Sunday shall be observed the following Monday. Any holiday that falls on a Saturday shall be observed the preceding Friday.

REGISTERED APPRENTICES

WAGES: (1) year terms at the following percentage of Journeyman's wage.

1st	2nd	3rd	4th
60%	70%	80%	90%

SUPPLEMENTAL BENEFITS per hour worked:

Appr. 1st year	\$ 10.50
Appr. 2nd year	18.59
Appr. 3rd year	19.74
Appr. 4th year	20.90

7-1163 Zone 2

Operating Engineer - Building

07/01/2019

JOB DESCRIPTION Operating Engineer - Building

ENTIRE COUNTIES

Cattaraugus, Chautauqua, Erie, Orleans, Wyoming

PARTIAL COUNTIES

Genesee: Only that portion of the county that lies west of a line down the center of Route 98 excluding that area that lies within the City of Batavia.

WAGES

CLASS A: Air Hoist, All Boom Type Equipment, All Pans and Carry-Alls, Archer Hoist, Asphalt Curb and Gutter Machines, Asphalt Roller, Asphalt Spreader or Paver, Automatic Fine Grade Machine (CMI or similar, first and second operator), Backhoe and Pullhoe, Backhoe and Pullhoe (tractor mounted, rubber tired), Back Filling Machine, Belt Placer (CMI or similar type), Bending Machine (Pipe), Bituminous Spreader and Mixer. Blacktop Plants (Automated and Non-automated), Blast or Rotary Drill (Truck or Track Mounted). Blower for Burning Brush, Boiler (when used for power), Boom Truck (excluding pick-up and delivery), Boring Machine, Bulldozer, Cableway, Cage Hoist, Caisson Auger, Central Mix Plant (and all concrete batching plants), Cherry Picker, Concrete Cleaning Decontamination Machine Operator, Concrete Curb and Gutter Machine, Concrete Curing Machine, Concrete Cutters (Vermeer or Similar Type), Concrete Mixer (over 1/2 cu yd.), Concrete Pavement Spreaders and Finishers, Concrete Paver, Concrete Pump, Conveyor, Core Drill, Crane, Crusher, Decon of Equipment, Derrick, Dragline, Dredge, Drill Rig (Tractor Mounted), Dual Drum Paver, Electric Pump used in conjunction with Well Point Systems, Elevating Grader (self propelled or towed), Elevator, Excavator (all purpose, hydraulically operated), Farm Tractor with Accessories, Fine Grade Machine, Forklift, Front End Loader, Generator (10 outlets or more), Gradall, Grader, Grout or Gunite Machine, Head Tower, Heavy Equipment Robotics Operator/Mechanic, Helicopter (when used for hoisting), Hoist (one drum), Hoisting Engine, Horizontal Directional Drill Locator, Horizontal Directional Drill Operator, Hydraulic Boom, Hydraulic Hammer (self-propelled), Hydraulic Pipe Jack Machine (or similar type machine), Hydraulic Rock Expander (or similar type machine), Hydraulic System Pumps, Hydro Crane, Hydro Hammer (or similar type), Industrial Tractor, Jersey Spreader, Kolman Plant Loader (and similar type loaders), Laser Screed, Locomotive, Lubrication Truck, Maintenance Engineer, Maintenance, Lubrication Unit or Truck, Mine Hoist, Mixer for Stabilized Base (self-propelled), Monorail, Motorized Hydraulic Pin Puller, Motorized Hydraulic Seeder, Mucking Machine, Mulching Machine, Multiple Drum Hoist (more than one drum in use), Overhead Crane, Peine Crane (or similar type), Pile Driver, Plant Engineer, Pneumatic Mixer, Post Hole Digger and Driver, Power Broom, Pump Crete, Push Button Hoist, Push or Snatch Cat, Quarry Master or equivalent, Road Widener, Rock Bit Sharpener (all types), Roller (all), Rolling Machine (pipe), Rotomill, Scissors Trucks, Lift, or Boom Lift of any type (when used for hoisting), Scoopmobile, Shovel, SideBoom, Skidsteer/Bobcat (Similar Type), Skimmer, Slip Form Paver (CMI or similar type), Snorkel/Vacuum Truck, Strato-Tower, Stump Chipping Machine, Tire Truck and Drivers performing tire repair (exclude outside vendor), Towed Roller, Tractor Drawn Belt-Type Grader/Loader, Tractor Shovel, Tractor with Towed Accessories, Tractor (when using winch power), Tractors, Trencher, Truck Crane, Truck Mechanic and Helper (exclude Teamsters when repairing their own trucks), Tunnel Shovel, Tube Finisher (CMI and similar type), Ultra High Pressure Waterjet Cutting Tool System Operator/Mechanic, Vacuum Blasting Machine Operator/Mechanic, Vibratory Compactor, Vibro Tamp, Well Drilling Machine, Well Point, Winch, Winch Truck with A Frame.

CLASS B: Aggregate Bin, Aggregate Plant, Apprentice Engineer, Apprentice Engineer Driver, Articulated Off Road Material Hauler, Boiler (used in conjunction with production), CMI and similar type Concrete Spreads (Apprentice Engineer), Cement Bin, Chipping Machine and Chip Spreader, Compressors (4 or less), Compressors (any size, but subject to other provisions for Compressors, Dust Collectors, Generators, Mechanical Heaters, Pumps, Welding Machines - four of any type or combination), Concrete Mixer (1/2 cu. yd. and under), Fireman, Form Tamper, Form Trucks (excluding Teamster or delivery), Fuel Truck or Drivers (exclude Teamster or delivery), Heaters, Heating Boiler (used for temporary heat), Helper on Lubrication Unit or Truck, Jeep Trencher, Power Heaterman, Power Plant in excess of 10 K.W., Pumps, Revinius Widener, Steam Boilers (if manning or license by local law is required), Steam Cleaner (when used for cleaning equipment on the job site), Welding Machine (1 machine over 300 amps or 2 or 3 machines regardless of amps).

Operating Engineer- Building:

Per hour:	07/01/2019
Class A	\$ 37.21
Class B	32.73
Crane(Up to 60 Tons)	38.71
" (61 to 199 Tons)	40.71
" (200 to 399 Tons)	41.21
" (400 Tons or more)	41.71

Additional \$5.00/hr. for Any Tower Crane Additional \$2.50/hr. for Hazardous Work Site Additional \$1.00/hr. for Tunnel Work

SUPPLEMENTAL BENEFITS

Per Hour:

Journeyman \$2

\$ 29.85**

**Note: For Overtime Hours \$21.65 of this amount is paid a straight time, the remaining balance of \$8.20 is paid at the same premium as the wage.

OVERTIME PAY

See (B, E, *E2, P, **V) on OVERTIME PAGE * Only Saturdays between October 15th and April 15th.

HOLIDAY

Paid:See (5, 6) on HOLIDAY PAGEOvertime:See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

1 year Terms

12-17b

07/01/2019

1st	2nd	3rd	4th
\$27.05	\$27.94	\$28.82	\$29.71

Supplemental benefits Per Hour: All Apprentices \$28.95**

**Note: For Overtime Hours \$21.65 of this amount to be paid a straight time rate remaining balance of \$7.30 is paid at same premium as the wage.

Operating Engineer - Heavy&Highway

JOB DESCRIPTION Operating Engineer - Heavy&Highway

ENTIRE COUNTIES

Cattaraugus, Chautauqua, Erie, Orleans, Wyoming

PARTIAL COUNTIES

Genesee: Only that portion of the county that lies west of a line down the center of Route 98 excluding that area that lies within the City of Batavia.

WAGES

CLASS A: Air Hoist, All Boom Type Equipment, All Pans and Carry-Alls, Asphalt Curb and Cutter Machines, Asphalt Roller, Asphalt Spreader or Paver, Automatic Fine Grade Machine (CMI or similar, first and second operator), Backhoe and Pullhoe (all), Back Filling Machine, Belt Placer (CMI or similar type), Bending Machine (pipe), Bituminous Spreader and Mixer, Blacktop Plant (all), Blast or Rotary Drill (Truck or Track Mounted), Blower for Burning Brush, Boiler (when used for power), Boom Truck, Boring Machine, Bulldozer, Cableway, Cage Hoist, Caisson Auger, Central Mix Plant (and all Concrete Batching Plants), Cherry Picker, Concrete Cleaning Decontamination Machine, Concrete Curb and Gutter Machine, Concrete Curing Machine, Concrete Mixer (over 1/2 cu. yd.), Concrete Pavement Spreaders and Finishers, Concrete Paver, Concrete Pump, Concrete Saw (self propelled), Conveyor, Convoying Vehicles Convoying Engineer's Equipment, Core Drill, Crane, Crusher, Decontamination of Equipment, Derrick, Dragline, Dredge, Drill Rig (Tractor Mounted), Dual Drum Paver, Electric Pump used in conjunction with Well Point Systems, Elevating Grader (self propelled or towed), Elevator, Excavator (all purpose, hydraulically operated), Farm Tractor with Accessories, Fine Grade Machine, Forklift, Front End Loader, Gradall, Grader, Grout or Gunite Machine, Head Tower, Heavy Equipment Robotics Operator/Mechanic, Hoist (all types), Hoisting Engine, Horizontal Directional Drill Locator, Horizontal Directional Drill Operator, Hydraulic Boom, Hydraulic Hammer (self propelled), Hydraulic Pipe Jack Machine, (or similar type machine), Hydraulic Rock Expander (or similar type machine), Hydraulic System Pumps, Industrial Tractor, Jersey Spreader, Kolman Plant Loader (and similar type Loaders), Laser Screed, Locomotive, Log Skidder (similar type), Maintenance Engineer, Maintenance, Lubrication Unit or Truck, Mine Hoist, Mixer for Stabilized Base (self propelled), Monorail, Motorized Hydraulic Pin Puller, Motorized Hydraulic Seeder, Mucking Machine, Mulching Machine, Overhead Crane, Parts Chasing, Peine Crane (or similar type), Pile Driver, Plant Engineer, Pneumatic Mixer, Post Hole Digger and Post Driver, Power Broom, Pump Crete, Push Button Hoist, Push or Snatch Cat, Quarry Master (or equivalent), Road Widener, Rock Bit Sharpener (all types), Roller (all), Rolling Machine (Pipe), Rotomill, Scoopmobile, Shovel, Side Boom, Skidsteer/Bobcat (similar type), Skimmer, Slip Form Paver (CMI or similar, first and second operator), Snorkel/Vacuum Truck, Strato-Tower, Tire Truck & Repair, Towed Roller, Tractor Drawn Belt-Type Grader/Loader, Tractor Shovel, Tractor with Towed Accessories, Tractors (when using winch power), Trencher, Truck Crane, Tug Boats, Tunnel Shovel, Tube Finisher (CMI and similar), Vacuum Blasting Machine Operator/Mechanic, Vibratory Compactor, Vibro Tamp, Waterjet Cutting Tool System Operator/Mechanic (Ultra High Pressure), Well Drilling Machine, Well Point, Winch, Winch Truck with A Frame.

CLASS B: Aggregate Bin, Aggregate Plant, Apprentice Engineer, Apprentice Engineer Driver, Articulated Off Road Material Hauler, CMI and similar type Concrete Spreads (Apprentice Engineer), Cement Bin, Chipping Machine and Chip Spreader, Compressors (4 or less), Compressors: any size, but subject to other provisions for Compressors, Dust Collectors, Generators, Mechanical Heaters, Pumps, Welding Machines (four of any type or combination), Concrete Mixer (1/2 cu. yd. and under), Fireman, Form Tamper, Fuel Truck, Heating Boiler (used for temporary heat), Helper on Lubrication Unit or Truck, Jeep Trencher, Power Heaterman, Power Plant in excess of 10 K.W., Pumps (4" or over), Revinius Widener, Steam Cleaner, Stump Chipping Machine, Welding Machine (1 machine over 300 amps or 2 or 3 machines regardless of amps).

Operating Engineer- Heavy/Highway, Sewer/Water, Tunnel:

Per hour:	07/01/2019
Class A	\$ 38.99
Class B	34.49
Crane(boom over 100ft)	39.74
" (boom over 200ft)	39.99
" (boom over 300ft)	40.49

Additional \$3.00/hr. for Lattice Boom Additional \$3.00/hr. for Hydraulic Crane over 60 tons Additional \$2.50/hr. for Hazardous Work Site Additional \$1.00/hr. for Tunnel Work Additional \$3.00/hr. for Mandated Off-Shift Work

DISTRICT 12

SUPPLEMENTAL BENEFITS

Per hour:

Journeymen

\$ 31.16*

*Note: For Overtime Hours \$23.46 of the amount paid at straight time, the remaining balance of \$7.70 is paid at the same premium as the wage.

OVERTIME PAY

See (B, E, Q, T, *V) on OVERTIME PAGE

HOLIDAY

 Paid:
 See (*5, **6) on HOLIDAY PAGE

 Overtime:
 See (**5, ***6) on HOLIDAY PAGE

 *,** NOTE: If Holiday falls on a Sunday it will be celebrated on Monday

 ****,**** NOTE: If employee works that Monday use "T" under Overtime Pay.

REGISTERED APPRENTICES

Wages per hour:

Apprentices at 1 year terms

1st	2nd	3rd	4th
\$31.49	\$32.49	\$33.49	\$34.49

Supplemental Benefits

All Apprentices \$30.76*

Note: For Overtime Hours \$23.46 of this amount is paid at straight time , the remaining balance of \$7.30 is paid at the same premium as the wage.

12-17 hh/sw/t

Operating Engineer - Survey Crew	07/01/2019
Operating Engineer - Survey Crew	07/01/2019

JOB DESCRIPTION Operating Engineer - Survey Crew

ENTIRE COUNTIES

Cattaraugus, Chautauqua, Erie, Orleans, Wyoming

PARTIAL COUNTIES

Genesee: Only that portion of the county that lies west of a line down the center of Route 98 excluding that area that lies within the City of Batavia.

WAGES

These rates apply to Building and Heavy Highway.

Per hour: SURVEY CLASSIFICATIONS:

Party Chief - One who directs a survey party. Instrument Person - One who operates the surveying instruments. Rod Person - One who holds the rods and assists the Instrument Person.

Party Chief	\$ 41.51
Instrument Person	39.15
Rod Person	27.10

Additional \$3.00 per hr. for work in a Tunnel. Additional \$2.50 per hr. for EPA or DEC certified toxic or hazardous waste work.

07/01/2019

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman	\$ 26.80

OVERTIME PAY See (B, E, P, T) on OVERTIME PAGE

HOLIDAY	
	See (5, 6) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

DISTRICT 12

WAGES:1000 hour terms based on the Percentage of Rod Person wage:

0-1000 Hrs 60% 1001-2000 Hrs 70% 2001-3000 Hrs 80% SUPPLEMENTAL BENEFITS per hour worked: 0-1000 Hrs \$16.21 1001-2000 Hrs 18.92 2001-3000 Hrs 21.63	07/01/2019
1001-2000 Hrs 70% 2001-3000 Hrs 80% SUPPLEMENTAL BENEFITS per hour worked: 0-1000 Hrs \$ 16.21 1001-2000 Hrs 18.92	12-17D Sur
1001-2000 Hrs 70% 2001-3000 Hrs 80% SUPPLEMENTAL BENEFITS per hour worked: 0-1000 Hrs \$ 16.21	
1001-2000 Hrs 70% 2001-3000 Hrs 80% SUPPLEMENTAL BENEFITS per hour worked:	
1001-2000 Hrs70%2001-3000 Hrs80%SUPPLEMENTAL BENEFITS per hour worked:	
1001-2000 Hrs 70% 2001-3000 Hrs 80%	
1001-2000 Hrs 70%	
0-1000 Hrs 60%	
07/01/2019	

JOB DESCRIPTION Operating Engineer - Survey Crew - Consulting Engineer

ENTIRE COUNTIES

Cattaraugus, Chautauqua, Erie, Orleans, Wyoming

PARTIAL COUNTIES

Genesee: Only that portion of the county that lies west of a line down the center of Route 98 excluding that area that lies within the City of Batavia.

WAGES

These rates apply to feasibility and preliminary design surveying, line of grade surveying for inspection or supervision of construction when performed under a Consulting Engineer Agreement.

Per hour: SURVEY CLASSIFICATIONS:

Party Chief - One who directs a survey party. Instrument Person - One who operates the surveying instruments. Rod Person - One who holds the rods and assists the Instrument Person.

	07/01/2019
Party Chief	\$ 41.51
Instrument Person	39.15
Rod Person	27.10

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman	\$ 26.80
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See (B, E, P, T) on OVERTIME PAGE

HOLIDAY

Painter

Paid:	See (5, 6) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES: 1000 hour terms based on the Percentage of Rod Persons Wage:

07/01/2019

0-1000	60%
1001-2000	70%
2001-3000	80%

SUPPLEMENTAL BENEFITS per hour worked:

0-1000	\$ 16.21
1001-2000	18.92
2001-3000	21.63

12-17D Con Eng

JOB DESCRIPTION Painter

Published by the New York State Department of Labor PRC Number 2019009051 Cattaraugus County

DISTRICT 3

ENTIRE COUNTIES

Allegany, Erie, Genesee, Niagara, Orleans, Wyoming

PARTIAL COUNTIES

WACES

Cattaraugus: Entire County except the Townships of Conewango, Leon, Napoli, New Albion, Randolph and South Valley. Chautauqua: Only the Townships of Awkright, Dunkirk, Hanover, Pomfret, Portland, Sheridan and Villenova. Livingston: Only the Townships of North Dansville, Nunda, Ossian, Portage, Sparta, Spring Water and West Sparta. Steuben: Only the Townships of Avoca, Canisteo, Cohocton, Dansville, Fremont, Greenwood, Hartsville, Hornellsville, Howard, Jasper, Prattsburg, Pulteney, Troupsburg, Tuscarora, Urbana, Wayland, Wayne, Woodhull, West Union, Wheeler, and the City of Hornell.

07/01/2019	05/01/2020 Additional
\$ 26.45	\$ 1.00
26.45	1.00
26.45	1.00
26.95	1.00
27.20	1.00
	\$ 26.45 26.45 26.45 26.95

* Skeleton Steel: No floors, walls or ceiling are constructed, including radio and television towers, flagpoles, smokestacks, cranes and the abatement of coatings with lead, asbestos and/or arsenic, etc. All work within the confines of a plant shall be paid the skeleton steel rate (except in-plant tank work (see Tank Rate)).

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

\$ 25.34

OVERTIME PAY

Exterior work only See (B, E4, F*, R) on OVERTIME PAGE. All other work See (B, F*, R) on OVERTIME PAGE.

* Note - Saturday is payable at straight time if the employee misses work, except where a doctor's or hospital verification of illness is produced Monday through Friday when work was available to the employee.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

Deinten/Deserveten 750 h		managed and of laws	manula Desis wasa watar
Painter/Decorator: 750 r	nour terms at the following	percentage of Journe	yman's Basic wage rate:

1st	2nd	3rd	4th	5th	6th	7th	8th	
50%	55%	60%	65%	70%	75%	80%	90%	
Taper/Dry	wall Finisher:	750 hour tern	ns at the follow	ing percentag	e of Journeym	an's Taper wa	ige:	
1st	2nd	3rd	4th	5th	6th			
50%	55%	60%	65%	75%	85%			

Supplemental benefits per hour:

Painter/Decor	rator and Tape	r/Drywall Finis	her:					
1st	2nd	3rd	4th	5th	6th	7th	8th	
\$ 2.30	\$ 4.30	\$ 5.30	\$ 5.80	\$ 6.30	\$ 6.80	\$ 7.30	\$ 7.55	
								3-4-Buf, Nia, Olean

Painter

JOB DESCRIPTION Painter

DISTRICT 3

07/01/2019

ENTIRE COUNTIES

Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Cortland, Delaware, Erie, Genesee, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Wayne, Wyoming, Yates

WAGES Per hour:

Bridge	\$ 38.50	\$ 1.05
Tunnel	38.50	1.05
Tank*	36.50	1.05

For Bridge Painting Contracts, ALL WORKERS on and off the bridge (including Flagmen) are to be paid Painter's Rate; the contract must be ONLY for Bridge Painting.

Tank rate applies to indoor and outdoor tanks, tank towers, standpipes, digesters, waste water treatment tanks, chlorinator tanks, etc. Covers all types of tanks including but not limited to steel tanks, concrete tanks, fiberglass tanks, etc.

Note an additional \$2.00 per hour is required when the contracting agency or project specification requires any shift to start prior to 6:00am or after 12:00 noon.

SUPPLEMENTAL BENEFITS

Per hour:

\$ 28.70

OVERTIME PAY

Exterior work only See (B, E4, F*, R) on OVERTIME PAGE. All other work See (B, F*, R) on OVERTIME PAGE.

*Note - Saturday is payable at straight time if the employee misses work, except where a doctor's or hospital verification of illness is produced Monday through Friday when work was available to the employee.

HOLIDAY

Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

750 hour terms	s at	the following	percentage of	of Journeyman's	wage rate:

1st	2nd	3rd	4th	5th	6th
50%	55%	60%	65%	75%	85%

Supplemental benefits per hour:

1st & 2nd terms	\$ 5.45
3rd & 4th terms	5.45
5th & 6th terms	6.45

3-4-Bridge, Tunnel, Tank

07/01/2019

Painter

JOB DESCRIPTION Painter

ENTIRE COUNTIES

PARTIAL COUNTIES

Cattaraugus: Only the Townships of Conewango, Leon, Napoli, New Albion, Randolph and South Valley. Chautauqua: Only the Townships of Busti, Carroll, Charlotte, Chautauqua, Cherry Creek, Clymer, Ellery, Ellicott, Ellington, French Creek, Gerry, Harmony, Kiantone, Mina, North Harmony, Poland, Ripley, Sherman, Stockton, Westfield and the City of Jamestown.

WAGES Per hour:	07/01/2019	05/01/2020 Additional
Brush & Roller, taping,	\$ 26.15	\$ 1.00
wallcovering, swing & bosun	26.15	1.00
under 3 stories or under 35 ft	26.15	1.00
Swing & bosun over 3 stories or	26.40	1.00
over 35 feet, steel painting	26.40	1.00
All spraying, steam cleaning &	26.80	1.00
sandblasting, all toxic coating	26.80	1.00
Stacks	27.45	1.00

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

DISTRICT 3

OVERTIME PAY

Exterior work only See (B, E4, F*, R) on OVERTIME PAGE. All other work See (B, F*, R) on OVERTIME PAGE. * Note - Saturday is payable at straight time if the employee misses work, except where a doctor's or hospital verification of illness is produced Monday through Friday when work was available to the employee.

\$18.08

HOLIDAY

Paid:See (1) on HOLIDAY PAGEOvertime:See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

Painter/Decorator: 750 hour terms at the following percentage of Journeyman's Basic wage rate:							
1st	2nd	3rd	4th	5th	6th	7th	8th
50%	55%	60%	65%	70%	75%	80%	90%
Taper/Dryv	vall Finisher: 7	50 hour term	is at the follow	ing percentage	e of Journeym	an's Taper wa	ge:
1st	2nd	3rd	4th	5th	6th		
50%	55%	60%	65%	75%	85%		

Supplemental benefits per hour:

Painter/Decor	ator and Tape	r/Drywall Finis	her:					
1st	2nd	3rd	4th	5th	6th	7th	8th	
\$ 2.30	\$ 4.30	\$ 5.30	\$ 5.80	\$ 6.30	\$ 6.80	\$ 7.30	\$ 7.55	
								3-4-Jamestown

Painter - Metal Polisher

JOB DESCRIPTION Painter - Metal Polisher

ENTIRE COUNTIES

WAGES

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES	
	07/01/2019
Metal Polisher	\$ 30.58
Metal Polisher*	31.53
Metal Polisher**	34.08

*Note: Applies on New Construction & complete renovation ** Note: Applies when working on scaffolds over 34 feet.

SUPPLEMENTAL BENEFITS Per Hour:	07/01/2019
Journeyworker: All classification	\$ 7.72

See (B, E, P, T) on OVERTIME PAGE

HOLIDAY Paid: Overtime:	See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE See (5, 6, 9, 11, 15, 16, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One (1) year term at the following wage rates:

	07/01/2019
1st year	\$ 15.00
2nd year	15.00
3rd year	15.75
1st year*	\$ 17.39
2nd year*	17.44
3rd year*	18.29

DISTRICT 8

07/01/2019

1st year**	\$ 19.50
2nd year**	19.50
3rd year**	20.25

*Note: Applies on New Construction & complete renovation ** Note: Applies when working on scaffolds over 34 feet.

Supplemental benefits:

Per hour:

\$ 5.52
5.52
5.52

8-8A/28A-MP

Plumber	
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07/01/2019

JOB DESCRIPTION Plumber

DISTRICT 3

ENTIRE COUNTIES

Erie, Niagara, Wyoming

PARTIAL COUNTIES

Allegany: Only the Townships of Allen, Angelica, Belfast, Caneadea, Centerville, Granger, Hume, New Hudson and Rushford Cattaraugus: Only the Townships of Ashford, Dayton, East Otto, Ellicottville, Farmersville, Franklinville, Freedom, Leon, Lyndon, Machias, Mansfield, New Albion, Otto, Perrysburg, Persia and Yorkshire. Chautauqua: Only the Townships of Arkwright, Charlotte, Cherry Creek, Dunkirk, Hanover, Pomfret, Portland, Ripley, Sheridan, Stockton, Villenova, Westfield, City of Dunkirk and Village of Fredonia. Genesee: Only the Townships of Alabama, Alexander, Batavia, Darien, Elba, Oakfield, Pembroke and the City of Batavia.

Genesee: Only the Townships of Alabama, Alexander, Batavia, Darien, Elba, Oakfield, Pembroke and the City of Batavia. Orleans: Only the Townships of Ridgeway, Shelby and Yates.

WAGES

Per hour:	07/01/2019
Plumber	\$ 35.60
Steamfitter	\$ 35.60

Note - Add 10% (ten-percent) to wage when HAZMAT training is required or when OSHA compliant respirator protection is required.

SUPPLEMENTAL BENEFITS

Per hour:

\$ 25.86

Note - \$3.40 of this amount must be paid at the same premium as the wage.

OVERTIME PAY

See (*B, **E, Q) on OVERTIME PAGE

* Double time after 11 hours per day on Weekdays.

** Double time after 10 hours per day on Saturday.

HOLIDAY

Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6, 16) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One year terms at the following percentage of Journeyman's wage:

1st	2nd	3rd	4th	5th
45%	55%	65%	75%	90%
Noto	Add 10% (top por	cont) to waa		AT training i

Note - Add 10% (ten-percent) to wage when HAZMAT training is required or when OSHA compliant respirator protection is required.

Supplemental benefits per hour:

\$ 21.30

Note - \$3.40 of this amount must be paid at the same premium as the wage.

3-22-Buffalo, Niagara

Plumber

07/01/2019

JOB DESCRIPTION Plumber ENTIRE COUNTIES **DISTRICT** 3

PARTIAL COUNTIES

Allegany: Only the Townships of Alma, Amity, Bolivar, Clarksville, Cuba, Friendship, Genesee, Wirt and that portion of Scio which lies west of Rt. 19.

Cattaraugus: Only the Townships of Allegany, Carrollton, Conewango, Cold Spring, Great Valley, Hinsdale, Humphrey, Ischua, Little Valley, Napoli, Olean, Portville, Randolph, Red House, Salamanca, South Valley, the City of Olean, the City of Salamanca, and the Allegany Indian Reservation.

Chautauqua: Only the Townships of Busti, Carroll, Chautauqua, Clymer, Ellery, Ellicott, Ellington, French Creek, Gerry, Harmony, Kiantone, Mina, North Harmony, Poland, Sherman, and the City of Jamestown.

WAGES

Per hour:	07/01/2019
Plumber	\$ 34.03
Steamfitter	\$ 34.03

Note - Add 10% (ten-percent) to wage when HAZMAT training is required or when OSHA compliant respirator protection is required.

SUPPLEMENTAL BENEFITS

Per hour:

\$ 25.86

Note - \$3.40 of this amount must be paid at the same premium as the wage.

OVERTIME PAY

See (*B, **E, Q) on OVERTIME PAGE

* Double time after 11 hours per day on Weekdays.

** Double time after 10 hours per day on Saturday.

HOLIDAY

Roofer

Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6, 16) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One year terms at the following percentage of Journeyman's wage:

1st	2nd	3rd	4th	5th
45%	55%	65%	75%	90%

Note - Add 10% (ten-percent) to wage when HAZMAT training is required or when OSHA compliant respirator protection is required.

Supplemental benefits per hour:

\$ 21.30

Note - \$3.40 of this amount must be paid at the same premium as the wage.

3-22-Southern

07/01/2019

JOB DESCRIPTION	Roofer	DISTRICT 3	
ENTIRE COUNTIES Allegany, Cattaraugus			
WAGES			
Per hour:	07/01/2019		
Roofer	\$ 31.00		
Waterproofer	31.00		
Asbestos Removal wi	h respirator or protective suit add \$1.00 per hour.		
SUPPLEMENTAL E Per hour:	BENEFITS		
	\$ 13.95		
OVERTIME PAY See (B, E, E2, Q) on (OVERTIME PAGE		
HOLIDAY			
Paid: Overtime:	See (1) on HOLIDAY PAGE See (5, 6) on HOLIDAY PAGE		
REGISTERED APP Wages per hour:	RENTICES		

750 hour terms at the following percentage of Journeyman's wage:

•	/age Rates for 0 ed on Jul 01 20)7/01/2019 - 06/3 19	30/2020			Published by the New York State D PRC Number 2019009051	
1st 50%	2nd 50%	3rd 60%	4th 70%	5th 80%	6th 90%		
Supplement	tal benefits pe	r hour:					
1st & 2nd te	erms	\$ 0.58					
All other ter	ms	13.95					3-210
Sheetmet	al Worker						07/01/2019
JOB DESC	CRIPTION S	heetmetal Worl	ker			DISTRICT 3	
-	OUNTIES s, Chautauqua	I					
WAGES Per hour:			07/01/2019	9	07/01/2020	07/01/2021	
Sheet Meta	l Worker		\$ 27.75		\$0.75	\$0.75	
Additional \$	1.00 per hour	for work perfor	med at a heig	ht of fifty (50)	feet or more on	boatswains chair, swing (of any type), p	picks and plank.
15% when t 20% when t	the majority of	the hours are whether hours are w	worked betwee	en the hours o	o specification oi of 3:30PM - 1:00, of 11:00PM - 9:00		
			\$ 23.53				
OVERTIMI See (B, E, C	E PAY ຊ) on OVERTI	ME PAGE					
HOLIDAY Paid: Overtime:		See (1) on H See (5, 6) or	IOLIDAY PAG 1 HOLIDAY PA	BE AGE			
REGISTER Wages per:	RED APPREI	NTICES					
1000 hour y 1st \$ 13.88	/ear terms: 2nd \$ 14.99	3rd \$ 16.10	4th \$ 17.21	5th \$ 18.32	6th \$ 19.43	7th 8th \$ 20.54 \$ 21.65	
Supplement	tal Benefits		07/01/2019	9			
1st term 2nd term 3rd term 4th term 5th term 6th term 7th term			\$ 13.29 13.84 16.04 16.70 17.36 18.02 18.68				
8th term			19.33				3-112-Jamestown
Sprinkler	Fitter						07/01/2019
JOB DESC	CRIPTION S	prinkler Fitter				DISTRICT 1	

ENTIRE COUNTIES Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Washington, Wayne, Wyoming, Yates

WAGES

Per hour Sprinkler Fitter

07/01/2019

\$ 34.91

SUPPLEMENTAL BENEFITS

Per hour

Journeyman \$24.93

OVERTIME PAY See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: Overtime:

See (1) on HOLIDAY PAGE See (5, 6) on HOLIDAY PAGE

Note: When a holiday falls on Sunday, the following Monday shall be considered a holiday and all work performed on either day shall be at the double time rate. When a holiday falls on Saturday, the preceding Friday shall be considered a holiday and all work performed on either day shall be at the double time rate.

REGISTERED APPRENTICES

Wages per hour

For Apprentices HIRED ON OR AFTER 04/01/2010:

One Half Year terms at the following percentage of journeyman's wage.

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
45%	50%	55%	60%	65%	70%	75%	80%	85%	90%
Supplemen	tal Benefits pe	r hour worked							
1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
\$ 9.18	\$ 9.22	\$ 17.89	\$ 17.93	\$ 18.48	\$ 18.52	\$ 18.57	\$ 18.61	\$ 18.66	\$ 18.70
For Apprent	tices HIRED O	N OR AFTER	04/01/2013:						
One Half Ye	ear terms at the	e following per	centage of jou	rneyman's wa	ge.				
1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
45%	50%	55%	60%	65%	70%	75%	80%	85%	90%
Supplemen	tal Benefits pe	r hour worked							
1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
\$ 8.27	\$ 8.27	\$ 18.04	\$ 18.04	\$ 18.29	\$ 18.29	\$ 18.29	\$ 18.29	\$ 18.29	\$ 18.29

1-669

07/01/2019

Teamster - Building / Heavy&Highway

JOB DESCRIPTION Teamster - Building / Heavy&Highway

DISTRICT 3

ENTIRE COUNTIES

Cattaraugus, Chautauqua

PARTIAL COUNTIES

Allegany: Entire county except the Townships of Alfred, Almond, Burns and West Almond.

WAGES

GROUP 1: Warehousemen, Yardmen, Truck Helpers, Panel Trucks, Flatboy Material Trucks (straight jobs), Single Axle Dump Trucks, Dumpsters, Material Checkers and Receivers, Greasers, Truck Tiremen, Mechanics Helpers and Parts Chasers, Tandems and Batch Trucks, Mechanics, Dispatcher, Semi-Trailers, Low-boy Trucks, Asphalt Distributor Trucks, and Agitator, Mixer Trucks and Dumpcrete type vehicles, Truck Mechanic, Fuel Trucks.

GROUP 2: Specialized Earth Moving Equipment, Euclid type, or similar off-highway where not self-loading and self-contained concrete mobile unit, Off-highway Tandem Back-Dump, Twin Engine Equipment and Double-Hitched Equipment where not self-loading, Water Tanks, Sprinkler Trucks and Winch Trucks.

Per hour:	07/01/2019	
GROUP 1	\$ 38.31	
GROUP 2	38.31	
Add \$ 2.00 whe	en required to use personal protection wh	en performing hazardous waste removal work.

Add \$ 2.00 while operating articulating truck.

SUPPLEMENTAL BENEFITS

Per hour:

\$ 14.78

OVERTIME PAY See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: Overtime:

Welder

See (5, 20) on HOLIDAY PAGE See (5, 6) on HOLIDAY PAGE

3-264

07/01/2019

JOB DESCRIPTION Welder

DISTRICT 1

ENTIRE COUNTIES

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES

Per hour

07/01/2019

Welder: To be paid the same rate of the mechanic performing the work.*

*EXCEPTION: If a specific welder certification is required, then the 'Certified Welder' rate in that trade tag will be paid.

OVERTIME PAY HOLIDAY

1-As Per Trade

Overtime Codes

Following is an explanation of the code(s) listed in the OVERTIME section of each classification contained in the attached schedule. Additional requirements may also be listed in the HOLIDAY section.

NOTE: Supplemental Benefits are 'Per hour worked' (for each hour worked) unless otherwise noted

- (AA) Time and one half of the hourly rate after 7 and one half hours per day
- (A) Time and one half of the hourly rate after 7 hours per day
- (B) Time and one half of the hourly rate after 8 hours per day
- (B1) Time and one half of the hourly rate for the 9th & 10th hours week days and the 1st 8 hours on Saturday.
 Double the hourly rate for all additional hours
- (B2) Time and one half of the hourly rate after 40 hours per week
- (C) Double the hourly rate after 7 hours per day
- (C1) Double the hourly rate after 7 and one half hours per day
- (D) Double the hourly rate after 8 hours per day
- (D1) Double the hourly rate after 9 hours per day
- (E) Time and one half of the hourly rate on Saturday
- (E1) Time and one half 1st 4 hours on Saturday; Double the hourly rate all additional Saturday hours
- (E2) Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather
- (E3) Between November 1st and March 3rd Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather, provided a given employee has worked between 16 and 32 hours that week
- (E4) Saturday and Sunday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather
- (E5) Double time after 8 hours on Saturdays
- (F) Time and one half of the hourly rate on Saturday and Sunday
- (G) Time and one half of the hourly rate on Saturday and Holidays
- (H) Time and one half of the hourly rate on Saturday, Sunday, and Holidays
- (I) Time and one half of the hourly rate on Sunday
- (J) Time and one half of the hourly rate on Sunday and Holidays
- (K) Time and one half of the hourly rate on Holidays
- (L) Double the hourly rate on Saturday
- (M) Double the hourly rate on Saturday and Sunday
- (N) Double the hourly rate on Saturday and Holidays
- (O) Double the hourly rate on Saturday, Sunday, and Holidays
- (P) Double the hourly rate on Sunday
- (Q) Double the hourly rate on Sunday and Holidays
- (R) Double the hourly rate on Holidays
- (S) Two and one half times the hourly rate for Holidays

- (S1) Two and one half times the hourly rate the first 8 hours on Sunday or Holidays One and one half times the hourly rate all additional hours.
- (T) Triple the hourly rate for Holidays
- (U) Four times the hourly rate for Holidays
- (V) Including benefits at SAME PREMIUM as shown for overtime
- (W) Time and one half for benefits on all overtime hours.
- (X) Benefits payable on Paid Holiday at straight time. If worked, additional benefit amount will be required for worked hours. (Refer to other codes listed.)

Holiday Codes

PAID Holidays:

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

OVERTIME Holiday Pay:

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays. The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

Following is an explanation of the code(s) listed in the HOLIDAY section of each classification contained in the attached schedule. The Holidays as listed below are to be paid at the wage rates at which the employee is normally classified.

- (1) None
- (2) Labor Day
- (3) Memorial Day and Labor Day
- (4) Memorial Day and July 4th
- (5) Memorial Day, July 4th, and Labor Day
- (6) New Year's, Thanksgiving, and Christmas
- (7) Lincoln's Birthday, Washington's Birthday, and Veterans Day
- (8) Good Friday
- (9) Lincoln's Birthday
- (10) Washington's Birthday
- (11) Columbus Day
- (12) Election Day
- (13) Presidential Election Day
- (14) 1/2 Day on Presidential Election Day
- (15) Veterans Day
- (16) Day after Thanksgiving
- (17) July 4th
- (18) 1/2 Day before Christmas
- (19) 1/2 Day before New Years
- (20) Thanksgiving
- (21) New Year's Day
- (22) Christmas
- (23) Day before Christmas
- (24) Day before New Year's
- (25) Presidents' Day
- (26) Martin Luther King, Jr. Day
- (27) Memorial Day
- (28) Easter Sunday

State Office Building 12 - Albany, New REQUEST FOR WAGE AND SU As Required by Articles 8 an Fax (518) 485-1870 or mail this form for new sch	Contracting Agangy Architect or Engineering Firm Dublic World District Office Date:												
Submitted By: (Check Only One) Contracting Agency Architect or Engineering I	Firm Public Work District Office Date:												
A. Public Work Contract to be let by: (Enter Data Pertaining to C													
1. Name and complete address [(Check if new or change) Telephone: () Fax: () E-Mail:	2. NY State Units (see Item 5) 07 City 01 DOT 08 Local School District 02 OGS 09 Special Local District, i.e., Fire, Sewer, Water District 03 Dormitory Authority 10 Village 04 State University 11 Town 05 Mental Hygiene 12 County Facilities Corp. 13 Other Non-N.Y. State 06 OTHER N.Y. STATE UNIT (Describe)												
 3. SEND REPLY TO □ check if new or change) Name and complete address: Telephone:() Fax: () 	 4. SERVICE REQUIRED. Check appropriate box and provide project information. New Schedule of Wages and Supplements. APPROXIMATE BID DATE : Additional Occupation and/or Redetermination PRC NUMBER ISSUED PREVIOUSLY FOR OFFICE USE ONLY THIS PROJECT : 												
B. PROJECT PARTICULARS													
5. Project Title Description of Work	Eocation of Project: Location on Site Route No/Street Address Village or City Town County												
 7. Nature of Project - Check One: 1. New Building 2. Addition to Existing Structure 3. Heavy and Highway Construction (New and Repair) 4. New Sewer or Waterline 5. Other New Construction (Explain) 6. Other Reconstruction, Maintenance, Repair or Alteration 7. Demolition 8. Building Service Contract 9. Has this project been reviewed for compliance with the Wick 	 8. OCCUPATION FOR PROJECT : Construction (Building, Heavy Highway/Sewer/Water) Tunnel Residential Landscape Maintenance Elevator maintenance Exterminators, Fumigators Fire Safety Director, NYC Only S Law involving separate bidding? YES NO 												
10.Name and Title of Requester	Signature												



NEW YORK STATE DEPARTMENT OF LABOR Bureau of Public Work - Debarment List

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Under Article 8 and Article 9 of the NYS Labor Law, a contractor, sub-contractor and/or its successor shall be debarred and ineligible to submit a bid on or be awarded any public work or public building service contract/sub-contract with the state, any municipal corporation or public body for a period of five (5) years from the date of debarment when:

- Two (2) final determinations have been rendered within any consecutive six-year (6) period determining that such contractor, sub-contractor and/or its successor has WILLFULLY failed to pay the prevailing wage and/or supplements;
- One (1) final determination involves falsification of payroll records or the kickback of wages and/or supplements.

The agency issuing the determination and providing the information, is denoted under the heading 'Fiscal Officer'. DOL = New York State Department of Labor; NYC = New York City Comptroller's Office; AG = New York State Attorney General's Office; DA = County District Attorney's Office.

Debarment Database: To search for contractors, sub-contractors and/or their successors debarred from bidding or being awarded any public work contract or subcontract under NYS Labor Law Articles 8 and 9, <u>or</u> under NYS Workers' Compensation Law Section 141-b, access the database at this link: <u>https://applications.labor.ny.gov/EDList/searchPage.do</u>

For inquiries where WCB is listed as the "Agency", please call 1-866-546-9322

AGENCY	Fiscal Officer	FEIN	EMPLOYER NAME	EMPLOYER DBA NAME	ADDRESS	DEBARMENT START DATE	DEBARMENT END DATE
DOL	DOL	*****0996	A-1 CONSTRUCTION & RENOVATION INC		1973 81ST ST - SUITE A-5 BROOKLYN NY 11214	01/08/2015	01/08/2020
DOL	NYC		ABDUL KARIM		C/O NORTH AMERICAN IRON W	05/15/2015	05/15/2020
					1560 DECATUR STREETRIDGEWOOD NY 11385		
DOL	DOL	*****4539	ACCOMPLISHED WALL SYSTEMS INC		112 OSCAWANNA HEIGHTS RD PUTNAM VALLEY NY 10542	03/13/2015	03/12/2020
DOL	DOL	****3344	ACT INC		6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020
DOL	DOL	*****4018	ADIRONDACK BUILDING RESTORATION INC.		4156 WILSON ROAD EAST TABERG NY 13471	03/26/2019	03/26/2024
DOL	DOL	*****1687	ADVANCED SAFETY SPRINKLER INC		261 MILL ROAD P O BOX 296EAST AURORA NY 14052	07/29/2015	07/29/2020
DOL	NYC	*****6775	ADVENTURE MASONRY CORP.		1535 RICHMOND AVENUE STATEN ISLAND NY 10314	12/13/2017	12/13/2022
DOL	DOL		AJ TORCHIA		10153 ROBERTS RD SAUQUOIT NY 13456	08/09/2016	08/09/2021
DOL	DOL	*****3344	ALL CATASTROPHE CONSTRUCTION TEAM INC	ACT INC	6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020
DOL	DOL	*****8740	ALLSTATE ENVIRONMENTAL CORP		C/O JOSE MONTAS 27 BUTLER PLACEYONKERS NY 10710	03/18/2011	03/19/2020
DOL	DOL		AMADEO J TORCHIA	TORCHIA'S HOME IMPROVEMEN T	10153 ROBERTS RD SAUQUOIT NY 13456	08/09/2016	08/09/2021
DOL	DOL		ANGELO F COKER			12/04/2018	12/04/2023
DOL	NYC		ANISUL ISLAM		C/O RELIANCE GENERAL CONS 644 OCEAN PARKWAYBROOKLYN NY 11230	09/02/2015	09/02/2020
DOL	DOL		ANITA SALERNO		158 SOLAR ST SYRACUSE NY 13204	01/07/2019	01/07/2024
DOL	DOL	****7004	ANNEX CONTRACTING LTD		3005 WYNSUM AVENUE MERRICK NY 11566	08/18/2014	08/18/2019
DOL	DOL	*****7004	ANNEX GENERAL CONTRACTING INC		3005 WYNSUM AVENUE MERRICK NY 11566	08/18/2014	08/18/2019
DOL	DA		ANTHONY CARDINALE		58-48 59TH STREET MASPETH NY 11378	05/16/2012	05/08/2020
DOL	DOL		ANTHONY J MINGARELLI JR		C/O T & T CONCRETE INC 2560 HAMBURG TURNPIKELACKAWANNA NY 14218	07/08/2015	07/08/2020
DOL	DOL		ANTHONY PERGOLA		3 WEST MAIN ST/SUITE 208 ELMSFORD NY 10323	01/23/2017	01/23/2022
DOL	DOL		ANTONIO ESTIVEZ		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL	*****3020	APCO CONTRACTING CORP		24 SOUTH MARYLAND AVENUE PORT WASHINGTON NY 11050	09/24/2012	09/02/2020
DOL	NYC	****9232	ARKAY CONSTRUCTION INC		102-104 GREYLOCK AVENUE BELLEVILLE NJ 07109	07/15/2015	07/15/2020
DOL	NYC	****4779	ASTORIA GENERAL CONTRACTING CORP		35-34 31ST STREET LONG ISLAND CITY NY 11106	09/02/2015	09/02/2020
DOL	NYC	****7217	ASTRO COMMUNICATIONS OF NY CORP		79 ALEXANDER AVE- STE 36A BRONX NY 10454	10/30/2015	10/30/2020
DOL	NYC	*****6046	ATLANTIC SUN CONTRUCTION CORP		58-46 59TH AVENUE MASPETH NY 11378	05/08/2015	05/08/2020
DOL	NYC	*****6683	ATLAS RESTORATION CORP.		35-12 19TH AVENUE ASTORIA NY 11105	08/02/2017	08/02/2022
DOL	NYC		AUDLEY O'BRIEN		1273 NORTH AVENUE/#1 CP NEW ROCHELLE NY 10804	04/07/2015	04/07/2020
DOL	NYC	*****2591	AVI 212 INC.		260 CROPSEY AVENUE APT 11GBROOKLYN NY 11214	10/30/2018	10/30/2023
DOL	DOL		AVIS R HILL		3510 HICKORY WALK LANE ELLENWOOD GA 32094	01/22/2015	01/22/2020
DOL	AG		AVTAR SINGH		116-24 127TH STREET SOUTH OZONE PARK NY 11420	12/22/2015	12/22/2020

DOL	AG		BALDEV SINGH		116-24 127TH STREET SOUTH OZONE PARK NY 11420	12/22/2015	12/22/2020
DOL	NYC		BALWINDER SINGH		421 HUDSON ST SUITE C5NEW YORK NY 10014	02/20/2019	02/20/2024
DOL	DOL		BARBARA CASSIDY		7 BLENIS PLACE VALHALLA NY 10595	04/02/2015	04/02/2020
DOL	DOL		BARRY KINNEY		6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020
DOL	NYC	*****3915	BEACON RESTORATION INC		SUITE B-8 782 PELHAM PARKWAY SOUTHBRONX NY 10462	04/21/2016	04/21/2021
DOL	NYC	*****8416	BEAM CONSTRUCTION, INC.		50 MAIN ST WHITE PLAINS NY 10606	01/04/2019	01/04/2024
DOL	DOL		BIAGIO CANTISANI			06/12/2018	06/12/2023
DOL	DOL		BOGDAN MARKOVSKI		370 W. PLEASANTVIEW AVE SUITE 2.329HACKENSACK NJ 07601	02/11/2019	02/11/2024
DOL	DOL	****8551	BRANDY'S MASONRY		216 WESTBROOK STREET P O BOX 304SAYRE PA 18840	08/09/2016	08/09/2021
DOL	NYC	*****6555	BROOKLYN WELDING CORP		1273 NORTH AVENUE/ #1 CP NEW ROCHELLE NY 10804	04/07/2015	04/07/2020
DOL	DOL	*****1449	BRRESTORATION NY INC		140 ARCADIA AVENUE OSWEGO NY 13126	09/12/2016	09/12/2021
DOL	DOL		BRUCE MORSEY		C/O KENT HOLLOW SIDING LL 29A BRIDGE STREETNEW MILFORD CT 06776	01/15/2016	01/15/2021
DOL	DOL		BRUCE P. NASH JR.		5841 BUTTERNUT ROAD EAST SYRACUSE NY 13057	09/12/2018	09/12/2023
DOL	DOL	*****8809	C.B.E. CONTRACTING CORPORATION		310 MCGUINESS BLVD GREENPOINT NY 11222	03/07/2017	03/07/2022
DOL	DOL	*****9383	C.C. PAVING AND EXCAVATING, INC.		2610 SOUTH SALINA ST SUITE 12SYRACUSE NY 13205	12/04/2018	12/04/2023
DOL	DOL		CANTISANI & ASSOCIATES LTD		442 ARMONK RD MOUNT KISCSO NY 10549	06/12/2018	06/12/2023
DOL	DOL		CANTISANI HOLDING LLC			06/12/2018	06/12/2023
DOL	DOL		CARIBBEAN POOLS		C/O DOUGLAS L MALARKEY 64 VICTORIA DRIVEBINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL	*****3812	CARMODY "2" INC			06/12/2018	06/12/2023
DOL	DOL	*****1143	CARMODY BUILDING CORP	CARMODY CONTRACTIN G AND CARMODY CONTRACTIN G CORP.	442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		CARMODY CONCRETE CORPORATION			06/12/2018	06/12/2023
DOL	DOL		CARMODY ENTERPRISES, LTD.		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		CARMODY INC		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL	*****3812	CARMODY INDUSTRIES INC			06/12/2018	06/12/2023
DOL	DOL		CARMODY MAINTENANCE CORPORATION		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		CARMODY MASONRY CORP		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	NYC	*****9172	CASSIDY EXCAVATING INC		14 RAILROAD AVENUE VALHALLA NY 10595	05/15/2014	04/02/2020
DOL	DOL	****6745	CATSKILL FENCE INSTALLATIONS INC		5445 ROUTE 32 CATSKILL NY 12414	08/22/2014	08/22/2019
DOL	DOL	****8809	CBE CONTRACTING CORP		142 EAST MARKET STREET LONG BEACH NY 11561	03/07/2017	03/07/2022
DOL	AG		CESAR J. AGUDELO		81-06 34TH AVENUE APT. 6EJACKSON HEIGHTS NY 11372	02/07/2018	02/07/2023
DOL	DOL	*****7655	CHAMPION CONSTRUCTION SERVICES CORP		2131 SCHENECTADY AVENUE BROOKLYN NY 11234	11/18/2015	11/18/2020
DOL	NYC		CHARLES CASSIDY JR		14 RAILROAD AVENUE VALHALLA NY 10595	05/15/2014	04/02/2020
DOL	DOL		CHARLES ZIMMER JR		216 WESTBROOK STREET P O BOX 304SAYRE PA 18840	08/09/2016	08/09/2021

DOL	DOL		CHRISTINE J HEARNE		C/O CJ-HEARNE CONSTRUCTIO 131 PONCE DE LEON AVE NEATLANTA GA 30308	12/01/2015	12/01/2020
DOL	DOL		CHRISTOPHER J MAINI		19 CAITLIN AVE JAMESTOWN NY 14701	09/17/2018	09/17/2023
DOL	DOL	*****0671	CJ-HEARNE CONSTRUCTION CO		SUITE 204 131 PONCE DE LEON AVENUEATLANTA GA 30308	12/01/2015	12/01/2020
DOL	DOL	*****1927	CONSTRUCTION PARTS WAREHOUSE, INC.	CPW	5841 BUTTERNUT ROAD EAST SYRACUSE NY 13057	09/12/2018	09/12/2023
DOL	NYC	*****4468	CRAFT CONTRACTING GROUP INC		3256 BRUNER AVENUE BRONX NY 10469	07/29/2014	07/29/2019
DOL	NYC	*****8507	CRAFT FENCE INC		3256 BRUNER AVENUE BRONX NY 10469	07/29/2014	07/29/2019
DOL	NYC	*****2164	CREATIVE TRUCKING INC		58-83 54TH STREET MASPETH NY 11378	02/26/2016	02/26/2021
DOL	DOL	*****2524	CSI ELECTRICAL & MECHANICAL INC		42-32 235TH ST DOUGLASTON NY 11363	01/14/2019	01/14/2024
DOL	DOL	****7761	D L MALARKEY CONSTRUCTION		64 VICTORIA DRIVE BINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL	****7888	D L MALARKEY CONSTRUCTION INC		64 VICTORIA DRIVE BINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL	****5629	DAKA PLUMBING AND HEATING LLC		2561 ROUTE 55 POUGHQUAG NY 12570	02/19/2016	02/19/2021
DOL	DOL		DANICA IVANOSKI		61 WILLETT ST. PASSAIC NJ 07503	10/26/2016	10/26/2021
DOL	DOL		DARIAN L COKER		2610 SOUTH SALINA ST SUITE 2CSYRACUSE NY 13205	12/04/2018	12/04/2023
DOL	DOL		DARYL T RIEKS		C/O RIEKS CONTRACTING LLC 4804 GAHWILER ROADAUBURN NY 13021	05/01/2015	05/01/2020
DOL	NYC	****7707	DASSLE CONTRACTING INC		213-37 39TH AVE/SUITE 120 BAYSIDE NY 11360	05/08/2015	05/08/2020
DOL	DOL		DAVID MARTINEZ		C/O EMPIRE TILE INC 6 TREMONT COURTHUNTINGTON STATION NY 11746	03/08/2016	03/08/2021
DOL	DOL		DEBBIE STURDEVANT		29 MAPLEWOOD DRIVE BINGHAMTON NY 13901	02/21/2017	02/21/2022
DOL	AG		DEBRA MARTINEZ		31 BAY ST BROOKLYN NY 11231	03/28/2018	03/28/2023
DOL	DOL		DEDA GAZIVODAN		C/O DAKA PLUMBING AND H 2561 ROUTE 55POUGHQUAG NY 12570	02/19/2016	02/19/2021
DOL	DOL		DENNIS SCHWANDTNER		C/O YES SERVICE AND REPAI 145 LODGE AVEHUNTINGTON STATION NY 11476	08/09/2016	08/09/2021
DOL	DOL		DF CONTRACTORS OF ROCHESTER, INC.		1835 DAANSEN RD. PALMYRA NY 14522	05/16/2017	05/16/2022
DOL	DOL		DF CONTRACTORS, INC.		1835 DAANSEN RD. PALMYRA NY 14522	05/16/2017	05/16/2022
DOL	NYC		DIMITRIOS KOUTSOUKOS		C/O ASTORIA GENERAL CONTR 35-34 31ST STREETLONG ISLAND CITY NY 11106	09/02/2015	09/02/2020
DOL	NYC		DIMITRIOS TSOUMAS		35-12 19TH AVENUE ASTORIA NY 11105	08/02/2017	08/02/2022
DOL	DOL	****3242	DONALD R. FORSAY	DF LAWN SERVICE	1835 DAANSEN RD. PALMYRA NY 14522	05/16/2017	05/16/2022
DOL	DOL		DONALD R. FORSAY		1835 DAANSEN RD. PALMYRA NY 14522	05/16/2017	05/16/2022
DOL	DOL		DORIS SKODA		C/O APCO CONTRACTING CORP 24 SOUTH MARYLAND AVENUEPORT WASHINGTON NY 11050	09/24/2012	09/02/2020
DOL	NYC	****7404	DOSANJH CONSTRUCTION CORP		9439 212TH STREET QUEENS VILLAGE NY 11428	02/25/2016	02/25/2021
DOL	DOL		DOUGLAS L MALARKEY	MALARKEY CONSTRUCTI ON	64 VICTORIA DRIVE B INGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL		E C WEBB		6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020
DOL	DOL		EARL L WILSON	WILSON BROTHER DRYWALL CONTRACTOR S	36 ABERSOLD STREET ROCHESTER NY 14621	08/31/2015	08/31/2020

DOL	DOL		EAST COAST PAVING		2238 BAKER RD GILLETT PA 16923	03/12/2018	03/12/2023
DOL	DOL	*****0780	EMES HEATING & PLUMBING CONTR		5 EMES LANE MONSEY NY 10952	01/20/2002	01/20/3002
DOL	DOL	****3270	EMPIRE TILE INC		6 TREMONT COURT HUNTINGTON STATION NY 11746	03/08/2016	03/08/2021
DOL	DOL	****7403	F & B PAINTING CONTRACTING INC		2 PARKVIEW AVENUE HARRISON NY 10604	09/26/2016	09/26/2021
DOL	DOL		FAIGY LOWINGER		11 MOUNTAIN RD 28 VAN BUREN DRMONROE NY 10950	03/20/2019	03/20/2024
DOL	DOL		FAY MATTHEW		C/O CHAMPION CONSTRUCTION 2131 SCHENECTADY AVENUEBROOKLYN NY 11234	11/18/2015	11/18/2020
DOL	DOL		FAZIA GINA ALI-MOHAMMED	C/O CHAMPION CONSTRUCTI ON	2131 SCHENECTADY AVENUE BROOKLYN NY 11234	11/18/2015	11/18/2020
DOL	DOL		FRANK BENEDETTO		19 CATLIN AVE JAMESTOWN NY 14701	09/17/2018	09/17/2023
DOL	DOL		FRANK BENEDETTO		C/O F & B PAINTING CONTRA 2 PARKVIEW AVENUEHARRISON NY 10604	09/26/2016	09/26/2021
DOL	DOL	****4722	FRANK BENEDETTO AND CHRISTOPHER J MAINI	B & M CONCRETE	19 CAITLIN AVE JAMESTOWN NY 14701	09/17/2018	09/17/2023
DOL	DOL		FRANK DEMARTINO		101-61 99TH STREET OZONE PARK NY 11416	02/15/2017	02/15/2022
DOL	DOL		FRANK DEMARTINO		101-61 99TH STREET OZONE PARK NY 11416	02/15/2017	02/15/2022
DOL	DOL		GALINDA ROTENBERG		C/O GMDV TRANS INC 67-48 182ND STREETFRESH MEADOWS NY 11365	06/24/2016	06/24/2021
DOL	DOL		GEOFF CORLETT		415 FLAGGER AVE #302STUART FL 34994	10/31/2018	10/31/2023
DOL	DA		GEORGE LUCEY		150 KINGS STREET BROOKLYN NY 11231	01/19/1998	01/19/2998
DOL	DOL	*****5674	GMDV TRANS INC		67-48 182ND STREET FRESH MEADOWS NY 11365	06/24/2016	06/24/2021
DOL	NYC		GREAT ESTATE CONSTRUCTION, INC.		327 STAGG ST BROOKLYN NY 11206	10/10/2017	10/10/2022
DOL	DOL		GREGORY S. OLSON		P.O BOX 100 200 LATTA BROOK PARKHORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	NYC	*****0346	H N H CONTRACTORS CORP		4558 BROADWAY # 6 NEW YORK NY 10040	08/04/2014	08/04/2019
DOL	NYC		HAMEEDUL HASAN		240 HOME STREET TEANECK NJ 07666	08/04/2014	08/04/2019
DOL	NYC		HARMEL SINGH		15 CLINTON LANE HICKSVILLE NY 11801	02/25/2016	02/25/2021
DOL	NYC		HAROLD KUEMMEL		58-83 54TH STREET MASPETH NY 11378	02/26/2016	02/26/2021
DOL	DOL		HENRY VAN DALRYMPLE		2663 LANTERN LANE ATLANTA GA 30349	12/01/2015	12/01/2020
DOL	DOL	*****6370	HILLIANO CONSTRUCTION & ELECTRICAL INC		354 MAGNOLIA STREET ROCHESTER NY 14611	01/22/2015	01/22/2020
DOL	DOL	*****8282	IDEMA DEVELOPMENT INC		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	DOL	*****8282	IDEMA GENERAL CONTRACTORS INC		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	DOL	*****7001	INTEGRATED CONSTRUCTION & POWER SYSTEMS INC		SUITE 100 2105 W GENESEE STREETSYRACUSE NY 13219	01/06/2016	01/06/2021
DOL	DOL	****5131	INTEGRITY MASONRY, INC.	M&R CONCRETE	722 8TH AVE WATERVLIET NY 12189	06/05/2018	06/05/2023
DOL	AG		J A M CONSTRUCTION CORP		SUITE 125 265 SUNRISE HIGHWAYROCKVILLE CENTRE NY 10457	04/07/2016	04/07/202
DOL	DOL	*****4910	J V MAGIC TOUCH CORPORATION		94-25 57TH AVENUE, APT 5G ELMHURST NY 11373	01/12/2015	01/12/2020
DOL	DOL		J.A. HIRES CADWALLADER		P.O BOX 100 200 LATTA BROOK PARKHORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	DOL		JAMES B RHYNDERS		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	DOL		JAMES C. DELGIACCO		722 8TH AVE WATERVLIET NY 12189	06/05/2018	06/05/2023

DOL	DOL		JAMES E RHYNDERS		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	AG		JAMES FALCONE		SUITE 125 265 SUNRISE HIGHWAYROCKVILLE CENTRE NY 10457	04/07/2016	04/07/2021
DOL	DOL		JAMES LIACONE		9365 WASHINGTON ST LOCKPORT IL 60441	07/23/2018	07/23/2023
DOL	DOL		JAMES RACHEL		9365 WASHINGTON ST LOCKPORT IL 60441	07/23/2018	07/23/2023
DOL	DOL		JAMES RHYNDERS SR		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	DOL		JAMES SICKAU		3090 SHIRLEY ROAD NORTH COLLINS NY 14111	04/19/2011	07/08/2020
DOL	DOL		JASON W MILLIMAN		C/O ROCHESTER ACOUSTICAL P O BOX 799HILTON NY 14468	02/19/2016	02/19/2021
DOL	DOL	****5368	JCH MASONRY & LANDSCAPING INC.		35 CLINTON AVE OSSINING NY 10562	09/12/2018	09/12/2023
DOL	NYC		JEFFREY CASSIDY		14 RAILROAD AVENUE VALHALLA NY 10595	05/15/2014	04/02/2020
DOL	DOL		JEROME LACITIGNOLA		C/O CATSKILL FENCE INSTAL 5445 ROUTE 32 CATSKILL NY 12414	08/22/2014	08/22/2019
DOL	DOL		JESSICA WHITESIDE		C/O BRRESTORATION NY INC 140 ARCADIA AVENUEOSWEGO NY 13126	09/12/2016	09/12/202
DOL	AG		JOHN ANTHONY MASSINO		36-49 204TH STREET BAYSIDE NY 11372	02/07/2018	02/07/2023
DOL	DOL		JOHN F. CADWALLADER		200 LATTA BROOK PARK HORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	DOL	****4612	JOHN F. CADWALLADER, INC.	THE GLASS COMPANY	P.O BOX 100 200 LATTA BROOK PARKHORSEHEADS NY 14845	03/08/2018	03/08/202
DOL	AG	*****0600	JOHNCO CONTRACTING, INC.		36-49 204TH STREET BAYSIDE NY 11372	02/07/2018	02/07/202
DOL	DOL		JON E DEYOUNG		261 MILL ROAD P O BOX 296EAST AURORA NY 14052	07/29/2015	07/29/202
DOL	DOL		JORGE VILLALOBOS		94-25 57TH AVENUE - APT 5 ELMHURST NY 11373	01/12/2015	01/12/202
DOL	DOL		JORI PEDERSEN		415 FLAGER AVE #302STUART FL 34994	10/31/2018	10/31/202
DOL	DOL		JOSE CHUCHUCA		35 CLINTON AVE OSSINING NY 10562	09/12/2018	09/12/202
DOL	DOL		JOSE MONTAS		27 BUTLER PLACE YONKERS NY 10710	03/18/2011	03/19/202
DOL	AG		JOSEPH FALCONE		SUITE 125 265 SUNRISE HIGHWAYROCKVILLE CENTRE NY 10457	04/07/2016	04/07/202
DOL	DOL	*****9273	JOSEPH M LOVETRO		P O BOX 812 BUFFALO NY 14220	08/09/2016	08/09/202
DOL	NYC		JOSEPH MARTINO		1535 RICHMOND AVENUE STATEN ISLAND NY 10314	12/13/2017	12/13/202
DOL	DOL		JOSEPH MARTONE		112 OSCAWANA HEIGHTS RD PUTNAM VALLEY NY 10542	03/13/2015	03/13/202
DOL	DOL		JUANA MARTINEZ		C/O LEAD CONSTRUCTION 27 BUTLER PLACEYONKERS NY 10710	03/19/2015	03/19/202
DOL	DOL		JULIUS AND GITA BEHREND		5 EMES LANE MONSEY NY 10952	11/20/2002	11/20/300
DOL	DOL	*****5062	K R F SITE DEVELOPMENT INC		375 LAKE SHORE DRIVE PUTNAM VALLEY NY 10579	01/23/2017	01/23/202
DOL	DOL		KATIE BURDICK		2238 BAKER RD GILLETT PA 16923	03/12/2018	03/12/202
DOL	DOL		KENNETH FIORENTINO		375 LAKE SHORE DRIVE PUTNAM VALLEY NY 10579	01/23/2017	01/23/202
DOL	DOL	*****9732	KENT HOLLOW SIDING LLC		29A BRIDGE STREET NEW MILFORD CT 06776	01/15/2016	01/15/202
DOL	DOL		KEVIN BABCOCK JR		P O BOX 46 THOMPSON RIDGE NY 10985	08/22/2014	08/22/201
DOL	DOL		KEVIN M BABCOCK		P O BOX 46 THOMPSON RIDGE NY 10985	08/22/2014	08/22/201
DOL	DOL		KIM SOROCENSKI		C/O SOLUTION MATTERS INC 198 NORWOOD ROADPORT JEFFERSON NY 11776	11/19/2015	11/19/202

DOL	DOL	*****3490	L & M CONSTRUCTION/DRYWALL INC.		1079 YONKERS AVE YONKERS NY 10704	08/07/2018	08/07/2023
DOL	DA	*****8816	LAKE CONSTRUCTION AND DEVELOPMENT CORPORATION		150 KINGS STREET BROOKLYN NY 11231	08/19/1998	08/19/2998
DOL	DOL	*****6224	LAKESIDE FIRE SPRINKLERS		125 CHAUTAUQUA AVENUE LAKEWOOD NY 14750	06/24/2015	06/24/2020
DOL	AG	****4643	LALO DRYWALL, INC.		221 OLD FORD ROAD NEW PLATZ NY 12561	05/20/2016	05/20/2021
DOL	DOL	****4505	LARAPINTA ASSOCIATES INC		29 MAPLEWOOD DRIVE BINGHAMTON NY 13901	02/21/2017	02/21/2022
DOL	DOL		LAURI MARTONE		112 OSCAWANA HEIGHTS RD PUTNAM VALLEY NY 10542	03/13/2015	03/13/2020
DOL	DOL		LAVERN GLAVE		161 ROBYN RD MONROE NY 10950	09/15/2014	09/15/2019
DOL	DOL		LAVERN GLAVE		161 ROBYN RD MONROE NY 10950	01/30/2018	01/30/2023
DOL	DOL	*****1364	LEAD CONSTRUCTION SERVICES INC		3 ALAN B SHEPARD PLACE YONKERS NY 10705	03/19/2015	03/19/2020
DOL	DOL	****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	06/24/2016	09/19/2022
DOL	DOL	****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	06/24/2016	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL	****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL	****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	01/17/2017	09/19/2022
DOL	DOL	****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL	****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	08/14/2017	09/19/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	08/14/2017	08/14/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	01/17/2017	09/19/2022
DOL	DOL		LINDSEY R CRILL		143 FILLMORE AVENUE BUFFALO NY 14210	01/08/2015	01/08/2020
DOL	DA	****4460	LONG ISLAND GLASS & STOREFRONTS, LLC		4 MANHASSET TRL RIDGE NY 11961	09/06/2018	09/06/2023
DOL	AG	*****4216	LOTUS-C CORP.		81-06 34TH AVENUE APT. 6EJACKSON HEIGHTS NY 11372	02/07/2018	02/07/2023
DOL	AG		LUIS MARTINEZ	LALO DRYWALL	211 MAIN ST. NEW PALTZ NY 12561	05/20/2016	05/20/2021
DOL	DOL		M ANVER BEIG		142 EAST MARKET STREET LONG BEACH NY 11561	03/07/2017	03/07/2022
DOL	AG	*****6957	M B DIN CONSTRUCTION INC		8831 20TH AVENUE/SUITE 6E BROOKLYN NY 11214	11/17/2015	11/17/2020
DOL	NYC	*****6317	M S QUALITY CONSTRUCTION LLC		27 MAPLEWOOD AVENUE COLONIA NJ 07067	02/04/2015	02/04/2020
DOL	DOL		M. ANVER BEIG		142 EAST MARKET STREET LONG BEACH NY 11561	03/07/2017	03/07/2022
DOL	NYC		MACIEJ SONTOWSKI		27 MAPLEWOOD AVENUE COLONIA NJ 07067	02/04/2015	02/04/2020
DOL	NYC	*****9590	MACK GLASSNAUTH IRON WORKS INC		137 LIBERTY AVENUE BROOKLYN NY 11212	12/21/2015	12/21/2020
DOL	DOL	*****1784	MADISON AVE CONSTRUCTION CORP		39 PENNY STREET WEST ISLIP NY 11795	11/02/2016	11/02/2021
DOL	DOL		MALARKEY'S BAR & GRILL LLC		64 VICTORIA DRIVE BINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL	*****0705	MALARKEY'S PUB & GRUB LLC		64 VICTORIA DRIVE BINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DA		MANUEL P TOBIO		150 KINGS STREET BROOKLYN NY 14444	08/19/1998	08/19/2998

DOL	DA		MANUEL TOBIO		150 KINGS STREET BROOKLYN NY 11231	08/19/1998	08/19/2998
DOL	NYC		MAREK FABIJANOWSKI		50 MAIN ST WHITE PLAINS NY 10606	01/04/2019	01/04/2024
DOL	DOL		MARIACHI'S PIZZERIA		C/O DOUGLAS L MALARKEY 64 VICTORIA DRIVEBINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL		MARK MIONIS		6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020
DOL	DOL		MARVIN A STURDEVANT		29 MAPLEWOOD DRIVE BINGHAMTON NY 13901	02/21/2017	02/21/2022
DOL	DOL		MASONRY CONSTRUCTION, INC.		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL	*****33333	MASONRY INDUSTRIES, INC.		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		MATTHEW IDEMA GENERAL CONTRACTORS INC		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	DOL		MATTHEW P. KILGORE		4156 WILSON ROAD EAST TABERG NY 13471	03/26/2019	03/26/2024
DOL	DOL		MAURICE GAWENO		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL	****6416	MCCALL MASONRY		P O BOX 304 SAYRE PA 18840	08/09/2016	08/09/2021
DOL	DOL		MCLEAN "MIKKI BEANE"		1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	DOL		MCLEAN "MIKKI" DRAKE		1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	DOL		MCLEAN M DRAKE-BEANE		1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	DOL	****9445	MCLEAN M WALSH	ELITE PROFESSION AL PAINTING OF CNY	1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	DOL	****9445	MCLEAN M WALSH	ELITE PROFESSION AL PAINTING OF CNY	1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	NYC	****5330	METRO DUCT SYSTEMS INC		1219 ASTORIA BOULEVARD LONG ISLAND CITY NY 11102	04/16/2014	11/19/2020
DOL	DOL	****3368	MICEK CONSTRUCTION CO		20 CROSS STREET FALCONER NY 14733	12/02/2014	12/02/2019
DOL	DOL		MICHAEL A PASCARELLA		SUITE 100 2105 WEST GENESEE STREET SYRACUSE NY 13219	01/06/2016	01/06/2021
DOL	NYC		MICHAEL HIRSCH		C/O MZM CORP 163 S MAIN STREETNEW CITY NY 10956	01/28/2016	01/28/2021
DOL	DOL		MICHAEL LENIHAN		1079 YONKERS AVE UNIT 4YONKERS NY 10704	08/07/2018	08/07/2023
DOL	AG		MICHAEL RIGLIETTI		31 BAY ST BROOKLYN NY 11231	03/28/2018	03/28/2023
DOL	DOL		MICHAEL WILSON	WILSON BROTHER DRYWALL CONTRACTOR S	36 ABERSOLD STREET ROCHESTER NY 14621	08/31/2015	08/31/2020
DOL	NYC		MILANCE HADZIC		22 CALIFORNIA AVE - STE 1 PATERSON NJ 07503	03/11/2015	03/11/2020
DOL	AG		MOHAMMED N CHATHA		8831 20TH AVENUE/SUITE 6E BROOKLYN NY 11214	11/17/2015	11/17/2020
DOL	DOL	*****2737	MOUNTAIN'S AIR INC		2471 OCEAN AVENUE- STE 7A BROOKLYN NY 11229	09/24/2012	09/18/2020
DOL	AG		MSR ELECTRICAL CONSTRUCTION CORP.		31 BAY ST BROOKLYN NY 11231	03/28/2018	03/28/2023
DOL	DOL		MUHAMMAD BEIG		142 EAST MARKET STREET LONG BEACH NY 11561	03/07/2017	03/07/2022
DOL	DOL		MUHAMMAD BEIG		142 EAST MARKET STREET LONG BEACH NY 11561	03/07/2017	03/07/2022
DOL	DOL		MUHAMMAD PERVAIZ		C/O CHAMPION CONSTRUCTION 2131 SCHENECTADY AVENUEBROOKLYN NY 11234	11/18/2015	11/18/2020
DOL	NYC	****3613	MZM CORP		163 S MAIN STREET NEW CITY NY 10956	01/28/2016	01/28/2021
DOL	DA	****9786	NATIONAL INSULATION & GC CORP		180 MILLER PLACE HICKSVILLE NY 11801	12/12/2018	12/12/2023
DOL	NYC	*****1284	NEW AMERICAN RESTORATION INC		22 CALIFORNIA AVE - STE 1 PATERSON NJ 07503	03/11/2015	03/11/2020

DOL	DA	*****6988	NEW YORK INSULATION INC		58-48 59TH STREET MASPETH NY 11378	05/16/2012	05/08/2020
DOL	NYC	****4839	NEW YORK RIGGING CORP		58-83 54TH STREET MASPETH NY 11378	02/26/2016	02/26/2021
DOL	NYC	*****1968	NORTH AMERICAN IRON WORKS INC		1560 DECATUR STREET RIDGEWOOD NY 11385	05/15/2015	05/15/2020
DOL	DOL	*****6966	NORTH COUNTRY DRYWALL AND PAINT		23167 COUNTY ROUTE 59 DEXTER NY 13634	10/24/2016	10/24/2021
DOL	DOL	*****0065	NORTHEAST LANDSCAPE AND MASONRY ASSOC		3 WEST MAIN ST/SUITE 208 ELMSFORD NY 10523	01/23/2017	01/23/2022
DOL	DOL	*****1845	OC ERECTERS, LLC A/K/A OC ERECTERS OF NY INC.		1207 SW 48TH TERRACE DEERFIELD BEACH FL 33442	01/16/2018	01/16/2023
DOL	NYC		ORSON ARROYO		C/O METRO DUCT SYSTEMS 12-19 ASTORIA BOULEVARDLONG ISLAND CITY NY 11102	04/16/2014	11/19/2020
DOL	NYC	*****9422	PELIUM CONSTRUCTION, INC.		22-33 35TH ST. ASTORIA NY 11105	12/30/2016	12/30/2021
DOL	DOL		PETER M PERGOLA		3 WEST MAIN ST/SUITE 208 ELMSFORD NY 10523	01/23/2017	01/23/2022
DOL	DOL		PIERRE LAPORT		224 COUNTY HIGHWAY 138 BROADALBIN NY 12025	03/07/2017	03/07/2022
DOL	DOL	****1543	PJ LAPORT FLOORING INC		224 COUNTY HIGHWAY 138 BROADALBIN NY 12025	03/07/2017	03/07/2022
DOL	DOL	****6895	PROLINE CONCRETE OF WNY		3090 SHIRLEY ROAD NORTH COLLINS NY 14111	04/19/2011	07/08/2020
DOL	DA	*****6817	QUADRANT METAL BUILDINGS LLC		2740 SW MARTIN DOWNS BLVD PALM CITY FL 34990	08/25/2016	08/25/2021
DOL	NYC		RAMESHWAR ASU		137 LIBERTY AVENUE BROOKLYN NY 11212	12/21/2015	12/21/2020
DOL	DOL		RANA A KAHN		1973 81ST ST - SUITE A-5 BROOKLYN NY 11214	01/08/2015	01/08/2020
DOL	NYC		RANTIK PARIKH		13 LORIANN ROAD WARREN NJ 07059	07/15/2015	07/15/2020
DOL	DOL	****2633	RAW POWER ELECTRIC CORP		3 PARK CIRCLE MIDDLETOWN NY 10940	09/16/2013	09/15/2019
DOL	DOL	****2633	RAW POWER ELECTRIC CORP		3 PARK CIRCLE MIDDLETOWN NY 10940	01/30/2018	01/30/2023
DOL	AG	*****7015	RCM PAINTING INC.		69-06 GRAND AVENUE 2ND FLOORMASPETH NY 11378	02/07/2018	02/07/2023
DOL	DOL		REGINALD WARREN		161 ROBYN RD MONROE NY 10950	09/15/2014	09/15/2019
DOL	DOL		REGINALD WARREN		161 ROBYN RD MONROE NY 10950	01/30/2018	01/30/2023
DOL	NYC	*****3461	RELIANCE GENERAL CONSTRUCTION INC		644 OCEAN PARKWAY BROOKLYN NY 11230	09/02/2015	09/02/2020
DOL	DA		RIANN MULLER		2740 SW MARTIN DOWNS BLVD PALM CITY FL 34990	08/25/2016	08/25/2021
DOL	DOL	*****9148	RICH T CONSTRUCTION		107 WILLOW WOOD LANE CAMILLUS NY 13031	11/13/2018	11/13/2023
DOL	DOL		RICHARD MACONE		8617 THIRD AVE BROOKLYN NY 11209	09/17/2018	09/17/2023
DOL	DOL	*****9148	RICHARD TIMIAN	RICH T CONSTRUCTI ON	108 LAMONT AVE SYRACUSE NY 13209	10/16/2018	10/16/2023
DOL	DOL		RICHARD TIMIAN JR.		108 LAMONT AVE SYRACUSE NY 13209	10/16/2018	10/16/2023
DOL	DOL		RICHARD TIMIAN JR.		108 LAMONT AVE SYRACUSE NY 13209	11/13/2018	11/13/2023
DOL	DOL	*****8618	RIEKS CONTRACTING LLC		4804 GAHWILER ROAD AUBURN NY 13021	05/01/2015	05/01/2020
DOL	DOL		ROBBYE BISSESAR		89-51 SPRINGFIELD BLVD QUEENS VILLAGE NY 11427	01/11/2003	01/11/3003
DOL	DOL		ROBERT BRUNO		3 GAYLORD ST AUBURN NY 13021	11/15/2016	11/15/2021
DOL	DOL	****1855	ROBERT D BISHOP JR	ROBERT D BISHOP JR	P O BOX 112 MORRISSONVILLE NY 12962	07/15/2014	07/15/2019
DOL	DOL		ROBERT D BISHOP JR		P O BOX 112 MORRISONVILLE NY 12962	07/15/2014	07/15/2019
DOL	NYC		ROBERT GUIDO		3256 BRUNER AVENUE BRONX NY 10469	07/29/2014	07/29/2019
DOL	DOL		ROBERT TORDELLA		125 CHAUTAUQUA AVENUE LAKEWOOD NY 14750	06/24/2015	06/24/2020

DOL	DOL	****3859	ROCHESTER ACOUSTICAL CORP		P O BOX 799 HILTON NY 14468	02/19/2016	02/19/2021
DOL	DOL		RODERICK PUGH		404 OAK ST SUITE 101SYRACUSE NY 13203	07/23/2018	07/23/2023
DOL	DOL	*****4880	RODERICK PUGH CONSTRUCTION INC.		404 OAK ST SUITE 101SYRACUSE NY 13203	07/23/2018	07/23/2023
DOL	NYC		RODNEY SCOTT		201 HEMPSTEAD AVENUE WEST HEMPSTEAD NY 11552	10/30/2015	10/30/2020
DOL	DOL		ROMEO WARREN		161 ROBYN RD MONROE NY 10950	09/16/2013	09/15/2019
DOL	DOL		ROMEO WARREN		161 ROBYN RD MONROE NY 10950	01/30/2018	01/30/2023
DOL	DOL		ROSEANNE CANTISANI			06/12/2018	06/12/2023
DOL	DOL		RYAN ALBIE		21 S HOWELLS POINT ROAD BELLPORT NY 11713	02/21/2017	02/21/2022
DOL	DOL	*****3347	RYAN ALBIE CONTRACTING INC		21 S HOWELLS POINT ROAD BELLPORT NY 11713	02/21/2017	02/21/2022
DOL	DOL	****1365	S & L PAINTING, INC.		11 MOUNTAIN ROAD P.O BOX 408MONROE NY 10950	03/20/2019	03/20/2024
DOL	NYC		SABIR MUHAMMED		SUITE B-8 782 PELHAM PARKWAY SOUTHBRONX NY 10462	04/21/2016	04/21/2021
DOL	NYC		SAEED HASAN		4558 BROADWAY #6 NEW YORK NY 10040	08/04/2014	08/04/2019
DOL	NYC	****2117	SCOTT ELECTRICAL LLC		201 HEMPSTEAD AVENUE WEST HEMPSTEAD NY 11552	10/30/2015	10/30/2020
DOL	DOL	*****9751	SCW CONSTRUCTION		544 OLD ROUTE 23 ACRE NY 12405	02/14/2017	02/14/2022
DOL	AG		SERGIO RAYMUNDO		109 DUBOIS RD. NEW PALTZ NY 12561	05/20/2016	05/20/2021
DOL	NYC	*****6597	SHAIRA CONSTRUCTION CORP.		421 HUDSON STREET SUITE C5NEW YORK NY 10014	02/20/2019	02/20/2024
DOL	DOL	*****1961	SHANE BURDICK	CENTRAL TRAFFIC CONTROL, LLC.	2238 BAKER ROAD GILLETT PA 16923	03/12/2018	03/12/2023
DOL	DOL		SHANE BURDICK		2238 BAKER ROAD GILLETT PA 16923	03/12/2018	03/12/2023
DOL	DOL		SHANE NOLAN		9365 WASHINGTON ST LOCKPORT IL 60441	07/23/2018	07/23/2023
DOL	DOL		SHULEM LOWINGER		11 MOUNTAIN ROAD 28 VAN BUREN DRMONROE NY 10950	03/20/2019	03/20/2024
DOL	DOL	*****0816	SOLAR ARRAY SOLUTIONS, LLC		9365 WASHINGTON ST LOCKPORT IL 60441	07/23/2018	07/23/2023
DOL	DOL	****4025	SOLUTION MATTERS INC		198 NORWOOD ROAD PORT JEFFERSON NY 11776	11/19/2015	11/19/2020
DOL	NYC	****4934	SPHINX CONTRACTING CORP		240 HOME STREET TEANECK NJ 07666	08/04/2014	08/04/2019
DOL	DOL	****3496	STAR INTERNATIONAL INC		89-51 SPRINGFIELD BLVD QUEENS VILLAGE NY 11427	08/11/2003	08/11/3003
DOL	DOL	*****9751	STEPHEN C WAGAR		544 OLD ROUTE 23 ACRE NY 12405	02/14/2017	02/14/2022
DOL	DOL		STEVE TATE		415 FLAGER AVE #302STUART FL 34994	10/31/2018	10/31/2023
DOL	DOL		STEVEN P SUCATO		15-68 208TH STREET BAYSIDE NY 11360	06/23/2016	06/23/2021
DOL	DOL		STEVEN SAGGESE		3005 WYNSUM AVENUE MERRICK NY 11566	08/18/2014	08/18/2019
DOL	DOL		STEVEN TESTA		50 SALEM STREET - BLDG B LYNNFIELD MA 01940	01/23/2017	01/23/2022
DOL	NYC	*****9432	SUBLINK LTD		346 THIRD AVENUE PELHAM NY 10803	11/19/2015	11/19/2020
DOL	DOL	*****1060	SUNN ENTERPRISES GROUP, LLC		370 W. PLEASANTVIEW AVE SUITE 2.329HACKENSACK NJ 07601	02/11/2019	02/11/2024
DOL	DOL	****8209	SYRACUSE SCALES, INC.		158 SOLAR ST SYRACUSE NY 13204	01/07/2019	01/07/2024
DOL	DOL	****7441	T & T CONCRETE INC		2560 HAMBURG TURNPIKE P O BOX 367LACKAWANNA NY 14218	07/08/2015	07/08/2020
DOL	DOL	****7417	TADCO CONSTRUCTION		101-61 99TH STREET OZONE PARK NY 11416	02/15/2017	02/15/2022

DOL	DOL		TADCO CONSTRUCTION		101-61 99TH STREET OZONE PARK NY 11416	02/15/2017	02/15/2022
DOL	DOL	*****7417	TADCO CONSTRUCTION CORP		101-61 99TH STREET OZONE PARK NY 11416	02/15/2017	02/15/2022
DOL	DOL		TALAILA OCAMPA		1207 SW 48TH TERRACE DEERFIELD BEACH FL 33442	01/16/2018	01/16/2023
DOL	DOL		TAMMY LACITIGNOLA		C/O CATSKILL FENCE INSTAL 5445 ROUTE 32CATSKILL NY 12414	08/22/2014	08/22/2019
DOL	DOL	*****9852	TAP STEEL INC		ROUTE 26 3101 P O BOX 457CONSTABLEVILLE NY 13325	01/28/2016	01/28/2021
DOL	DOL	****5570	TESTA CORP		50 SALEM STREET - BLDG B LYNNFIELD MA 01940	01/23/2017	01/23/2022
DOL	DOL	*****0887	THE BRINSON PAINTING CORPORATION		72 TAUNTON PLACE BUFFALO NY 14216	04/14/2015	04/14/2020
DOL	DOL	*****5766	THE COKER CORPORATION	COKER CORPORATIO N	2610 SOUTH SALINA ST SUITE 14SYRACUSE NY 13205	12/04/2018	12/04/2023
DOL	DOL	*****8174	THE DALRYMPLE CORPORATION		UNIT 278 541 10TH STREET NWATLANTA GA 30318	12/01/2015	12/01/2020
DOL	DOL	*****8174	THE DALRYMPLE GROUP LLC		289 JONESBORO RD/ STE 216 MCDONOUGH GA 30253	12/01/2015	12/01/2020
DOL	DOL		TIMOTHY A PALUCK		C/O TAP STEEL INC RTE 26 3101/ P O BOX 457CONSTABLEVILLE NY 13325	01/28/2016	01/28/2021
DOL	DOL	****0600	TOMSON ALLOYS RECYCLING		143 FILLMORE AVENUE BUFFALO NY 14210	01/08/2015	01/08/2020
DOL	DOL	****3453	TORCHIA'S HOME IMPROVEMENT		10153 ROBERTS RD SAUQUOIT NY 13456	08/09/2016	08/09/2021
DOL	DOL	*****6914	TRI-COUNTY RESTORATIONS & CONSTRUCTION INC		13 SUMMERSET DRIVE WALLKILL NY 12589	08/22/2014	08/22/2019
DOL	DOL		TRI-COUNTY RESTORATIONS		392 ROCK CUT ROAD WALDEN NY 12586	08/22/2014	08/22/2019
DOL	DOL	*****8311	TRIPLE B FABRICATING, INC.		61 WILLETT ST. PASSAIC NJ 07503	10/26/2016	10/26/2021
DOL	DOL	*****9407	TURBO GROUP INC		15-68 208TH STREET BAYSIDE NY 11360	06/23/2016	06/23/2021
DOL	DOL	*****6392	V.M.K CORP.		8617 THIRD AVE BROOKLYN NY 11209	09/17/2018	09/17/2023
DOL	NYC		VALERIE VISCONTI		346 THIRD AVENUE PELHAM NY 10803	11/19/2015	11/19/2020
DOL	DOL		VICTOR ALICANTI		42-32 235TH ST DOUGLASTON NY 11363	01/14/2019	01/14/2024
DOL	DOL		VICTOR ROTENBERG		C/O GMDV TRANS INC 67048 182ND STREETFRESH MEADOWS NY 11365	06/24/2016	06/24/2021
DOL	NYC		VIKTAR PATONICH		2630 CROPSEY AVE BROOKLYN NY 11214	10/30/2018	10/30/2023
DOL	NYC		VITO GARGANO		1535 RICHMOND AVE STATEN ISLAND NY 10314	12/13/2017	12/13/2022
DOL	DOL		WAYNE LIVINGSTON JR	NORTH COUNTRY DRYWALL AND PAINT	23167 COUNTY ROUTE 59 DEXTER NY 13634	10/24/2016	10/24/2021
DOL	DOL		WHITE PLAINS CARPENTRY CORP		442 ARMONK RD	06/12/2018	06/12/2023
DOL	DOL		WILLIAM C WATKINS		1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	DOL		WILLIAM DEAK		C/O MADISON AVE CONSTR CO 39 PENNY STREETWEST ISLIP NY 11795	11/02/2016	11/02/2021
DOL	DOL		WILLIE BRINSON		72 TAUNTON PLACE BUFFALO NY 14216	04/14/2015	04/14/2020
DOL	DOL	*****6195	WILSON BROTHER DRYWALL CONTRACTORS		36 ABERSOLD STREET ROCHESTER NY 14621	08/31/2015	08/31/2020
DOL	DOL	****4043	WINDSHIELD INSTALLATION NETWORK, INC.		200 LATTA BROOK PARK HORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	DOL	****4730	XGD SYSTEMS, LLC	TDI GOLF	415 GLAGE AVE #302STUART FL 34994	10/31/2018	10/31/2023
DOL	DOL	****7345	YES SERVICE AND REPAIRS CORPORATION		145 LODGE AVE HUNTINGTON STATION NY 11476	08/09/2016	08/09/2021
DOL	DOL		YURIY IVANIN		C/O MOUNTAIN'S AIR INC 2471 OCEAN AVENUE-STE 7ABROOKLYN NY 11229	09/24/2012	09/18/2020

DOL	NYC		ZAKIR NASEEM	30 MEADOW ST BROOKLYN NY 11206	10/10/2017	10/10/2022
DOL	NYC	****8277	ZHN CONTRACTING CORP	30 MEADOW ST BROOKLYN NY 11206	10/10/2017	10/10/2022

SECTION F

TECHINCAL SPECIFICATIONS

SECTION 011000 - SUMMARY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Project information.
 - 2. Work covered by Contract Documents.
 - 3. Phased construction.
 - 4. Work by Owner.
 - 5. Work under separate contracts.
 - 6. Future work.
 - 7. Purchase contracts.
 - 8. Owner-furnished products.
 - 9. Contractor-furnished, Owner-installed products.
 - 10. Access to site.
 - 11. Coordination with occupants.
 - 12. Work restrictions.
 - 13. Specification and drawing conventions.
 - 14. Miscellaneous provisions.

1.3 PROJECT INFORMATION

- A. Project Identification: Catt County Pines Machias Fire Alarm, Wendel Project # 3076-63
 - 1. Project Location: 9855 Route 16, Machias, New York.
- B. Owner: Cattaraugus County Department of Nursing Homes
 - 1. Owner's Representative: Chris Klemann, Maintenance Supervisor, 716-373-1910 Ext 4426, clklemann@cattco.org.
- C. Architect: Wendel Companies, 345 Essjay Road, Suite 200, Williamsville, New York 14221.

1.4 WORK COVERED BY CONTRACT DOCUMENTS

A. The Work of Project is defined by the Contract Documents and consists of the following:

- 1. Replacement of the existing fire alarm system consisting of but not limited to hardware, software, devices, components, programming, wiring, etc. Additional devices added to system for code compliance and minor power connections for shut trip devices.
- B. Type of Contract:
 - 1. Project will be constructed under a single prime contract.

1.5 ACCESS TO SITE

- A. General: Contractor shall have full use of Project site for construction operations during construction period. Contractor's use of Project site is limited only by Owner's right to perform work or to retain other contractors on portions of Project.
- B. Use of Site: Limit use of Project site to work in areas indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - 1. Driveways, Walkways and Entrances: Keep driveways loading areas, and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- C. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations. Maintain fire alarm operational throughout the project or supplement with fire watch.

1.6 COORDINATION WITH OCCUPANTS

- A. Full Owner Occupancy: Owner will occupy site and existing building(s) during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits unless otherwise indicated.
 - 1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and approval of authorities having jurisdiction.
 - 2. Notify Owner not less than 72 hours in advance of activities that will affect Owner's operations.

1.7 CONTRACTOR USE OF PREMISES

- A. Use of the Site: Limit use of the premises to work in areas indicated. Confine operations to areas within contract limits indicated. Do not disturb portions of the site beyond the areas in which the Work is indicated.
 - 1. Owner Occupancy: Allow for Owner occupancy and use by the public for the entire duration of the project. Owner's operations are continuous, 24 hours per day, 7 days per week, 365 days per year.
 - 2. Driveways and Entrances: Keep driveways and entrances serving the premises clear and available to the Owner, the Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
 - 3. Owner's existing parking lots are not to be used for parking of construction workers vehicles or staging of materials or equipment, unless authorized specifically by the Owner.
 - 4. All deliveries to the Contractor at the site must be accepted at the site by the Contractor, regardless of time of delivery. The Owner will not accept deliveries for the Contractor at any time.
- B. Use of the Existing Building: Maintain the existing building in a weathertight condition throughout the construction period. Repair any damage caused by weather or construction operations. Take all precautions necessary to protect the building and its occupants during the construction period.
 - 1. Restore to new condition any lawn, pavement, sidewalk, etc., damage by construction and staging operations. Repair lawns with sod matching existing lawns, not with seed.

1.8 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
 - 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Limit work in the existing building to normal business working hours of 8:30am to 4:30 p.m., Monday through Friday, unless otherwise indicated.
 - 1. Weekend Hours: 8:30am to 4:30 p.m..
 - 2. Early Morning Hours: none.
 - 3. Hours for Utility Shutdowns: 8:30am to 4:30 p.m..
 - 4. Hours for Core Drilling 1:00pm to 3:00pm.
- C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
 - 1. Notify Owner not less than two days in advance of proposed utility interruptions.
 - 2. Obtain Owner's written permission before proceeding with utility interruptions.

- D. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Owner occupancy with Owner.
 - 1. Notify Owner not less than two days in advance of proposed disruptive operations.
 - 2. Obtain Owner's written permission before proceeding with disruptive operations.
- E. Nonsmoking Building: Smoking is not permitted within the building or on the project site at any time. There will be no exceptions.
- F. Controlled Substances: Use of tobacco products and other controlled substances within the existing building on Project site is not permitted.
- G. Employee Identification: Provide identification tags for Contractor personnel working on Project site. Require personnel to use identification tags at all times.

1.9 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 - 1. Abbreviated Language: Language used in the Specifications and other Contract Documents are abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural, and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.
 - 2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
 - a. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
 - 3. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- C. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
 - 1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
 - 2. Abbreviations: Materials and products are identified by abbreviations scheduled on Drawings.

3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

1.10 MISCELLANEOUS PROVISIONS

- A. Copies of Drawings and Project Manuals: The Contractor is required to purchase from the Designated Printing Company the number of copies of the Drawings and Project Manual it requires for construction of the project. The Owner will not reimburse the Contractor for these copies.
- B. Project Superintendent: The Owner must approve the Contractor's project superintendent for the work. Submit resume of proposed superintendent together with Bid.
 - 1. Full Time Superintendent: The Contractor's project superintendent is required to be on site full time for the duration of the project or until such time as mutually agreed upon by the Owner, Architect and Contractor. No substitution of project superintendents by the Contractor after work begins will be allowed without prior approval by Architect and Owner.
- C. Licensed Contractors/Subcontractors: Prime Contractor and all Subcontractors must be licensed to work in the State of New York, Cattaraugus County, Town of Machias in each of their perspective fields of work on the Project.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for alternates.

1.3 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if the Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
 - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternates into the Work. No other adjustments are made to the Contract Sum.

1.4 PROCEDURES

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include, as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation, whether or not indicated as part of alternate.
- B. Execute accepted alternates under the same conditions as other Work of the Contract.
- C. Schedule: A Part 3 "Schedule of Alternates" Article is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

- A. Alternate No. 1: ADD to Extend Maintenance Contract for Fire Alarm System.
 - Alternate: Provide cost to extend maintenance contract two (2) additional years for a total of 72 months or 6 Years from substantial completion as outlined in specification section 284621 – FIRE DETECTION AND ALARM SYSTEM item 1.10 MAINTENANCE SERVICE
- B. Alternate No. 2: DEDUCT to reuse existing Fire Alarm System SLC and NAC circuits.
 - 1. Alternate: Provide cost deduct to accept existing fire alarm system wiring including but not limited to SLC, NAC, Risers, etc. Acceptance of existing wiring does not exclude contractor from repairing existing faults, damaged or improperly supported cabling, and bringing up to code for use by the new system and devices.

END OF SECTION 012300

SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for handling and processing Contract modifications.

1.3 MINOR CHANGES IN THE WORK

A. Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710, "Architect's Supplemental Instructions."

1.4 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Work Change Proposal Requests issued by Architect are not instructions either to stop work in progress or to execute the proposed change.
 - 2. Within 14 calendar days, when not otherwise specified, after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.
 - d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - e. Quotation Form: Use forms acceptable to Architect.

- B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Architect.
 - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
 - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - 4. Include costs of labor and supervision directly attributable to the change.
 - 5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - 6. Comply with requirements in Section 012500 "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.
 - 7. Proposal Request Form: Use form acceptable to Architect.

1.5 CHANGE ORDER PROCEDURES

A. On Owner's approval of a Work Changes Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on AIA Document G701.

1.6 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Architect may issue a Construction Change Directive on AIA Document G714. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 - 1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
 - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012600

SECTION 012900 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract including General and Supplementary Conditions and other Division 01 Specification Sections apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.

1.3 DEFINITIONS

A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

1.4 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.
 - 1. Coordinate line items in the schedule of values with other required administrative forms and schedules, including the following:
 - a. Application for Payment forms with continuation sheets.
 - b. Submittal schedule.
 - c. Items required to be indicated as separate activities in Contractor's construction schedule.
 - 2. Submit the schedule of values to Architect at earliest possible date, but no later than seven calendar days before the date scheduled for submittal of initial Applications for Payment.
 - 3. Sub-schedules for Phased Work: Where the Work is separated into phases requiring separately phased payments, provide sub-schedules showing values coordinated with each phase of payment.
 - 4. Sub-schedules for Separate Elements of Work: Where the Contractor's construction schedule defines separate elements of the Work, provide sub-schedules showing values coordinated with each element.
- B. Format and Content: Use Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.

- 1. Identification: Include the following Project identification on the schedule of values:
 - a. Project name and location.
 - b. Names of Architect
 - c. Architect's project number(s).
 - d. Contractor's name and address.
 - e. Date of submittal.
- 2. Arrange schedule of values consistent with format of AIA Document G703.
- 3. Arrange the schedule of values in tabular form with separate columns to indicate the following for each item listed:
 - a. Related Specification Section or Division.
 - b. Description of the Work.
 - c. Name of subcontractor.
 - d. Name of manufacturer or fabricator.
 - e. Name of supplier.
 - f. Change Orders (numbers) that affect value.
 - g. Dollar value of the following, as a percentage of the Contract Sum to nearest onehundredth percent, adjusted to total 100 percent.
 - 1) Labor.
 - 2) Materials.
 - 3) Equipment.
- 4. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with Project Manual table of contents. Provide multiple line items for principal subcontract amounts in excess of five percent of the Contract Sum.
 - a. Include separate line items under Contractor and principal subcontracts for Project closeout requirements in an amount totaling five percent of the Contract Sum and subcontract amount.
- 5. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
- 6. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored but not yet installed.
 - a. Differentiate between items stored on-site and items stored off-site. Regardless of on- or off-site storage, provide evidence of insurance for such.
- 7. Provide separate line items in the schedule of values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
- 8. Purchase Contracts: Provide a separate line item in the schedule of values for each purchase contract. Show line-item value of purchase contract. Indicate owner payments or deposits, if any, and balance to be paid by Contractor.
- 9. Each item in the schedule of values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.

- a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the schedule of values or distributed as general overhead expense, at Contractor's option.
- 10. Schedule Updating: Update and resubmit the schedule of values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.5 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments as certified by Architect and paid for by Owner.
 - 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction work covered by each Application for Payment is the period indicated in the Agreement.
- C. Payment Application Times: Submit Application for Payment to Architect by the fifteenth of the month. The period covered by each Application for Payment is one month, ending on the last day of the month.
 - 1. Submit draft copy of Application for Payment seven calendar days prior to due date for review by Architect.
- D. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 as form for Applications for Payment.
- E. Application for Payment Forms: Use forms provided by Owner for Applications for Payment. Sample copies are included in Project Manual.
- F. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.
 - 1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
 - 2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
 - 3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
 - 4. Indicate separate amounts for work being carried out under Owner-requested project acceleration.

- G. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Differentiate between items stored on-site and items stored off-site.
 - 1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment, for stored materials.
 - 2. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
 - 3. Provide summary documentation for stored materials indicating the following:
 - a. Value of materials previously stored and remaining stored as of date of previous Applications for Payment.
 - b. Value of previously stored materials put in place after date of previous Application for Payment and on or before date of current Application for Payment.
 - c. Value of materials stored since date of previous Application for Payment and remaining stored as of date of current Application for Payment.
- H. Transmittal: Submit three signed and notarized original copies of each Application for Payment to Architect by a method ensuring receipt within 24 hour. One copy shall include waivers of liens and similar attachments if required.
 - 1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- I. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from entities lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
 - 1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
 - 2. When an application shows completion of an item, submit conditional final or full waivers.
 - 3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
 - 4. Waiver Forms: Submit executed waivers of lien on forms acceptable to Owner.
- J. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's liens from subcontractors, sub-subcontractors, and suppliers for construction period covered by the previous application.
 - 1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
 - 2. When an application shows completion of an item, submit conditional final or full waivers.
 - 3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
 - 4. Submit final Application for Payment with or preceded by conditional final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.

- 5. Waiver Forms: Submit executed waivers of lien on forms, acceptable to Owner.
- K. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
 - 1. List of subcontractors.
 - 2. Schedule of values.
 - 3. Contractor's construction schedule (preliminary if not final).
 - 4. Combined Contractor's construction schedule (preliminary if not final) incorporating Work of multiple contracts, with indication of acceptance of schedule by each Contractor.
 - 5. Products list (preliminary if not final).
 - 6. Schedule of unit prices.
 - 7. Submittal schedule (preliminary if not final).
 - 8. List of Contractor's staff assignments.
 - 9. List of Contractor's principal consultants.
 - 10. Copies of building permits.
 - 11. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
 - 12. Initial progress report.
 - 13. Report of preconstruction conference.
 - 14. Certificates of insurance and insurance policies.
 - 15. Performance and payment bonds.
 - 16. Data needed to acquire Owner's insurance.
- L. Application for Payment at Substantial Completion: After Architect issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
 - 1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 - 2. This application shall reflect Certificate(s) of Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- M. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
 - 1. Consult Owner about the need for additional affidavits and other requirements.
 - 2. Evidence of completion of Project closeout requirements.
 - 3. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 - 4. Updated final statement, accounting for final changes to the Contract Sum.
 - 5. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
 - 6. AIA Document G706A, "Contractor's Affidavit of Release of Liens."
 - 7. AIA Document G707, "Consent of Surety to Final Payment."
 - 8. AIA Document G707A, "Consent of Surety to Final Reduction in or Partial Release of Retainage."
 - 9. Evidence that claims have been settled.

- 10. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
- 11. Final liquidated damages settlement statement.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012900

SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. General coordination procedures.
 - 2. Coordination drawings.
 - 3. Requests for Information (RFIs).
 - 4. Project Web site.
 - 5. Project meetings.
- B. Each contractor shall cooperate and participate in coordination requirements. Certain areas of responsibility are assigned to a specific contractor.

1.3 DEFINITIONS

A. RFI: Request from Owner, Architect, or Contractor seeking information required by or clarifications of the Contract Documents.

1.4 INFORMATIONAL SUBMITTALS

- A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
 - 1. Name, address, and telephone number of entity performing subcontract or supplying products.
 - 2. Number and title of related Specification Section(s) covered by subcontract.
 - 3. Drawing number and detail references, as appropriate, covered by subcontract.
- B. Key Personnel Names: Within 21 calendar days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home, office, and cellular telephone numbers and e-mail

addresses. Provide names, addresses, and telephone numbers of individuals assigned as alternates in the absence of individuals assigned to Project.

1. Post copies of list in project meeting room, in temporary field office, and by each temporary telephone. Keep list current at all times.

1.5 GENERAL COORDINATION PROCEDURES

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections, that depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Coordination: Each contractor shall coordinate its construction operations with those of other contractors and entities to ensure efficient and orderly installation of each part of the Work. Each contractor shall coordinate its operations with operations, included in different Sections, that depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components with other contractors to ensure maximum performance and accessibility for required maintenance, service, and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.
- C. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
 - 1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- D. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of Contractor's construction schedule.
 - 2. Preparation of the schedule of values.
 - 3. Installation and removal of temporary facilities and controls.
 - 4. Delivery and processing of submittals.
 - 5. Progress meetings.
 - 6. Preinstallation conferences.

- 7. Project closeout activities.
- 8. Startup and adjustment of systems.
- E. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.
 - 1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. See other Sections for disposition of salvaged materials that are designated as Owner's property.

1.6 COORDINATION DRAWINGS

- A. Coordination Drawings, General: Prepare coordination drawings according to requirements in individual Sections, and additionally where installation is not completely shown on Shop Drawings, where limited space availability necessitates coordination, or if coordination is required to facilitate integration of products and materials fabricated or installed by more than one entity.
 - 1. Content: Project-specific information, drawn accurately to a scale large enough to indicate and resolve conflicts. Do not base coordination drawings on standard printed data. Include the following information, as applicable:
 - a. Use applicable Drawings as a basis for preparation of coordination drawings. Prepare sections, elevations, and details as needed to describe relationship of various systems and components.
 - b. Coordinate the addition of trade-specific information to the coordination drawings by multiple contractors in a sequence that best provides for coordination of the information and resolution of conflicts between installed components before submitting for review.
 - c. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
 - d. Indicate space requirements for routine maintenance and for anticipated replacement of components during the life of the installation.
 - e. Show location and size of access doors required for access to concealed dampers, valves, and other controls.
 - f. Indicate required installation sequences.
 - g. Indicate dimensions shown on the Drawings. Specifically note dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Architect indicating proposed resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.
- B. Coordination Drawing Organization: Organize coordination drawings as follows:
 - 1. Floor Plans and Reflected Ceiling Plans: Show architectural and structural elements, and mechanical, plumbing, fire-protection, fire-alarm, and electrical Work. Show locations of visible ceiling-mounted devices relative to acoustical ceiling grid. Supplement plan drawings with section drawings where required to adequately represent the Work.

- 2. Plenum Space: Indicate subframing for support of ceiling and wall systems, mechanical and electrical equipment, and related Work. Locate components within ceiling plenum to accommodate layout of light fixtures indicated on Drawings. Indicate areas of conflict between light fixtures and other components.
- 3. Mechanical Rooms: Provide coordination drawings for mechanical rooms showing plans and elevations of mechanical, plumbing, fire-protection, fire-alarm, and electrical equipment.
- 4. Structural Penetrations: Indicate penetrations and openings required for all disciplines.
- 5. Slab Edge and Embedded Items: Indicate slab edge locations and sizes and locations of embedded items for metal fabrications, sleeves, anchor bolts, bearing plates, angles, door floor closers, slab depressions for floor finishes, curbs and housekeeping pads, and similar items.
- 6. Mechanical and Plumbing Work: Show the following:
 - a. Sizes and bottom elevations of ductwork, piping, and conduit runs, including insulation, bracing, flanges, and support systems.
 - b. Dimensions of major components, such as dampers, valves, diffusers, access doors, cleanouts and electrical distribution equipment.
 - c. Fire-rated enclosures around ductwork.
- 7. Electrical Work: Show the following:
 - a. Runs of vertical and horizontal conduit 1-1/4 inches in diameter and larger.
 - b. Light fixture, exit light, emergency battery pack, smoke detector, and other firealarm locations.
 - c. Panel board, switch board, switchgear, transformer, busway, generator, and motor control center locations.
 - d. Location of pull boxes and junction boxes, dimensioned from column center lines.
- 8. Fire-Protection System: Show the following:
 - a. Locations of standpipes, mains piping, branch lines, pipe drops, and sprinkler heads.
- 9. Review: Architect will review coordination drawings to confirm that the Work is being coordinated, but not for the details of the coordination, which are Contractor's responsibility. If Architect determines that coordination drawings are not being prepared in sufficient scope or detail, or are otherwise deficient, Architect will so inform Contractor, who shall make changes as directed and resubmit.
- 10. Coordination Drawing Prints: Prepare coordination drawing prints according to requirements in Section 013300 "Submittal Procedures."
- C. Coordination Digital Data Files: Prepare coordination digital data files according to the following requirements:
 - 1. File Preparation Format: DWG, Version AutoCAD 2013, operating in Microsoft Windows operating system.
 - 2. File Submittal Format: Submit or post coordination drawing files using Portable Data File (PDF) format.

- 3. Architect will furnish Contractor one set of digital data files of Drawings for use in preparing coordination digital data files.
 - a. Architect makes no representations as to the accuracy or completeness of digital data files as they relate to Drawings.
 - b. Digital Data Software Program: Drawings are available in AutoCAD 2013 operating in Microsoft Windows.
 - c. Contractor shall execute a data licensing agreement in the form of Agreement included in this Project Manual.
 - d. The signed Agreement and handling and administration fee **<Insert Amount>** for the full set of CAD files must be received by the Architect before digital data drawings are furnished to the Contractor.

1.7 REQUESTS FOR INFORMATION (RFIs)

- A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
 - 1. Architect will return RFIs submitted to Architect by other entities controlled by Contractor with no response.
 - 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
 - 3. Architect will not review RFI's submitted via fax or verbal requests.
- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
 - 1. Project name.
 - 2. Project number.
 - 3. Date.
 - 4. Name of Contractor.
 - 5. Name of Architect.
 - 6. RFI number, numbered sequentially.
 - 7. RFI subject.
 - 8. Specification Section number and title and related paragraphs, as appropriate.
 - 9. Drawing number and detail references, as appropriate.
 - 10. Field dimensions and conditions, as appropriate.
 - 11. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 - 12. Contractor's signature.
 - 13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
 - a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.
- C. RFI Forms: Form immediately following this section.

- 1. Attachments shall be electronic files in Adobe Acrobat PDF format.
- D. Architect's Action: Architect will review each RFI, determine action required, and respond. Allow five business days for Architect's response for each RFI. RFIs received by after 1:00 p.m. will be considered as received the following business day.
 - 1. The following Contractor-generated RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for approval of Contractor's means and methods.
 - d. Requests for coordination information already indicated in the Contract Documents.
 - e. Requests for adjustments in the Contract Time or the Contract Sum.
 - f. Requests for interpretation of Architect's actions on submittals.
 - g. Incomplete RFIs or inaccurately prepared RFIs.
 - 2. Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt of additional information.
 - 3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 012600 "Contract Modification Procedures."
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 10 business days of receipt of the RFI response.
- E. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly. Include the following:
 - 1. Project name.
 - 2. Name and address of Contractor.
 - 3. Name and address of Architect
 - 4. RFI number including RFIs that were returned without action or withdrawn.
 - 5. RFI description.
 - 6. Date the RFI was submitted.
 - 7. Date Architect's response was received.
- F. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within five business days if Contractor disagrees with response.
 - 1. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.

1.8 PROJECT MEETINGS

A. General: Where indicated, the contractor shall schedule and conduct meetings and conferences at Project site unless otherwise indicated.

- 1. Attendees: Contractor shall inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
- 2. Agenda: Contractor shall prepare the meeting agenda. Distribute the agenda to all invited attendees.
- 3. Minutes: Contractor shall be responsible for conducting meeting and will record significant discussions and agreements achieved. Contractor shall distribute the meeting minutes to everyone concerned, including Owner, and Architect, within three business days of the meeting.
- B. Preconstruction Conference: Architect will schedule and conduct a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 15 business days after execution of the Agreement.
 - 1. Conduct the conference to review responsibilities and personnel assignments.
 - 2. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 3. Agenda: Discuss items of significance that could affect progress, including the following:
 - a. Tentative construction schedule.
 - b. Phasing.
 - c. Critical work sequencing and long-lead items.
 - d. Designation of key personnel and their duties.
 - e. Lines of communications.
 - f. Procedures for processing field decisions and Change Orders.
 - g. Procedures for RFIs.
 - h. Procedures for testing and inspecting.
 - i. Procedures for processing Applications for Payment.
 - j. Distribution of the Contract Documents.
 - k. Submittal procedures.
 - 1. Preparation of record documents.
 - m. Use of the premises and existing building.
 - n. Work restrictions.
 - o. Working hours.
 - p. Owner's occupancy requirements.
 - q. Responsibility for temporary facilities and controls.
 - r. Procedures for moisture and mold control.
 - s. Procedures for disruptions and shutdowns.
 - t. Construction waste management and recycling.
 - u. Parking availability.
 - v. Office, work, and storage areas.
 - w. Equipment deliveries and priorities.
 - x. First aid.
 - y. Security.
 - z. Progress cleaning.

- 4. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.
- C. Preinstallation Conferences: Contractor shall conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction. Preinstallation conferences shall include conferences identified in individual Specification Sections.
 - 1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect, of scheduled meeting dates.
 - 2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:
 - a. Contract Documents.
 - b. Options.
 - c. Related RFIs.
 - d. Related Change Orders.
 - e. Purchases.
 - f. Deliveries.
 - g. Submittals.
 - h. Review of mockups.
 - i. Possible conflicts.
 - j. Compatibility requirements.
 - k. Time schedules.
 - l. Weather limitations.
 - m. Manufacturer's written instructions.
 - n. Warranty requirements.
 - o. Compatibility of materials.
 - p. Acceptability of substrates.
 - q. Temporary facilities and controls.
 - r. Space and access limitations.
 - s. Regulations of authorities having jurisdiction.
 - t. Testing and inspecting requirements.
 - u. Installation procedures.
 - v. Coordination with other work.
 - w. Required performance results.
 - x. Protection of adjacent work.
 - y. Protection of construction and personnel.
 - 3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
 - 4. Reporting: Distribute minutes of the meeting to each party present and to other parties requiring information.
 - 5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.

- D. Project Closeout Conference: Contractor shall schedule and conduct a project closeout conference, at a time convenient to Owner and Architect, but no later than 90 calendar days prior to the scheduled date of Substantial Completion.
 - 1. Contractor shall conduct the conference to review requirements and responsibilities related to Project closeout.
 - 2. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the meeting. Participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 3. Agenda: Discuss items of significance that could affect or delay Project closeout, including the following:
 - a. Preparation of record documents.
 - b. Procedures required prior to inspection for Substantial Completion and for final inspection for acceptance.
 - c. Submittal of written warranties.
 - d. Requirements for preparing operations and maintenance data.
 - e. Requirements for delivery of material samples, attic stock, and spare parts.
 - f. Requirements for demonstration and training.
 - g. Preparation of Contractor's punch list.
 - h. Procedures for processing Applications for Payment at Substantial Completion and for final payment.
 - i. Submittal procedures.
 - j. Coordination of separate contracts.
 - k. Owner's partial occupancy requirements.
 - 1. Installation of Owner's furniture, fixtures, and equipment.
 - m. Responsibility for removing temporary facilities and controls.
 - 4. Minutes: Contractor shall record and distribute meeting minutes.
- E. Progress Meetings: Contractor shall conduct progress meetings at biweekly intervals minimally.
 - 1. Coordinate dates of meetings with preparation of payment requests.
 - 2. Attendees: In addition to representatives of Owner, and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 3. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.

- 1) Review schedule for next period.
- b. Review present and future needs of each entity present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Status of LEED and or sustainable design documentation.
 - 5) Deliveries.
 - 6) Off-site fabrication.
 - 7) Access.
 - 8) Site utilization.
 - 9) Temporary facilities and controls.
 - 10) Progress cleaning.
 - 11) Quality and work standards.
 - 12) Status of correction of deficient items.
 - 13) Field observations.
 - 14) Status of RFIs.
 - 15) Status of proposal requests.
 - 16) Pending changes.
 - 17) Status of Change Orders.
 - 18) Pending claims and disputes.
 - 19) Documentation of information for payment requests.
- 4. Minutes: Contractor shall record and distribute the meeting minutes to each party present and to parties requiring information.
 - a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013100

Requesting Entity	Name of Requesting
Name ("Recipient")	Entity's
	Representative

Project Name	
Project Location	
Wendel Project Number	

Electronic Files				
Copies	Date/Version	Name/Description of File		
1				
	(If more	space is needed attach a list of the requested files hereto.)		

Purpose of Request:

Processing Fee:

In order to request electronic files from Wendel Architecture, Engineering, Surveying & Landscape Architecture, Inc, (hereinafter "Wendel") this Request Form must be submitted to Wendel, fully executed and with no modifications. By submitting this Request Form the Recipient is entering into a contract, the Terms and Conditions of which are attached hereto and made a part hereof, and acknowledges that the Recipient has read this document, that the Recipient understands it and agrees to be bound by its terms.

In consideration of Recipient's acceptance of the terms of this Request Form, the sufficiency of which is hereby acknowledged, Wendel grants Recipient a limited, nonexclusive, non-transferable license, subject to the attached Terms and Conditions, to temporarily save the original electronic files to storage media for viewing and printing, and the creation of derivative works therefrom, by Recipient solely for the Purpose stated above, which Purpose must be related to the Project named above.

Each person signing this Agreement represents and warrants that he or she is duly authorized and has legal capacity to execute and deliver this Agreement.

Wendel	Recipient
Signature	Signature
Printed Name	Printed Name
Title	Title
Date	Date

Recipient understands and confirms that (i) the electronic files provided by Wendel may contain confidential and/or proprietary information and are each and all deemed confidential and proprietary, (ii) Recipient shall use not less than the same degree of care to avoid disclosure of the electronic files as it uses for its own confidential or proprietary Information of like importance, and (iii) Recipient must immediately notify Wendel of any known or suspected unauthorized use(s) of the electronic files.

The availability of electronic files is subject to the consent of the owner(s) of those electronic files. Wendel will not negotiate with nor repeatedly solicit another party to obtain their consent. Neither this Request Form nor any such separate party's consent may be assigned or transferred by Recipient to any other person or entity.

Electronic files and data, and the license for the limited use thereof hereby granted, are provided by Wendel only for the convenience of the Recipient, do not constitute or imply a grant of any rights, by license or otherwise, to Recipient under any patent, copyright, trade secret, or other intellectual property right, are not Project contract documents nor Instruments of Service of any licensed professional, shall not be construed as containing original signatures and seals of any licensed professionals, and are not intended to be deemed a sale of the electronic files and data to the Recipient; all right, title and interest in the electronic files belong to and shall remain with Wendel. The electronic files and data shall not be used by the Recipient for the construction or building of the Project, for additions to the Project, for completion of the Project by others, or on other projects.

Recipient may not remove or obscure any copyright notice or other notices contained in the electronic files. Recipient will not copy, alter, modify, disassemble, reverse engineer, decompile, or distribute, sell, rent, lease, lend or sublicense to any third party, any of the electronic files received from Wendel without the prior written consent of Wendel.

Wendel, at its sole discretion, may (i) modify the electronic files before they are provided to the Recipient. Such modifications may include, but are not necessarily limited to, removal of the seals of licensed professionals and certain confidential or proprietary information or (ii) refuse to provide some or all electronic files requested by Recipient.

WENDEL PROVIDES THE ELECTRONIC FILES SOLELY ON AN "AS IS" BASIS. NO REPRESENTATION OR WARRANTY IS MADE, EITHER EXPRESS OR IMPLIED, CONCERNING THE MERCHANTABILITY OF THE ELECTRONIC FILES AND DATA OR THEIR FITNESS FOR A PARTICULAR PURPOSE. Wendel shall not be responsible for and the Recipient assumes all risks associated with the receipt, use and possession of the electronic files. Recipient waives any and all claims against and shall defend, indemnify and hold harmless Wendel, its sub-consultants, subcontractors, agents, and the owners, partners and employees of each of them, from and against any and all third party claims, suits, losses, direct, indirect, consequential, punitive or special damages, costs and expenses, including but not limited to attorney's fees, arising out of, resulting from, or in connection with the Recipient's possession, use, modification or distribution of the electronic files and data provided by Wendel. The waiver, defense and indemnification obligations set forth in this paragraph shall survive any use of the electronic files provided under this Request Form.

Recipient agrees it shall have no right to furnish or provide the electronic files in any litigation, administrative proceeding, arbitration or mediation against Wendel, its sub-consultants, subcontractors, agents, and the owners, partners and employees of each of them, except with the express written consent of Wendel.

Upon conclusion or expiration of the stated Purpose, Recipient will return or destroy all the electronic files received from Wendel. Recipient will retain no copies of the electronic files, unless both parties agree that such return or destruction is not feasible, Recipient will then extend the protection of the confidentiality requirements set forth herein to the electronic files not returned or destroyed, and refrain from further use or disclosure of such electronic files or their content for as long as Recipient retains the electronic files.

The Recipient understands and acknowledges that any disclosure or misappropriation of any of the electronic files, or the confidential or proprietary data or Information contained therein, in violation of this contract may cause Wendel irreparable harm, the amount of which may be difficult to ascertain, and therefore agrees that Wendel shall have the right to apply to a court of competent jurisdiction for an order restraining and enjoining such disclosure or breach and for such other relief as Wendel shall deem appropriate. Such right of Wendel is to be in addition to the remedies otherwise available to Wendel at law or in equity. The Recipient expressly waives (i) the defense that a remedy in damages will be adequate and (ii) any requirement in an action for injunction for the posting of a bond by Wendel. If any action at law or in equity is brought to enforce or interpret the provisions of this contract, the prevailing party in such action shall be awarded its attorneys' fees and costs incurred.

This Request Form shall be interpreted and construed in accordance with the laws of the State of New York. If one or more of the provisions contained herein is found to be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions shall not be affected. Such invalid, illegal or unenforceable provisions shall be revised only to the extent necessary to make them enforceable. Recipient agrees to submit to jurisdiction and venue in the state and federal courts of Erie County, New York for any dispute which may arise hereunder.

This Request Form contains all applicable terms and conditions relating to the provision of the requested electronic files to the Recipient by Wendel. No other terms and conditions apply. This Request Form is not a part of, subject to, nor a modification of the terms and conditions of any bid documents or contract documents of the Project named above.

		REQUEST FOR INFORMATION
Contractor Name		-
Address: City, State, Zip:	Phone: Fax:	Project No. 307663
Contractor R	FI No.:	DATE:
TITLE:		JOB:
PROJECT:	Pines Machias Fire Alarm Replacement Wendel	REQUIRED:
TO:	375 Essjay Road, Suite 200 Williamsville, New York, 14221	
ATTN:	Nancy DeLoatch, CDFA ndeloatch@wendelcompanies.com)	
OUESTION:		

ANSWER:

Note: the response to this RFI is for clarification of the contract documents. The response is **NOT** authorization to proceed with additional work.
Answered By:______ Date:______

SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including but not limited to, the following:
 - 1. Preliminary construction schedule.
 - 2. Contractor's construction schedule.
 - 3. Submittal schedule.
 - 4. Daily construction reports.
 - 5. Material location reports.
 - 6. Site condition reports.
 - 7. Special reports.

1.3 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
 - 1. Critical Activity: An activity on the critical path that must start and finish on the planned early start and finish times.
 - 2. Predecessor Activity: An activity that precedes another activity in the network.
 - 3. Successor Activity: An activity that follows another activity in the network.
- B. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.
- C. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- D. Event: The starting or ending point of an activity.
- E. Float: The measure of leeway in starting and completing an activity.
 - 1. Float time belongs to Owner.

- 2. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the successor activity.
- 3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.

1.4 INFORMATIONAL SUBMITTALS

- A. Format for Submittals: Submit required submittals in the following format:
 - 1. Working electronic copy of schedule file, where indicated.
 - 2. PDF electronic file.
 - 3. Two paper copies.
- B. Qualification Data for Scheduling Consultant: For consultant or in-house persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- C. Preliminary construction schedule.
 - 1. Approval of startup construction schedule will not constitute approval of schedule of values for cost-loaded activities.
- D. Submittals Schedule: Submit submittals schedule, conforming to dates on the Contractor's Construction Schedule. Include any required submittals not included on the schedule. Arrange the following information in a tabular format:
 - 1. Scheduled dates for first submittal.
 - 2. Specification Section number and title.
 - 3. Submittal category (action or informational)
 - 4. Name of subcontractor.
 - 5. Description of the Work covered.
 - 6. Scheduled date for Architect's and Owner's final release or approval.
- E. Contractor's Construction Schedule: Submit on 11"x17" paper for review as required to display entire schedule for entire construction period.
 - 1. Submit a working electronic copy of schedule, using software indicated, and labeled to comply with requirements for submittals. Include type of schedule (initial or updated) and date on label.
- F. CPM Reports: Concurrent with CPM schedule, submit each of the following reports. Format for each activity in reports shall contain activity number, activity description and resource loading, original duration, remaining duration, early start date, early finish date, late start date, late finish date, and total float in calendar days.
 - 1. Activity Report: List of all activities sorted by activity number and then early start date, or actual start date if known.

- 2. Logic Report: List of preceding and succeeding activities for all activities, sorted in ascending order by activity number and then early start date, or actual start date if known.
- 3. Total Float Report: List of all activities sorted in ascending order of total float.
- G. Daily Construction Reports: Submit at weekly intervals.
- H. Material Location Reports: Submit at monthly intervals.
- I. Site Condition Reports: Submit at time of discovery of differing conditions.
- J. Special Reports: Submit at time of unusual event.
- K. Two Week Look-Ahead Schedules: Submit at weekly intervals.

1.5 QUALITY ASSURANCE

- A. Scheduling Consultant Qualifications: An experienced specialist in CPM scheduling and reporting, with capability of producing CPM reports and diagrams within 24 hours of Architect's request. This shall be a consultant to the contractor or an in-house scheduling specialist, if approved by Owner.
- B. Prescheduling Conference: Conduct conference at Project site to comply with requirements in Section 013100 "Project Management and Coordination" Review methods and procedures related to the preliminary construction schedule and Contractor's construction schedule, including, but not limited to, the following:
 - 1. Review software limitations and content and format for reports.
 - 2. Verify availability of qualified personnel needed to develop and update schedule.
 - 3. Discuss constraints, including phasing.
 - 4. Review delivery dates for Owner-furnished products.
 - 5. Review schedule for work of Owner's separate contracts.
 - 6. Review submittal requirements and procedures.
 - 7. Review time required for review of submittals and resubmittals.
 - 8. Review requirements for tests and inspections by independent testing and inspecting agencies.
 - 9. Review time required for Project closeout and Owner startup procedures,.
 - 10. Review and finalize list of construction activities to be included in schedule.
 - 11. Review procedures for updating schedule.

1.6 COORDINATION

- A. Coordinate Contractor's construction schedule with the schedule of values, list of subcontracts, submittal schedule, progress reports, payment requests, and other required schedules and reports.
 - 1. Secure time commitments for performing critical elements of the Work from entities involved.

2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

PART 2 - PRODUCTS

2.1 SUBMITTAL SCHEDULE

- A. Preparation: Submit a schedule of submittals, arranged in chronological order by dates required per construction schedule. Include time required for review, resubmittal, ordering, manufacturing, fabrication, and delivery when establishing dates.
 - 1. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Values, and Contractor's Construction Schedule.
 - 2. Initial Submittal: Submit within 10 business days of Notice to Proceed. Include submittals required during the first 60 calendar days of construction. List those required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
 - 3. Final Submittal: Submit concurrently with the first complete submittal of Contractor's Construction Schedule. Update monthly as required.

2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. Time Frame: Extend schedule from date established for the Notice of Award to date of Final Completion.
 - 1. Contract completion date(s) shall not be changed by submission of a schedule that shows a late completion date, unless specifically authorized by Change Order.
- B. Activities: Treat each story or separate area as a separate numbered activity for each main element of the Work. Include the following:
 - 1. Activity Duration
 - 2. Procurement Activities
 - 3. Submittal Review Time
 - 4. Startup and Testing Time
 - 5. Commissioning
 - 6. Substantial Completion
 - 7. Punch List and Final Completion
- C. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the Work is affected.
 - 1. Phasing: Arrange list of activities on schedule by phase.
 - 2. Work under More Than One Contract: Include a separate activity for each contract.
 - 3. Work by Owner: Include a separate activity for each portion of the Work performed by Owner.

- 4. Products Ordered in Ad vance: Include a separate activity for each product. Include delivery date as provided or as indicated in Section 011000 "Summary." Delivery dates indicated stipulate the earliest possible delivery date.
- 5. Owner-Furnished Products: Include a separate activity for each product. Include delivery date as provided or as indicated in Section 011000 "Summary." Delivery dates indicated stipulate the earliest possible delivery date.
- 6. Work Restrictions: Show the effect of the following items on the schedule:
 - a. Coordination with existing construction.
 - b. Limitations of continued occupancies.
 - c. Uninterruptible services.
 - d. Partial occupancy before Substantial Completion.
 - e. Use of premises restrictions.
 - f. Provisions for future construction.
 - g. Seasonal variations.
 - h. Environmental control.
- 7. Work Stages: Indicate important stages of construction for each major portion of the Work, including, but not limited to, the following:
 - a. Subcontract awards.
 - b. Submittals.
 - c. Purchases.
 - d. Mockups.
 - e. Fabrication.
 - f. Sample testing.
 - g. Deliveries.
 - h. Installation.
 - i. Tests and inspections.
 - j. Adjusting.
 - k. Curing.
 - 1. Building flush-out.
 - m. Startup and placement into final use and operation.
 - n. Commissioning
- 8. Construction Areas: Identify each major area of construction for each major portion of the Work. Indicate where each construction activity within a major area must be sequenced or integrated with other construction activities to provide for the following:
 - a. Structural completion.
 - b. Temporary enclosure and space conditioning.
 - c. Permanent space enclosure.
 - d. Completion of mechanical installation.
 - e. Completion of electrical installation.
 - f. Substantial Completion.
 - g. Final Completion.
- D. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and final completion.

- E. Recovery Schedule: When periodic update indicates the Work is 14 or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by which Contractor intends to regain compliance with the schedule. Indicate changes to working hours, working days, crew sizes, and equipment required to achieve compliance, and date by which recovery will be accomplished.
- F. Computer Scheduling Software: Prepare schedules using current version of a program that has been developed specifically to manage construction schedules.

2.3 PRELIMINARY CONSTRUCTION SCHEDULE

- A. Bar-Chart Schedule: Submit startup, horizontal, bar-chart-type construction schedule within ten calendar days of date established for the Notice of Award.
- B. Preparation: Indicate each significant construction activity separately.

2.4 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal, Gantt-chart-type, Contractor's construction schedule within 30 calendar days of date established for the Notice of Award. Base schedule on the startup construction schedule and additional information received since the start of Project.
- B. Preparation: Indicate each significant construction activity separately.

2.5 CONTRACTOR'S CONSTRUCTION SCHEDULE (CPM SCHEDULE)

- A. General: Prepare network diagrams using AON (activity-on-node) format.
- B. CPM Schedule: Prepare Contractor's construction schedule using a time-scaled CPM network analysis diagram for the Work.
 - 1. Develop network diagram in sufficient time to submit CPM schedule so it can be accepted for use no later than 30 calendar days after date established **for** the Notice of Award.
 - a. Failure to include any work item required for performance of this Contract shall not excuse Contractor from completing all work within applicable completion dates.
 - 2. Conduct educational workshops to train and inform key Project personnel, including subcontractors' personnel, in proper methods of providing data and using CPM schedule information.
 - 3. Establish procedures for monitoring and updating CPM schedule and for reporting progress. Coordinate procedures with progress meeting and payment request dates.
 - 4. Use "one workday" as the unit of time for individual activities. Indicate nonworking days and holidays incorporated into the schedule in order to coordinate with the Contract Time.

- C. CPM Schedule Preparation: Prepare a list of all activities required to complete the Work. Using the startup network diagram, prepare a network to identify probable critical paths.
 - 1. Activities: Indicate the estimated time duration, sequence requirements, and relationship of each activity in relation to other activities. Include estimated time frames for the following activities:
 - a. Preparation and processing of submittals.
 - b. Mobilization and demobilization.
 - c. Purchase of materials.
 - d. Delivery.
 - e. Fabrication.
 - f. Utility interruptions.
 - g. Installation.
 - h. Work by Owner that may affect or be affected by Contractor's activities.
 - i. Startup Testing and commissioning.
 - j. Punch list and final completion.
 - k. Activities occurring following final completion.
 - 2. Critical Path Activities: Identify critical path activities, including those for interim completion dates. Scheduled start and completion dates shall be consistent with Contract milestone dates.
 - 3. Processing: Process data to produce output data on a computer-drawn, time-scaled network. Revise data, reorganize activity sequences, and reproduce as often as necessary to produce the CPM schedule within the limitations of the Contract Time.
 - 4. Format: Mark the critical path.
- D. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using a network fragment to demonstrate the effect of the proposed change on the overall project schedule.
- E. Initial Issue of Schedule: Prepare initial network diagram from a sorted activity list indicating straight "early start-total float." Identify critical activities. Prepare tabulated reports showing the following:
 - 1. Contractor or subcontractor and the Work or activity.
 - 2. Description of activity.
 - 3. Main events of activity.
 - 4. Immediate preceding and succeeding activities.
 - 5. Early and late start dates.
 - 6. Early and late finish dates.
 - 7. Activity duration in workdays.
 - 8. Total float or slack time.
 - F. Schedule Updating: Concurrent with making revisions to schedule, prepare tabulated reports showing the following:
 - 1. Identification of activities that have changed.
 - 2. Changes in early and late start dates.
 - 3. Changes in early and late finish dates.

- 4. Changes in activity durations in workdays.
- 5. Changes in the critical path.
- 6. Changes in total float or slack time.
- 7. Changes in the Contract Time.

2.6 REPORTS

- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
 - 1. List of subcontractors at Project site.
 - 2. List of separate contractors at Project site.
 - 3. Approximate count of personnel at Project site.
 - 4. Equipment at Project site.
 - 5. Material deliveries.
 - 6. High and low temperatures and general weather conditions, including presence of rain or snow.
 - 7. Accidents.
 - 8. Meetings and significant decisions.
 - 9. Unusual events (see special reports).
 - 10. Stoppages, delays, shortages, and losses.
 - 11. Meter readings and similar recordings.
 - 12. Emergency procedures.
 - 13. Orders and requests of authorities having jurisdiction.
 - 14. Change Orders received and implemented.
 - 15. Construction Change Directives received and implemented.
 - 16. Services connected and disconnected.
 - 17. Equipment or system tests, commissioning, and startups.
 - 18. Partial completions and occupancies.
 - 19. Substantial Completions authorized.
 - 20. Locations of Work.
- B. Material Location Reports: At monthly intervals, prepare and submit a comprehensive list of materials delivered to and stored at Project site. List shall be cumulative, showing materials previously reported plus items recently delivered. Include with list a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from Project site. Indicate the following categories for stored materials:
 - 1. Material stored prior to previous report and remaining in storage.
 - 2. Material stored prior to previous report and since removed from storage and installed.
 - 3. Material stored following previous report and remaining in storage.
- C. Site Condition Reports: Immediately on discovery of a difference between site conditions and the Contract Documents, prepare and submit a detailed report. Submit with a Request for Information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

2.7 SPECIAL REPORTS

- A. General: Submit special reports directly to Owner within one day of an occurrence. Distribute copies of report to parties affected by the occurrence.
- B. Reporting Unusual Events: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, response by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise Owner in advance when these events are known or predictable.
- C. Two Week Look-Ahead Schedules: Contractor will submit a 2 week look-ahead schedule each week on a specific day of the week to be determined at the Preconstruction meeting. Each schedule will show specific work activities over that 2 week period and also areas of coordination required with other contractors and involved entities. These schedules will also show delivery dates of critical material or equipment items.
 - 1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.

PART 3 - EXECUTION

3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Scheduling Consultant: If necessary, Contractor shall engage and pay for a consultant to provide planning, evaluation, and reporting using CPM scheduling.
 - 1. In-House Option: Owner may waive the requirement to retain a consultant if Contractor demonstrates they employ skilled personnel with experience in CPM scheduling and reporting techniques. Submit qualifications.
 - 2. Meetings: Scheduling consultant shall attend all meetings related to Project progress, alleged delays, and time impact.
- B. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.
 - 1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
 - 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
 - 3. As the Work progresses, indicate final completion percentage for each activity.
- C. Distribution: Distribute copies of approved schedule to Architect, Owner, separate contractors, testing and inspecting agencies, and other parties identified by Owner with a need-to-know schedule responsibility.

- 1. Post copies in Project meeting rooms and temporary field offices.
- 2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION 013200

SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract including General and Supplementary Conditions and other Division 01 Specification Sections apply to this Section.

1.2 SUMMARY

A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples and other submittals.

1.3 DEFINITIONS

- A. Action Submittals: Written and graphic information, and physical samples that require Architect's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information, and physical samples that do not require Architect's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."
- C. File Transfer Protocol (FTP): Communications protocol that enables transfer of files to and from another computer over a network and that serves as the basis for standard Internet protocols. An FTP site is a portion of a network located outside of network firewalls within which internal and external users are able to access files.
- D. Portable Document Format (PDF): An open standard for electronic documents, licensed by Adobe Systems, used for representing documents in a device-independent and display resolution-independent fixed-layout document format.

1.4 SUBMITTAL PROCEDURES

- A. Architect's Digital Data Files: Electronic digital data files of the Contract Drawings will be provided by Architect for Contractor's use in preparing submittals.
 - 1. Architect will furnish Contractor one set of digital data drawing files of the Contract Drawings for use in preparing Shop Drawings and Project Record Drawings.
 - a. Architect makes no representations as to the accuracy or completeness of digital data drawing files as they relate to the Contract Drawings.

- b. Digital Drawing Software Program: The Contract Drawings are available in Revit.
- c. Contractor shall execute a data licensing agreement in the form included in Project Manual.
 - 1) To request electronic files, complete "Request Form for Electronic Files".
 - 2) Include "Processing Fee" in amount as indicated on the request form.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
 - 3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
 - 4. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
 - a. Architect reserve(s) the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence upon Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
 - 1. Initial Review: Allow 15 business days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
 - 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
 - 3. Resubmittal Review: Allow 15 business days for review of each resubmittal.
 - 4. Sequential Review: Where sequential review of submittals by Architect's consultants, Owner, or other parties is indicated, allow 20 additional business days for initial review of each submittal.
 - 5. Concurrent Consultant Review: Where the Contract Documents indicate that submittals may be transmitted simultaneously to Architect and to Architect's consultants, allow 15 business days for review of each submittal. Submittal will be returned to Architect before being returned to Contractor.
 - 6. Transmittal for Sample Submittals: Assemble each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Architect will return without review submittals received from sources other than Contractor. Transmit each submittal using the transmittal form at the end of this section.
- D. Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:

- 1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
- 2. Name file with submittal number or other unique identifier, including revision identifier.
 - a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-061000.01.A).
- 3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Architect
- 4. Transmittal Form for Electronic Submittals: Use software-generated form from electronic project management software acceptable to Owner and Architect, containing the following information:
 - a. Project name.
 - b. Date.
 - c. Name and address of Architect.
 - d. Name of Contractor.
 - e. Name of firm or entity that prepared submittal.
 - f. Names of subcontractor, manufacturer, and supplier.
 - g. Category and type of submittal.
 - h. Submittal purpose and description.
 - i. Specification Section number and title.
 - j. Specification paragraph number or drawing designation and generic name for each of multiple items.
 - k. Drawing number and detail references, as appropriate.
 - 1. Location(s) where product is to be installed, as appropriate.
 - m. Related physical samples submitted directly.
 - n. Indication of full or partial submittal.
 - o. Transmittal number.
 - p. Submittal and transmittal distribution record.
 - q. Other necessary identification.
 - r. Remarks.
- 5. Metadata: Include the following information as keywords in the electronic submittal file metadata:
 - a. Project name.
 - b. Number and title of appropriate Specification Section.
 - c. Manufacturer name.
 - d. Product name.
- E. Options: Identify options requiring selection by Architect.
- F. Deviations and Additional Information: On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Architect on previous submittals, and deviations from requirements in the Contract

Documents, including minor variations and limitations. Include same identification information as related submittal.

- G. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
 - 1. Note date and content of previous submittal.
 - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
 - 3. Resubmit submittals until they are marked with approval notation from Architect's action stamp.
- H. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, and installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- I. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's action stamp.

PART 2 - PRODUCTS

2.1 ACTION SUBMITTALS

- A. General: Prepare and submit Action Submittals required by individual Specification Sections.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 - 1. If information must be specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
 - 2. Mark each copy of each submittal to show which products and options are applicable.
 - 3. Include the following information, as applicable:
 - a. Manufacturer's written recommendations.
 - b. Manufacturer's product specifications.
 - c. Color charts showing full range of available colors.
 - d. Manufacturer catalog cuts.
 - e. Wiring diagrams showing factory-installed wiring.
 - f. Printed performance curves.
 - g. Operational range diagrams.
 - h. Mill reports.
 - i. Standard product operating and maintenance manuals.
 - j. Compliance with recognized trade association standards.
 - k. Compliance with recognized testing agency standards.
 - 1. Application of testing agency labels and seals.
 - m. Notation of coordination requirements.
 - 4. For equipment, include the following in addition to the above, as applicable:
 - a. Wiring diagrams showing factory-installed wiring.

- b. Printed performance curves.
- c. Operational range diagrams.
- d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
 - 1. Preparation: Include the following information, as applicable:
 - a. Dimensions.
 - b. Identification of products.
 - c. Fabrication and installation drawings.
 - d. Roughing-in and setting diagrams.
 - e. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
 - f. Shop work manufacturing instructions.
 - g. Templates and patterns.
 - h. Schedules.
 - i. Design calculations.
 - j. Compliance with specified standards.
 - k. Notation of coordination requirements.
 - 1. Notation of dimensions established by field measurement.
 - 2. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.
 - 3. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches (215 by 280 mm) but no larger than sheet size used for Contract Document Drawings.
 - 4. Number of Copies: Submit two black-line prints and one electronic file copy of each submittal. Architect will return the one print marked with action taken to the Contractor for distribution. Contractor shall make necessary copies from the returned print.
- D. Samples: Prepare physical units of materials or products, including the following:
 - 1. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
 - 2. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from the same material to be used for the Work, cured and finished in manner specified, and physically identical with the product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 - 3. Preparation: Mount, display, or package Samples in manner specified to facilitate review of qualities indicated. Prepare Samples to match Architect's sample where so indicated. Attach label on unexposed side that includes the following:
 - a. Generic description of Sample.
 - b. Product name or name of manufacturer.
 - c. Sample source.

- 4. Submit Samples for review of kind, color, pattern, and texture for a final check of these characteristics with other elements and for a comparison of these characteristics between final submittal and actual component as delivered and installed.
 - a. If variation in color, pattern, texture, or other characteristic is inherent in the product represented by a Sample, submit at least three sets of paired units that show approximate limits of the variations.
 - b. Refer to individual Specification Sections for requirements for Samples that illustrate workmanship, fabrication techniques, and details of assembly, connections, operation, and similar construction characteristics.
- 5. Number of Samples for Initial Selection: Submit two full sets of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return one submittal with options selected.
- 6. Number of Samples for Verification: Submit two full sets of Samples. Architect will retain one Sample set; remainder will be returned marked with action taken to the Contractor for distribution.
 - a. Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
- 7. Disposition: Contractor to maintain one set of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
 - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
- E. Submittals requiring compliance with other sections in the Project Manual.
 - 1. Contractor's Construction Schedule.
 - 2. Submittals Schedule.
 - 3. Application for Payment.
 - 4. Schedule of Values.
 - 5. Subcontract List.

2.2 INFORMATIONAL SUBMITTALS

- A. General: Prepare and submit Informational Submittals required by individual Specification Sections and elsewhere in the Contract Documents.
 - 1. Number of Copies: Submit two copies of each submittal, unless otherwise indicated. Architect will not return copies, unless they are rejected for noncompliance with the Contract Documents.
 - 2. Certificates and Certifications: Provide a notarized statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
 - 3. Test and Inspection Reports: Comply with requirements in Division 1 Section "Quality Requirements."

- B. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- C. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements.
- D. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements. Submit record of Welding Procedure Specification (WPS) and Procedure Qualification Record (PQR) on AWS forms. Include names of firms and personnel certified.
- E. Installer Certificates: Prepare written statements on manufacturer's letterhead certifying that Installer complies with requirements and, where required, is authorized for this specific Project.
- F. Manufacturer Certificates: Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements. Include evidence of manufacturing experience where required.
- G. Material Certificates: Prepare written statements on manufacturer's letterhead certifying that material complies with requirements.
- H. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements.
- I. Preconstruction Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements.
- J. Compatibility Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- K. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements.
- L. Product Test Reports: Prepare written reports indicating current product produced by manufacturer complies with requirements. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- M. Research/Evaluation Reports: Prepare written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
 - 1. Name of evaluation organization.
 - 2. Date of evaluation.
 - 3. Time period when report is in effect.

- 4. Product and manufacturers' names.
- 5. Description of product.
- 6. Test procedures and results.
- 7. Limitations of use.
- N. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment.
- O. Design Data: Prepare written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.
- P. Manufacturer's Instructions: Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of manufacturer. Include the following, as applicable:
 - 1. Preparation of substrates.
 - 2. Required substrate tolerances.
 - 3. Sequence of installation or erection.
 - 4. Required installation tolerances.
 - 5. Required adjustments.
 - 6. Recommendations for cleaning and protection.
- Q. Manufacturers Field Reports: Prepare written information documenting factory-authorized service representative's tests and inspections. Include the following, as applicable:
 - 1. Name, address, and telephone number of factory-authorized service representative making report.
 - 2. Statement on condition of substrates and their acceptability for installation of product.
 - 3. Statement that products at Project site comply with requirements.
 - 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 - 5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 - 6. Statement whether conditions, products, and installation will affect warranty.
 - 7. Other required items indicated in individual Specification Sections.
- R. Insurance Certificates and Bonds: Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, if any, and term of the coverage.
- S. Material Safety Data Sheets: Keep on site and submit information directly to Owner. If submitted to Architect, Architect will not review this information but will return it with no action taken.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Project Closeout and Maintenance Material Submittals: See requirements in Section 017700 "Closeout Procedures."
- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT'S ACTION

- A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken, as follows:
 - 1. Architect's Action:
 - a. Final Unrestricted Release: When the Architect marks a submittal "No Exceptions Taken" the Work covered by the submittal may proceed provided it complies with requirements of the Contract Documents. Final payment depends on that compliance.
 - b. Final-But-Restricted Release: When the Architect marks a submittal "Provide as Corrected," the Work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents. Final payment depends on that compliance.
 - c. Returned for Resubmittal: When the Architect marks a submittal "Revise and Resubmit," do not proceed with Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal according to the notations; resubmit without delay.
 - 1) Do not use, or allow others to use, submittals marked "Revise and Resubmit" at the Project Site or elsewhere where Work is in progress.
 - d. Returned for Resubmittal: When the Architect marks a submittal "Rejected", the Architect has not completed a full review, because it is clear that the submittal does not reflect the requirements of the Contract Documents. Do not proceed with work covered by the submittal, including purchasing, fabrication, delivery or other activity. Revise or prepare a new submittal that complies with the Contract Documents.

- e. Other Action: If the submittal is primarily for information purposes, record purposes, special processing, or other contractor activity, the submittal will be returned marked "Reviewed for General Conformance Only". These submittals have been received and processed for information only and not approved or disapproved by the architect.
- C. Informational Submittals: Architect will review each submittal and will not return it, or will reject and return it if it does not comply with Contract Document requirements.
- D. Submittals not required by the Contract Documents will not be reviewed and will be discarded or returned without action.

SECTION 014000 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specific quality-control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
 - 2. Specified tests, inspections, and related actions do not limit Contractor's quality-control procedures that facilitate compliance with the Contract Document requirements.
 - 3. Requirements for Contractor to provide quality-control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.
- C. Related Sections include the following:
 - 1. Division 1 Section "Construction Progress Documentation" for developing a schedule of required tests and inspections.
 - 2. Division 1 Section "Cutting and Patching" for repair and restoration of construction disturbed by testing and inspecting activities.

1.3 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and ensure that proposed construction complies with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that completed construction complies with requirements. Services do not include contract enforcement activities performed by Architect.
- C. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.

1.4 DELEGATED DESIGN

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
 - 1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.

1.5 SUBMITTALS

- A. Qualification Data: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- B. Delegated-Design Submittal: In addition to Shop Drawings, Product Data, and other required submittals, submit a statement, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional, indicating that the products and systems are in compliance with performance and design criteria indicated. Include list of codes, loads, and other factors used in performing these services.
- C. Reports: Prepare and submit certified written reports that include the following:
 - 1. Date of issue.
 - 2. Project title and number.
 - 3. Name, address, and telephone number of testing agency.
 - 4. Dates and locations of samples and tests or inspections.
 - 5. Names of individuals making tests and inspections.
 - 6. Description of the Work and test and inspection method.
 - 7. Identification of product and Specification Section.
 - 8. Complete test or inspection data.
 - 9. Test and inspection results and an interpretation of test results.
 - 10. Ambient conditions at time of sample taking and testing and inspecting.
 - 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
 - 12. Name and signature of laboratory inspector.
 - 13. Recommendations on retesting and reinspecting.
- D. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.6 QUALITY ASSURANCE

A. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

- B. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- C. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- D. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar to those indicated for this Project in material, design, and extent.
- F. Testing Agency Qualifications: An agency with the experience and capability to conduct testing and inspecting indicated, as documented by ASTM E 548, and that specializes in types of tests and inspections to be performed.
- G. Preconstruction Testing: Testing agency shall perform preconstruction testing for compliance with specified requirements for performance and test methods.
 - 1. Contractor responsibilities include the following:
 - a. Provide test specimens and assemblies representative of proposed materials and construction. Provide sizes and configurations of assemblies to adequately demonstrate capability of product to comply with performance requirements.
 - b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
 - c. Fabricate and install test assemblies using installers who will perform the same tasks for Project.
 - d. When testing is complete, remove assemblies; do not reuse materials on Project.
 - 2. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to Architect, with copy to Owner and Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.
- H. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
 - 1. Build mockups in location and of size indicated or, if not indicated, as directed by Architect.
 - 2. Notify Architect seven days in advance of dates and times when mockups will be constructed.
 - 3. Demonstrate the proposed range of aesthetic effects and workmanship.
 - 4. Obtain Architect's approval of mockups before starting work, fabrication, or construction.

- 5. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
- 6. Demolish and remove mockups when directed, unless intent for mockups to become part of completed construction is indicated.

1.7 QUALITY CONTROL

- A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
 - 1. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of the types of testing and inspecting they are engaged to perform.
 - 2. Costs for retesting and reinspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor, and the Contract Sum will be adjusted by Change Order.
- B. Contractor Responsibilities: Unless otherwise indicated, provide quality-control services specified and required by authorities having jurisdiction.
 - 1. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
 - a. Contractor shall not employ the same entity engaged by Owner, unless agreed to in writing by Owner.
 - 2. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
 - 3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
 - 4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
 - 5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- C. Special Tests and Inspections: Owner will engage a testing agency to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner.
 - 1. Testing agency will notify Architect and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
 - 2. Testing agency will submit a certified written report of each test, inspection, and similar quality-control service to Architect with copy to Owner and Contractor and to authorities having jurisdiction.
 - 3. Testing agency will submit a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.
 - 4. Testing agency will interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.
 - 5. Testing agency will retest and reinspect corrected work.

- D. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing.
- E. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that revised or replaced Work that failed to comply with requirements established by the Contract Documents.
- F. Testing Agency Responsibilities: Cooperate with Architect and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
 - 1. Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 - 2. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 - 3. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
 - 4. Do not release, revoke, alter, or increase requirements of the Contract Documents or approve or accept any portion of the Work.
 - 5. Do not perform any duties of Contractor.
- G. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
 - 1. Access to the Work.
 - 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 - 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 - 4. Facilities for storage and field-curing of test samples.
 - 5. Delivery of samples to testing agencies.
 - 6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 - 7. Security and protection for samples and for testing and inspecting equipment at Project site.
- H. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and quality-control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
 - 1. Schedule times for tests, inspections, obtaining samples, and similar activities.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 REPAIR AND PROTECTION

QUALITY REQUIREMENTS

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
 - 1. Provide materials and comply with installation requirements specified in other Sections of these Specifications. Restore patched areas and extend restoration into adjoining areas in a manner that eliminates evidence of patching.
 - 2. Comply with the Contract Document requirements for Division 1 Section "Cutting and Patching."
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

SECTION 014200 - REFERENCES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Architect or Owner Other terms including "requested," "authorized," "selected," "approved," "required," and "permitted" have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- H. "Provide": Furnish and install, complete and ready for the intended use.
- I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.
- J. "Installer": Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.

- 1. Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to tradespeople of the corresponding generic name.
- K. "Experienced": When used with an entity, "experienced" means having successfully completed a minimum of five previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.3 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.
- C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
 - 1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

1.4 ABBREVIATIONS AND ACRONYMS

- A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Gale's "Encyclopedia of Associations: National Organizations of the U.S." or in Columbia Books' "National Trade & Professional Associations of the United States."
- B. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities.
- C. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities.
- D. Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations.
- E. State Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
- B. Related Sections include the following:
 - 1. Division 1 Section "Summary" for limitations on utility interruptions and other work restrictions and infection control guidelines.
 - 2. Division 1 Section "Submittal Procedures" for procedures for submitting copies of implementation and termination schedule and utility reports.
 - 3. Division 1 Section "Execution Requirements" for progress cleaning requirements.

1.3 USE CHARGES

- A. General: Cost or use charges for temporary facilities shall be included in the Contract Sum. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, Architect, occupants of Project, testing agencies, and authorities having jurisdiction.
- B. Water Service: Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.
- C. Electric Power Service: Electric power from Owner's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

1.4 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

1.5 PROJECT CONDITIONS

A. Temporary Use of Permanent Facilities: Installer of each permanent service shall assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Lumber and Plywood: Exterior quality, pressure treated.
- B. Portable Chain-Link Fencing: Minimum 2-inch (50-mm), 0.148-inch- (3.8-mm-) thick, galvanized-steel, chain-link fabric fencing; minimum 6 feet (1.8 m) high with galvanized-steel pipe posts; minimum 2-3/8-inch- (60-mm-) OD line posts and 2-7/8-inch- (73-mm-) OD corner and pull posts, with 1-5/8-inch- (42-mm-) OD top and bottom rails. Provide [concrete] [galvanized-steel] bases for supporting posts.
- C. Fencing Windscreen Privacy Screen: Polyester fabric scrim with grommets for attachment to chain link fence, sized to height of fence, in color selected by Architect from manufacturer's standard colors
- D. Polyethylene Sheet: Reinforced, fire-resistive sheet, 10-mil (0.25-mm) minimum thickness, with flame-spread rating of 15 or less per ASTM E 84 and passing NFPA 701 Test Method 2.

2.2 TEMPORARY FACILITIES

- A. Field Offices, General: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.
- B. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations. Coordinate with the Owner to use space in the existing site lot.
 - 1. Store combustible materials apart from building.

2.3 EQUIPMENT

A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
 - 1. Arrange with Owner for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Water Service: Use of Owner's existing water service facilities will be permitted, as long as facilities are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.
- C. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
 - 1. Use of existing toilet room facilities to be at the discretion of the Owner. If acceptable to the Owner, contractor is to clean and maintain facilities in a manner acceptable to the Owner. At Substantial Completion, restore facilities to original condition acceptable to the Owner.
- D. Ventilation and Humidity Control: Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption.
- E. Electric Power Service: Use of Owner's existing electric power service will be permitted, as long as equipment is maintained in a condition acceptable to Owner.
 - 1. Install electric power service overhead, unless otherwise indicated.
 - 2. Connect temporary service to Owner's existing power source, as directed by Owner.
- F. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
 - 1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.
- G. Telephone Service: Provide project superintendent with cell phone for use whenever on job site.

3.3 SUPPORT FACILITIES INSTALLATION

- A. General: Comply with the following:
 - 1. Maintain support facilities until near Substantial Completion. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.
- B. Parking: Coordinate with the Owner a designated area of existing parking areas for construction personnel.
- C. Storage and staging: Use designate area of Project site as indicated on drawings for storage and staging needs.
- D. Temporary Signs:
 - 1. Provide temporary, directional signs for construction personnel and visitors.
 - 2. Maintain and touchup signs so they are legible at all times.
- E. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with Division 1 Section "Execution Requirements" for progress cleaning requirements.
- F. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.
 - 1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.
- G. Existing Elevator Use: Use of Owner's existing elevators will not be permitted.
- H. Use of Existing Stairs: Use of Owner's existing interior stairs will not be permitted.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
- B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
 - 1. Comply with work restrictions specified in Division 1 Section "Summary."
- C. Security Enclosure and Lockup: Install substantial temporary enclosure around partially completed areas of construction and staging area. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security.

- D. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- E. Tree and Plant Protection: Comply with requirements specified in Section 015639 "Temporary Tree and Plant Protection."
- F. Covered Walkway: Erect protective, covered walkway for passage of individuals at all building entrances. Coordinate with entrance gates, other facilities, and obstructions. Comply with regulations of authorities having jurisdiction.
 - 1. Provide overhead decking, protective enclosure walls, handrails, barricades, warning signs, exit signs, lights, safe and well-drained walkways, and similar provisions for protection and safe passage.
- G. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
- H. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.
 - 1. Prohibit smoking in construction areas. Comply with Owner's rules for designated smoking areas. Smoking is prohibited inside of building.
 - 2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
 - 3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.
 - 4. Provide fire extinguishers for fire protection.

3.5 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
 - 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
- C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
- D. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

- 1. Materials and facilities that constitute temporary facilities are property of Contractor.
- 2. At Substantial Completion, clean and renovate permanent facilities used during construction period. Comply with final cleaning requirements specified in Division 1 Section "Closeout Procedures."

SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following administrative and procedural requirements: selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.
- B. Related Sections include the following:
 - 1. Division 1 Section "Alternates" for products selected under an alternate.
 - 2. Division 1 Section "References" for applicable industry standards for products specified.
 - 3. Division 1 Section "Closeout Procedures" for submitting warranties for contract closeout.

1.3 DEFINITIONS

- A. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation, shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility, except that products consisting of recycled-content materials are allowed, unless explicitly stated otherwise. Products salvaged or recycled from other projects are not considered new products.
 - 3. Comparable Product: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- B. Substitutions: Changes in manufacturers, products, materials, equipment, and methods of construction from those required by the Contract Documents, proposed by Contractor.
- C. Basis-of-Design Product Specification: Where a specific manufacturer's product is named and accompanied by the words "basis of design," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service

performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of other named manufacturers.

- D. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
- E. Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.

1.4 SUBMITTALS

- A. Product List: Submit a list, in tabular from, showing specified products. Include generic names of products required. Include manufacturer's name and proprietary product names for each product.
 - 1. Coordinate product list with Contractor's Construction Schedule and the Submittals Schedule.
 - 2. Form: Tabulate information for each product under the following column headings:
 - a. Specification Section number and title.
 - b. Generic name used in the Contract Documents.
 - c. Proprietary name, model number, and similar designations.
 - d. Manufacturer's name and address.
 - e. Supplier's name and address.
 - f. Installer's name and address.
 - g. Projected delivery date or time span of delivery period.
 - h. Identification of items that require early submittal approval for scheduled delivery date.
 - 3. Completed List: Within 30 days after date of commencement of the Work, submit 3 copies of completed product list. Include a written explanation for omissions of data and for variations from Contract requirements.
 - 4. Architect's Action: Architect will respond in writing to Contractor within 15 days of receipt of completed product list. Architect's response will include a list of unacceptable product selections and a brief explanation of reasons for this action. Architect's response, or lack of response, does not constitute a waiver of requirement that products comply with the Contract Documents.
- B. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Substitution Request Form: Use form provided at end of Section.
 - 2. Documentation: With each substitution request, show compliance with requirements for substitutions and include the following, as applicable:
 - a. Statement indicating why specified material or product cannot be provided.
 - b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.

- c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, code compliance and specific features and requirements indicated.
- d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
- e. Samples, where applicable or requested.
- f. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
- g. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
- h. Detailed comparison of Contractor's Construction Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.
- i. Cost information, including a proposal of change, if any, in the Contract Sum.
- j. Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
- k. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
- 3. Architect's Action: If accepted, Architect will issue a written Addendum prior to bid opening indicating acceptance of the proposed substitution.
 - a. Use product specified if Architect cannot make a decision on use of a proposed substitution prior to bid opening.
 - b. If rejected, Architect will notify Contractor through Construction Manager prior to bid opening.

1.5 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.
 - 1. Each contractor is responsible for providing products and construction methods compatible with products and construction methods of other contractors.
 - 2. If a dispute arises between contractors over concurrently selectable but incompatible products, Architect will determine which products shall be used.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturers written instructions.
 - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.

- 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
- 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
- 4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
- 5. Store products to allow for inspection and measurement of quantity or counting of units.
- 6. Store materials in a manner that will not endanger Project structure.
- 7. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
- 8. Comply with product manufacturers written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
- 9. Protect stored products from damage.

1.7 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Submit a draft for approval before final execution.
 - 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 - 2. Specified Form: Forms are included with the Specifications. Prepare a written document using appropriate form properly executed.
 - 3. Refer to Divisions 2 through 16 Sections for specific content requirements and particular requirements for submitting special warranties.
- C. Submittal Time: Comply with requirements in Division 1 Section "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT OPTIONS

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged, and unless otherwise indicated, that are new at time of installation.
 - 1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 - 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.

- 3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
- 4. Where products are accompanied by the term "as selected," Architect will make selection.
- 5. Where products are accompanied by the term "match sample," sample to be matched is Architect's.
- 6. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.
- B. Product Selection Procedures: Procedures for product selection include the following:
 - 1. Product(s): Where Specification paragraphs or subparagraphs titled "Product" or "Products" name one or two products and manufacturers, provide one of the products named.
 - a. Substitutions may be considered, unless otherwise indicated.
 - 2. Products: Where Specification paragraphs or subparagraphs titled "Products" introduce a list of three (3) or more names of both products and manufacturers, provide one of the products listed that complies with requirements.
 - 3. Manufacturer/Source: Where Specification paragraphs or subparagraphs titled "Manufacturer" or "Source" name single manufacturers or sources, provide a product by the manufacturers or from the sources named that complies with requirements.
 - a. Substitutions may be considered, unless otherwise indicated.
 - 4. Manufacturers: Where Specification paragraphs or subparagraphs titled "Manufacturers" introduce a list of three (3) or more manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements.
 - 5. Product Options: Where Specification paragraphs titled "Product Options" indicate that size, profiles, and dimensional requirements on Drawings are based on a specific product or system, provide either the specific product or system indicated or a comparable product or system by another manufacturer, if substitutions are allowed. Comply with provisions in "Product Substitutions" Article.
 - 6. Basis-of-Design Products: Where Specification paragraphs or subparagraphs titled "Basisof-Design Product[s]" are included and also introduce or refer to a list of three (3) or more manufacturers' names, provide either the specified product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with provisions in "Comparable Products" Article to obtain approval for use of an unnamed product.
 - a. Substitutions may be considered, unless otherwise indicated.
 - 7. Or Equal: Where products and/or manufacturers are specified by name and accompanied by the term "or equal" or "or approved equal" or "or as approved", comply with the provisions in "Product Substitutions" Article.
 - 8. Visual Matching Specification: Where Specifications require matching an established Sample, select a product (and manufacturer) that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches satisfactorily.

- a. If no product available within specified category matches satisfactorily and complies with other specified requirements, comply with provisions of the Contract Documents on "substitutions" for selection of a matching product.
- 9. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns, textures" or a similar phrase, select a product (and manufacturer) that complies with other specified requirements.
 - a. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, or texture from manufacturer's product line that does not include premium items.
 - b. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, or texture from manufacturer's product line that includes both standard and premium items.

2.2 PRODUCT SUBSTITUTIONS

- A. Timing: Architect will consider requests for substitution if received no later than ten (10) days prior to the date established for opening of bids. Architect will also consider requests for substitution submitted with the bid proposal, as described below. Requests received after that time will be rejected.
 - 1. Substitutions Submitted With Bid Package: Contractor may submit fully documented substitution requests with his bid proposal, but does so at his own risk, as such proposed substitution are subject to the approval of the Architect.
- B. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
 - 1. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
 - 2. Requested substitution does not require extensive revisions to the Contract Documents.
 - 3. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - 4. Substitution request is fully documented and properly submitted, as per provisions in "Submittals" Article.
 - 5. Requested substitution will not adversely affect Contractor's Construction Schedule.
 - 6. Requested substitution has received necessary approvals of authorities having jurisdiction.
 - 7. Requested substitution is compatible with other portions of the Work.
 - 8. Requested substitution has been coordinated with other portions of the Work.
 - 9. Requested substitution provides specified warranty.
 - 10. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

2.3 COMPARABLE PRODUCTS

- A. Where products or manufacturers are specified by name, submit the following, in addition to other required submittals, to obtain approval of an unnamed product:
 - 1. Evidence that the proposed product does not require extensive revisions to the Contract Documents that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
 - 2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
 - 3. Evidence that proposed product provides specified warranty.
 - 4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
 - 5. Samples, if requested.

PART 3 - EXECUTION (Not Used)

SECTION 017300 - EXECUTION REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes general procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. Construction layout.
 - 2. General installation of products.
 - 3. Coordination of Owner-installed products.
 - 4. Progress cleaning.
 - 5. Starting and adjusting.
 - 6. Protection of installed construction.
 - 7. Correction of the Work.
- B. Related Sections include the following:
 - 1. Division 1 Section "Temporary Facilities and Controls" for procedures for coordinating temporary utilities, temporary partitions and other temporary facilities with other construction facilities.
 - 2. Division 1 Section "Cutting and Patching" for procedural requirements for cutting and patching necessary for the installation or performance of other components of the Work.
 - 3. Division 1 Section "Closeout Procedures" for final cleaning.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

A. Existing Conditions: The existence and location of site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work.

- B. Acceptance of Conditions: Examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
 - 1. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:
 - a. Description of the Work.
 - b. List of detrimental conditions, including substrates.
 - c. List of unacceptable installation tolerances.
 - d. Recommended corrections.
 - 2. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
 - 3. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
 - 4. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
 - 5. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- B. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- C. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Architect on the form at the end of this Section. Include a detailed description of problem encountered, together with recommendations (if any) for changing the Contract Documents.

3.3 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Architect promptly.
- B. Building Lines and Levels: Locate and lay out control lines and levels for installation of the work, including those required for mechanical and electrical work.
- C. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Make the log available for reference by Architect.

3.4 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 - 1. Make vertical work plumb and make horizontal work level.
 - 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
- F. Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.
- G. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- H. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.5 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.
 - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 - 2. Do not hold materials more than 7 days during normal weather or 3 days if the temperature is expected to rise above 80°F (27°C).
 - 3. Provide dumpsters on site for depositing of waste materials. Locate on site where approved by the Owner. Empty dumpsters legally off site when full. Do not allow dumpsters to overflow.
 - 4. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.

- 1. Remove liquid spills promptly.
- 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Cutting and Patching: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar materials.
 - 1. Thoroughly clean piping, conduit, and similar features before applying paint or other finishing materials. Restore damaged pipe covering to its original condition.
- H. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.
- I. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- J. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- K. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.6 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.

3.7 CORRECTION OF THE WORK

- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes. Comply with requirements in Division 1 Section "Cutting and Patching."
 - 1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.

- B. Restore permanent facilities used during construction to their specified condition.
- C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
- D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.
- E. Remove and replace chipped, scratched, and broken glass or reflective surfaces.

SECTION 017329 - CUTTING AND PATCHING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes procedural requirements for cutting and patching.

1.3 DEFINITIONS

- A. Cutting: Removal of existing construction necessary to permit installation or performance of other Work.
- B. Patching: Fitting and repair work required to restore surfaces to original conditions after installation of other Work.

1.4 SUBMITTALS

- A. Cutting and Patching Proposal: Submit a proposal describing procedures at least 10 days before the time cutting and patching will be performed, requesting approval to proceed. Include the following information:
 - 1. Extent: Describe cutting and patching, show how they will be performed, and indicate why they cannot be avoided.
 - 2. Changes to Existing Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in building's appearance and other significant visual elements.
 - 3. Products: List products to be used and firms or entities that will perform the Work.
 - 4. Dates: Indicate when cutting and patching will be performed.
 - 5. Utilities: List utilities that cutting and patching procedures will disturb or affect. List utilities that will be relocated and those that will be temporarily out of service. Indicate how long service will be disrupted.
 - 6. Structural Elements: Where cutting and patching involve adding reinforcement to structural elements, submit details and engineering calculations showing integration of reinforcement with original structure.
 - 7. Architect's Approval: Obtain approval of cutting and patching proposal before cutting and patching. Approval does not waive right to later require removal and replacement of unsatisfactory work.

1.5 QUALITY ASSURANCE

- A. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.
- B. Operational Elements: Do not cut and patch the following operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
 - 1. Primary operational systems and equipment.
 - 2. Fire-protection systems.
 - 3. Control systems.
 - 4. Communication systems.
 - 5. Electrical wiring systems.
- C. Miscellaneous Elements: Do not cut and patch the following elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety.
 - 1. Water, moisture, or vapor barriers.
 - 2. Membranes and flashings.
 - 3. Exterior wall construction.
 - 4. Equipment supports.
 - 5. Piping, ductwork, vessels, and equipment.
 - 6. Noise- and vibration-control elements and systems.
- D. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
- E. Cutting and Patching Conference: Before proceeding, meet at Project site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.

1.6 WARRANTY

A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during cutting and patching operations, by methods and with materials so as not to void existing warranties.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections of these Specifications.
- B. Existing Materials: Use materials identical to existing materials. For exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.
 - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of existing materials.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
 - 1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
 - 2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Temporary Support: Provide temporary support of Work to be cut.
- B. Protection: Protect existing construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

3.3 PERFORMANCE

- A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
 - 1. Cut existing construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Cutting: Cut existing construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or

adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.

- 1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
- 2. Existing Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
- 3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
- 4. Proceed with patching after construction operations requiring cutting are complete.
- C. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections of these Specifications.
 - 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
 - 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
 - 3. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition.

SECTION 017823 - OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
 - 1. Operation and maintenance manuals for systems, subsystems, and equipment.
 - 2. Maintenance manuals for the care and maintenance of products, materials, and finishes.
- B. Related Sections include the following:
 - 1. Division 1 Section "Submittal Procedures" for submitting copies of submittals for operation and maintenance manuals.
 - 2. Division 1 Section "Closeout Procedures" for submitting operation and maintenance manuals.

1.3 DEFINITIONS

- A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.
- B. Subsystem: A portion of a system with characteristics similar to a system.

1.4 SUBMITTALS

- A. Final Submittal: Submit 2 copies of each manual in final form at least 15 days before final inspection. Architect will return copy with comments within 15 days after final inspection.
 - 1. Correct or modify each manual to comply with Architect's comments. Submit 3 copies of each corrected manual within 15 days of receipt of Architect's comments.

1.5 COORDINATION

A. Where operation and maintenance documentation includes information on installations by more than one factory-authorized service representative, assemble and coordinate information furnished by representatives and prepare manuals.

PART 2 - PRODUCTS

2.1 MANUALS, GENERAL

- A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:
 - 1. Title page.
 - 2. Table of contents.
 - 3. Manual contents.
- B. Title Page: Enclose title page in transparent plastic sleeve. Include the following information:
 - 1. Subject matter included in manual.
 - 2. Name and address of Project.
 - 3. Name and address of Owner.
 - 4. Date of submittal.
 - 5. Name, address, and telephone number of Contractor.
 - 6. Name and address of Architect.
 - 7. Cross-reference to related systems in other operation and maintenance manuals.
- C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.
 - 1. If operation or maintenance documentation requires more than one volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.
- D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
 - 1. Binders: Heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch (115-by-280-mm) paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
 - a. If two or more binders are necessary to accommodate data of a system, organize data in each binder into groupings by subsystem and related components. Cross-reference other binders if necessary to provide essential information for proper operation or maintenance of equipment or system.
 - b. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents. Indicate volume number for multiple-volume sets.
 - 2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.

- 3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software diskettes for computerized electronic equipment.
- 4. Supplementary Text: Prepared on 8-1/2-by-11-inch (115-by-280-mm), 20-lb/sq. ft. (75-g/sq. m) white bond paper.
- 5. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
 - a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
 - b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

2.2 OPERATION AND MAINTENANCE MANUALS

- A. Content: In addition to requirements in this Section, include operation and maintenance data required in individual Specification Sections and the following information:
 - 1. System, subsystem, and equipment descriptions.
 - 2. Performance and design criteria if Contractor is delegated design responsibility.
 - 3. Operating standards.
 - 4. Operating procedures.
 - 5. Wiring diagrams.
 - 6. Control diagrams.
 - 7. Piped system diagrams.
 - 8. Precautions against improper use.
 - 9. License requirements including inspection and renewal dates.
- B. Descriptions: Include the following:
 - 1. Product name and model number.
 - 2. Manufacturer's name.
 - 3. Equipment identification with serial number of each component.
 - 4. Equipment function.
 - 5. Operating characteristics.
 - 6. Limiting conditions.
 - 7. Performance curves.
 - 8. Engineering data and tests.
 - 9. Complete nomenclature and number of replacement parts.
- C. Operating Procedures: Include the following, as applicable:
 - 1. Startup procedures.
 - 2. Equipment or system break-in procedures.
 - 3. Routine and normal operating instructions.
 - 4. Regulation and control procedures.
 - 5. Instructions on stopping.
 - 6. Normal shutdown instructions.
 - 7. Seasonal and weekend operating instructions.
 - 8. Required sequences for electric or electronic systems.

- 9. Special operating instructions and procedures.
- D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.
- E. Piped Systems: Diagram piping as installed, and identify color-coding where required for identification.
- F. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:
 - 1. Standard printed maintenance instructions and bulletins.
 - 2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
 - 3. Identification and nomenclature of parts and components.
 - 4. List of items recommended to be stocked as spare parts.
- G. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:
 - 1. Test and inspection instructions.
 - 2. Troubleshooting guide.
 - 3. Precautions against improper maintenance.
 - 4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
 - 5. Aligning, adjusting, and checking instructions.
 - 6. Demonstration and training videotape, if available.
- H. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
 - 1. Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
 - 2. Maintenance and Service Record: Include manufacturers' forms for recording maintenance.
- I. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.
- J. Maintenance Service Contracts: Include copies of maintenance agreements with name and telephone number of service agent.
- K. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
 - 1. Include procedures to follow and required notifications for warranty claims.
- L. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include instructions and procedures for each type of emergency, and responsibilities of Owner's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.

- 1. Include the following, as applicable:
 - a. Instructions on stopping.
 - b. Shutdown instructions for each type of emergency.
 - c. Operating instructions for conditions outside normal operating limits.
 - d. Required sequences for electric or electronic systems.
 - e. Special operating instructions and procedures.

2.3 PRODUCT MAINTENANCE MANUAL

- A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Product Information: Include the following, as applicable:
 - 1. Product name and model number.
 - 2. Manufacturer's name.
 - 3. Color, pattern, and texture.
 - 4. Material and chemical composition.
 - 5. Reordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
 - 1. Inspection procedures.
 - 2. Types of cleaning agents to be used and methods of cleaning.
 - 3. List of cleaning agents and methods of cleaning detrimental to product.
 - 4. Schedule for routine cleaning and maintenance.
 - 5. Repair instructions.
- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
 - 1. Include procedures to follow and required notifications for warranty claims.

PART 3 - EXECUTION

3.1 MANUAL PREPARATION

- A. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
 - 1. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
 - 2. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.
- B. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- C. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
 - 1. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.
- D. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in Record Drawings to ensure correct illustration of completed installation.
 - 1. Do not use original Project Record Documents as part of operation and maintenance manuals.
- E. Comply with Division 1 Section "Closeout Procedures" for the schedule for submitting operation and maintenance documentation.

SECTION 260500 – COMMON WORK RESULTS FOR ELECTRICAL

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Examine all other Sections of the Specifications for requirements that affect work under this Section whether or not such work is specifically mentioned in this Section.
- C. Coordinate work with that of all other trades affecting, or affected by work of this Section. Cooperate with such trades to assure the steady progress of all work under the Contract.

1.2 SUMMARY

- A. Section Includes:
 - 1. Electrical equipment coordination and installation.
 - 2. Common electrical installation requirements.

1.3 COORDINATION

- A. Coordinate arrangement, mounting, and support of electrical equipment:
 - 1. To allow maximum possible headroom unless specific mounting heights that reduce headroom are indicated.
 - 2. To provide for ease of disconnecting the equipment with minimum interference to other installations.
 - 3. To allow right of way for piping and conduit installed at required slope.
 - 4. So connecting raceways, cables, wireways, cable trays, and busways will be clear of obstructions and of the working and access space of other equipment.
- B. Coordinate installation of required supporting devices and set sleeves in cast-in-place concrete, masonry walls, and other structural components as they are constructed.

PART 2 - PRODUCTS – Not Used

PART 3 - EXECUTION

3.1 COMMON REQUIREMENTS FOR ELECTRICAL INSTALLATION

- A. Comply with NECA 1.
- B. Measure indicated mounting heights to bottom of unit for suspended items and to center of unit for wall-mounting items.
- C. Headroom Maintenance: If mounting heights or other location criteria are not indicated, arrange and install components and equipment to provide maximum possible headroom consistent with these requirements.
- D. Equipment: Install to facilitate service, maintenance, and repair or replacement of components of both electrical equipment and other nearby installations. Connect in such a way as to facilitate future disconnecting with minimum interference with other items in the vicinity.
- E. Right of Way: Give to piping systems installed at a required slope.

3.2 FIRESTOPPING

- A. Apply firestopping to penetrations of fire-rated floor and wall assemblies for electrical installations to restore original fire-resistance rating of assembly. Firestopping materials must be approved for specific use.
- B. Penetrations in Fire-Resistance-Rated Walls: Provide penetration firestopping with ratings determined per ASTM E 814 or UL 1479, based on testing at a positive pressure differential of 0.01-inch wg (2.49 Pa).
 - 1. Fire-resistance-rated walls include fire walls, fire-barrier walls, smoke-barrier walls and fire partitions.
- C. F-Rating: Not less than the fire-resistance rating of constructions penetrated.
- D. Manufacturers:
 - 1. 3m
 - 2. Rockwool
 - 3. Tremco
 - 4. STI

SECTION 260519 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Examine all other Sections of the Specifications for requirements that affect work under this Section whether or not such work is specifically mentioned in this Section.
- C. Coordinate work with that of all other trades affecting, or affected by work of this Section. Cooperate with such trades to assure the steady progress of all work under the Contract.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Building wires and cables rated 600 V and less.
 - 2. Connectors, splices, and terminations rated 600 V and less.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Field quality-control test reports.

1.4 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- B. Comply with NFPA 70.

PART 2 - PRODUCTS

2.1 CONDUCTORS AND CABLES

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. General Cable Corporation.

- 2. Senator Wire & Cable Company.
- 3. Southwire Company.
- B. Copper Conductors: Comply with NEMA WC 70.
- C. Conductor Insulation: Comply with NEMA WC 70 for Types THHN-THWN.
- D. Two-hour Fire Rated: Comply with UL2196 Type RHW

2.2 CONNECTORS AND SPLICES

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Hubbell Power Systems, Inc.
 - 2. O-Z/Gedney; EGS Electrical Group LLC.
 - 3. 3M; Electrical Products Division.
- B. Description: Factory-fabricated connectors and splices of size, ampacity rating, material, type, and class for application and service indicated.

PART 3 - EXECUTION

3.1 CONDUCTOR MATERIAL APPLICATIONS

- A. Feeders: stranded for allr.
- B. Branch Circuits: Copper. stranded for all.
- C. VFC Output Circuits Cable: Extra-flexible stranded for all sizes.
- D. Power-Limited Fire Alarm and Control: Solid for No. 12 AWG and smaller.

3.2 CONDUCTOR INSULATION AND MULTICONDUCTOR CABLE APPLICATIONS AND WIRING METHODS

- A. Service Entrance: Type XHHW-2, single conductors in raceway.
- B. Exposed Feeders: Type THHN/THWN-2, single conductors in raceway.
- C. Feeders Concealed in Ceilings, Walls, Partitions, and Crawlspaces: Type THHN/THWN-2, single conductors in raceway.
- D. Feeders Concealed in Concrete, below Slabs-on-Grade, and Underground: Type THHN/THWN-2, single conductors in raceway.
- E. Exposed Branch Circuits, Including in Crawlspaces: Type THHN/THWN-2, single conductors in raceway.

- F. Branch Circuits Concealed in Ceilings, Walls, and Partitions: Metal-clad cable, Type MC.
- G. Branch Circuits Concealed in Concrete, below Slabs-on-Grade, and Underground: Type THHN/THWN-2, single conductors in raceway.
- H. Cord Drops and Portable Appliance Connections: Type SO, hard service cord with stainlesssteel, wire-mesh, strain relief device at terminations to suit application. Feeders in conduit outdoors: Type XHHW.
- I. Fire Rate Cable: Type RHW
 - 1. Use Cable for: Fire pump feeders (NEC 695), emergency feeders (NEC 700 and 708)

3.3 INSTALLATION OF CONDUCTORS AND CABLES

- A. Conceal cables in finished walls, ceilings, and floors unless otherwise indicated.
- B. Complete raceway installation between conductor and cable termination points according to Section 260533 "Raceways and Boxes for Electrical Systems" prior to pulling conductors and cables.
- C. Use manufacturer-approved pulling compound or lubricant where necessary; compound used must not deteriorate conductor or insulation. Do not exceed manufacturer's recommended maximum pulling tensions and sidewall pressure values.
- D. Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips, that will not damage cables or raceway.
- E. Install exposed cables parallel and perpendicular to surfaces of exposed structural members, and follow surface contours where possible.
- F. Support cables according to Section 260529 "Hangers and Supports for Electrical Systems."

3.4 CONNECTIONS

- A. Tighten electrical connectors and terminals according to manufacturer's published torquetightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B.
- B. Wiring at Outlets: Install conductor at each outlet, with at least 6 inches (150 mm).

3.5 FIRESTOPPING

A. Refer to 260500.

3.6 FIELD QUALITY CONTROL

A. Perform tests and inspections and prepare test reports.

- B. Tests and Inspections:
 - 1. Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specification. Certify compliance with test parameters.
- C. Test Reports: Prepare a written report to record the following:
 - 1. Test procedures used.
 - 2. Test results that comply with requirements.
 - 3. Test results that do not comply with requirements and corrective action taken to achieve compliance with requirements.
- D. Remove and replace malfunctioning units and retest as specified above.

SECTION 260529 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Examine all other Sections of the Specifications for requirements that affect work under this Section whether or not such work is specifically mentioned in this Section.
- C. Coordinate work with that of all other trades affecting, or affected by work of this Section. Cooperate with such trades to assure the steady progress of all work under the Contract.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Hangers and supports for electrical equipment and systems.

1.3 DEFINITIONS

- A. EMT: Electrical metallic tubing.
- B. RMC: Rigid metal conduit.

1.4 PERFORMANCE REQUIREMENTS

A. Design supports for multiple raceways capable of supporting combined weight of supported systems and its contents.

1.5 SUBMITTALS

- A. Product Data: For the following:
 - 1. Steel slotted support systems.
 - 2. Nonmetallic slotted support systems.
- B. Welding certificates.

- 1.6 QUALITY ASSURANCE
 - A. Welding: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code Steel."
 - B. Comply with NFPA 70.

PART 2 - PRODUCTS

2.1 SUPPORT, ANCHORAGE, AND ATTACHMENT COMPONENTS

- A. Steel Slotted Support Systems: Comply with MFMA-4, factory-fabricated components for field assembly.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Allied Tube & Conduit.
 - b. Cooper B-Line, Inc.; a division of Cooper Industries.
 - c. ERICO International Corporation.
 - d. Thomas & Betts Corporation.
 - e. Unistrut; Tyco International, Ltd.
 - 2. Metallic Coatings: Hot-dip galvanized after fabrication and applied according to MFMA-4.
- B. Raceway and Cable Supports: As described in NECA 1 and NECA 101.
- C. Conduit and Cable Support Devices: Steel and malleable-iron hangers, clamps, and associated fittings, designed for types and sizes of raceway or cable to be supported.
- D. Structural Steel for Fabricated Supports and Restraints: ASTM A 36/A 36M, steel plates, shapes, and bars; black and galvanized.
- E. Mounting, Anchoring, and Attachment Components: Items for fastening electrical items or their supports to building surfaces include the following:
 - 1. Powder-Actuated Fasteners: Threaded-steel stud, for use in hardened portland cement concrete, steel, or wood, with tension, shear, and pullout capacities appropriate for supported loads and building materials where used.
 - 2. Mechanical-Expansion Anchors: Insert-wedge-type, stainless steel, for use in hardened portland cement concrete with tension, shear, and pullout capacities appropriate for supported loads and building materials in which used.
 - 3. Concrete Inserts: Steel or malleable-iron, slotted support system units similar to MSS Type 18; complying with MFMA-4 or MSS SP-58.
 - 4. Clamps for Attachment to Steel Structural Elements: MSS SP-58, type suitable for attached structural element.

- 5. Through Bolts: Structural type, hex head, and high strength. Comply with ASTM A 325.
- 6. Toggle Bolts: All-steel springhead type.
- 7. Hanger Rods: Threaded steel.

2.2 FABRICATED METAL EQUIPMENT SUPPORT ASSEMBLIES

A. Description: Welded or bolted, structural-steel shapes, shop or field fabricated to fit dimensions of supported equipment.

PART 3 - EXECUTION

3.1 APPLICATION

- A. Comply with NECA 1 and NECA 101 for application of hangers and supports for electrical equipment and systems except if requirements in this Section are stricter.
- B. Maximum Support Spacing and Minimum Hanger Rod Size for Raceway: Space supports for EMT and RMC as required by NFPA 70. Minimum rod size shall be 1/4 inch (6 mm) in diameter.
- C. Multiple Raceways or Cables: Install trapeze-type supports fabricated with steel slotted support system, sized so capacity can be increased by at least 25 percent in future without exceeding specified design load limits.
 - 1. Secure raceways and cables to these supports with single-bolt conduit clamps.
- D. Spring-steel clamps designed for supporting single conduits without bolts may be used for 1-1/2-inch (38-mm) and smaller raceways serving branch circuits and communication systems above suspended ceilings and for fastening raceways to trapeze supports.

3.2 SUPPORT INSTALLATION

- A. Comply with NECA 1 and NECA 101 for installation requirements except as specified in this Article.
- B. Raceway Support Methods: In addition to methods described in NECA 1, EMT, IMC, and RMC may be supported by openings through structure members, as permitted in NFPA 70.
- C. Strength of Support Assemblies: Where not indicated, select sizes of components so strength will be adequate to carry present and future static loads within specified loading limits. Minimum static design load used for strength determination shall be weight of supported components plus 200 lb (90 kg).

- D. Mounting and Anchorage of Surface-Mounted Equipment and Components: Anchor and fasten electrical items and their supports to building structural elements by the following methods unless otherwise indicated by code:
 - 1. To New Concrete: Bolt to concrete inserts.
 - 2. To Masonry: Approved toggle-type bolts on hollow masonry units and expansion anchor fasteners on solid masonry units.
 - 3. To Existing Concrete: Expansion anchor fasteners.
 - 4. Instead of expansion anchors, powder-actuated driven threaded studs provided with lock washers and nuts may be used in existing standard-weight concrete 4 inches (100 mm) thick or greater. Do not use for anchorage to lightweight-aggregate concrete or for slabs less than 4 inches (100 mm) thick.
 - 5. To Light Steel: Sheet metal screws.
 - 6. Items Mounted on Hollow Walls and Nonstructural Building Surfaces: Mount cabinets, panelboards, disconnect switches, control enclosures, pull and junction boxes, transformers, and other devices on slotted-channel racks attached to substrate by means that meet seismic-restraint strength and anchorage requirements.
- E. Drill holes for expansion anchors in concrete at locations and to depths that avoid reinforcing bars.

3.3 INSTALLATION OF FABRICATED METAL SUPPORTS

- A. Cut, fit, and place miscellaneous metal supports accurately in location, alignment, and elevation to support and anchor electrical materials and equipment.
- B. Field Welding: Comply with AWS D1.1/D1.1M.

3.4 PAINTING

- A. Touchup: Clean field welds and abraded areas of shop paint. Paint exposed areas immediately after erecting hangers and supports. Use same materials as used for shop painting. Comply with SSPC-PA 1 requirements for touching up field-painted surfaces.
 - 1. Apply paint by brush or spray to provide minimum dry film thickness of 2.0 mils (0.05 mm).
- B. Galvanized Surfaces: Clean welds, bolted connections, and abraded areas and apply galvanizing-repair paint to comply with ASTM A 780.

SECTION 260533 - RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Metal conduits, tubing, and fittings.
 - 2. Nonmetal conduits, tubing, and fittings.
 - 3. Metal wireways and auxiliary gutters.
 - 4. Nonmetal wireways and auxiliary gutters.
 - 5. Surface raceways.
 - 6. Boxes, enclosures, and cabinets.
 - 7. Handholes and boxes for exterior underground cabling.
- B. Related Requirements:
 - 1. Section 260543 "Underground Ducts and Raceways for Electrical Systems" for exterior ductbanks, manholes, and underground utility construction.
 - 2. Section 271523 "Computer-Telephone Network"

1.3 DEFINITIONS

- A. GRC: Galvanized rigid steel conduit.
- B. EMT: Electrical Metallic Tubing.
- C. RNC: Rigid Nonmetallic Conduit.

1.4 ACTION SUBMITTALS

A. Product Data: For surface raceways, wireways and fittings, floor boxes, hinged-cover enclosures, and cabinets.

PART 2 - PRODUCTS

2.1 METAL CONDUITS, TUBING, AND FITTINGS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Alflex Inc.
 - 2. Allied Tube & Conduit; a Tyco International Ltd. Co.
 - 3. O-Z Gedney; a unit of General Signal.
 - 4. Wheatland Tube Company.
- B. Listing and Labeling: Metal conduits, tubing, and fittings shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- C. GRC: Comply with ANSI C80.1 and UL 6.
- D. IMC: Comply with ANSI C80.6 and UL 1242.
- E. EMT: Comply with ANSI C80.3 and UL 797.
- F. FMC: Comply with UL 1; zinc-coated steel.
- G. LFMC: Flexible steel conduit with PVC jacket and complying with UL 360.
- H. Fittings for Metal Conduit: Comply with NEMA FB 1 and UL 514B.
 - 1. Conduit Fittings for Hazardous (Classified) Locations: Comply with UL 886 and NFPA 70.
 - 2. Fittings for EMT:
 - a. Material: die cast.
 - b. Type: Setscrew or compression.
 - 3. Expansion Fittings: PVC or steel to match conduit type, complying with UL 651, rated for environmental conditions where installed, and including flexible external bonding jumper.
- I. Joint Compound for IMC, GRC, or EMT: Approved, as defined in NFPA 70, by authorities having jurisdiction for use in conduit assemblies, and compounded for use to lubricate and protect threaded conduit joints from corrosion and to enhance their conductivity.

2.2 NONMETALLIC CONDUITS, TUBING, AND FITTINGS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. AFC Cable Systems

- 2. Arnco
- 3. CANTEX
- 4. RACO
- 5. Alflex Inc.
- 6. Allied Tube & Conduit; a Tyco International Ltd. Co.
- 7. O-Z Gedney; a unit of General Signal.
- 8. Wheatland Tube Company
- B. Listing and Labeling: Nonmetallic conduits, tubing, and fittings shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- C. ENT: Comply with NEMA TC 13 and UL 1653.
- D. RNC: Type EPC-40-PVC, complying with NEMA TC 2 and UL 651 unless otherwise indicated.
- E. LFNC: Comply with UL 1660.
- F. Rigid HDPE: Comply with UL 651A.
- G. Continuous HDPE: Comply with UL 651B.
- H. Coilable HDPE: Preassembled with conductors or cables, and complying with ASTM D 3485.
- I. RTRC: Comply with UL 1684A and NEMA TC 14.
- J. Fittings for ENT and RNC: Comply with NEMA TC 3; match to conduit or tubing type and material.
- K. Fittings for LFNC: Comply with UL 514B.
- L. Solvents and Adhesives: As recommended by conduit manufacturer.

2.3 METAL WIREWAYS AND AUXILIARY GUTTERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Erickson Electrical Equipment Company.
 - 2. Hoffman.
 - 3. Hubbell Incorporated; Killark Electric Manufacturing Co. Division.
 - 4. O-Z/Gedney; a unit of General Signal.
 - 5. RACO; a Hubbell Company.
 - 6. Robroy Industries, Inc.; Enclosure Division.
 - 7. Spring City Electrical Manufacturing Company.
 - 8. Thomas & Betts Corporation

- B. Description: Sheet metal, complying with UL 870 and NEMA 250, Type 3R unless otherwise indicated, and sized according to NFPA 70.
 - 1. Metal wireways installed outdoors shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- C. Fittings and Accessories: Include covers, couplings, offsets, elbows, expansion joints, adapters, hold-down straps, end caps, and other fittings to match and mate with wireways as required for complete system.
- D. Wireway Covers: Screw-cover type unless otherwise indicated.
- E. Finish: Manufacturer's standard enamel finish.

2.4 SURFACE RACEWAYS

A. Listing and Labeling: Surface raceways and tele-power poles shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application

2.5 BOXES, ENCLOSURES, AND CABINETS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Erickson Electrical Equipment Company.
 - 2. Hoffman.
 - 3. Hubbell Incorporated; Killark Electric Manufacturing Co. Division.
 - 4. O-Z/Gedney; a unit of General Signal.
 - 5. RACO; a Hubbell Company.
 - 6. Robroy Industries, Inc.; Enclosure Division.
 - 7. Spring City Electrical Manufacturing Company.
 - 8. Thomas & Betts Corporation
- B. General Requirements for Boxes, Enclosures, and Cabinets: Boxes, enclosures, and cabinets installed in wet locations shall be listed for use in wet locations.
- C. Sheet Metal Outlet and Device Boxes: Comply with NEMA OS 1 and UL 514A.
- D. Cast-Metal Outlet and Device Boxes: Comply with NEMA FB 1, ferrous alloy or aluminum, Type FD, with gasketed cover.
- E. Nonmetallic Outlet and Device Boxes: Comply with NEMA OS 2 and UL 514C.
- F. Metal Floor Boxes:
 - 1. Material: Cast metal or sheet metal.
 - 2. Type: Fully adjustable.

- 3. Shape: Rectangular or otherwise indicated.
- 4. Listing and Labeling: Metal floor boxes shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- G. Luminaire Outlet Boxes: Nonadjustable, designed for attachment of luminaire weighing 50 lb. Outlet boxes designed for attachment of luminaires weighing more than 50 lb shall be listed and marked for the maximum allowable weight.
- H. Small Sheet Metal Pull and Junction Boxes: NEMA OS 1.
- I. Cast-Metal Access, Pull, and Junction Boxes: Comply with NEMA FB 1 and UL 1773, galvanized, cast iron with gasketed cover.
- J. Box extensions used to accommodate new building finishes shall be of same material as recessed box.
- K. Device Box Dimensions: 4 inches square by 2-1/8 inches deep.
- L. Gangable boxes are prohibited.
- M. Hinged-Cover Enclosures: Comply with UL 50 and NEMA 250, Type 3R with continuoushinge cover with flush latch unless otherwise indicated.
 - 1. Metal Enclosures: Steel, finished inside and out with manufacturer's standard enamel.
 - 2. Nonmetallic Enclosures: Fiberglass.
 - 3. Interior Panels: Steel; all sides finished with manufacturer's standard enamel.
- N. Cabinets:
 - 1. NEMA 250, Type 1 or Type 3R galvanized-steel box with removable interior panel and removable front, finished inside and out with manufacturer's standard enamel.
 - 2. Hinged door in front cover with flush latch and concealed hinge.
 - 3. Key latch to match panelboards.
 - 4. Metal barriers to separate wiring of different systems and voltage.
 - 5. Accessory feet where required for freestanding equipment.
 - 6. Nonmetallic cabinets shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

2.6 HANDHOLES AND BOXES FOR EXTERIOR UNDERGROUND WIRING

- A. General Requirements for Handholes and Boxes:
 - 1. Boxes and handholes for use in underground systems shall be designed and identified as defined in NFPA 70, for intended location and application.
 - 2. Boxes installed in wet areas shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

- B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Armorcast Products Company
 - 2. OldErickson Electrical Equipment Company.
 - 3. Hoffman.
 - 4. Hubbell Incorporated; Killark Electric Manufacturing Co. Division.
 - 5. O-Z/Gedney; a unit of General Signal.
 - 6. RACO; a Hubbell Company.
 - 7. Robroy Industries, Inc.; Enclosure Division.
 - 8. Spring City Electrical Manufacturing Company.
- C. Thomas & Betts Corporation
- D. Polymer-Concrete Handholes and Boxes with Polymer-Concrete Cover: Molded of sand and aggregate, bound together with polymer resin, and reinforced with steel, fiberglass, or a combination of the two.
 - 1. Standard: Comply with SCTE 77.
 - 2. Configuration: Designed for flush burial with open bottom unless otherwise indicated.
 - 3. Cover: Weatherproof, secured by tamper-resistant locking devices and having structural load rating consistent with enclosure and handhole location.
 - 4. Cover Finish: Nonskid finish shall have a minimum coefficient of friction of 0.50.
 - 5. Cover Legend: Molded lettering, "ELECTRIC" or "COMMUNICATIONS".
 - 6. Conduit Entrance Provisions: Conduit-terminating fittings shall mate with entering ducts for secure, fixed installation in enclosure wall.
 - 7. Handholes 24 Inches Wide by 24 Inches Long and Larger: Have inserts for cable racks and pulling-in irons installed before concrete is poured.

2.7 SOURCE QUALITY CONTROL FOR UNDERGROUND ENCLOSURES

- A. Handhole and Pull-Box Prototype Test: Test prototypes of handholes and boxes for compliance with SCTE 77. Strength tests shall be for specified tier ratings of products supplied.
 - 1. Tests of materials shall be performed by an independent testing agency.
 - 2. Strength tests of complete boxes and covers shall be by either an independent testing agency or manufacturer. A qualified registered professional engineer shall certify tests by manufacturer.
 - 3. Testing machine pressure gages shall have current calibration certification complying with ISO 9000 and ISO 10012 and traceable to NIST standards.

PART 3 - EXECUTION

3.1 RACEWAY APPLICATION

A. Outdoors: Apply raceway products as specified below unless otherwise indicated:

- 1. Exposed Conduit: GRC.
- 2. Concealed Conduit, Aboveground: GRC.
- 3. Underground Conduit: RNC, Type EPC-40-PVC or Type EPC-80-PVC, concrete encased.
- 4. Connection to Vibrating Equipment (Including Transformers and Hydraulic, Pneumatic, Electric Solenoid, or Motor-Driven Equipment): LFMC.
- 5. Boxes and Enclosures, Aboveground: NEMA 250, Type 3R.
- B. Indoors: Apply raceway products as specified below unless otherwise indicated:
 - 1. Exposed, Not Subject to Physical Damage: GRC.
 - 2. Exposed, Not Subject to Severe Physical Damage: GRC.
 - 3. Exposed and Subject to Severe Physical Damage: GRC. Raceway locations include the following:
 - a. Loading dock.
 - b. Corridors used for traffic of mechanized carts, forklifts, and pallet-handling units.
 - c. Mechanical rooms up to 8ft above finished floor. Use of EMT above the 8ft is permitted
 - d. Vehicle Maintenance and supporting areas up to 8ft above finished floor. Use of EMT above the 8ft is permitted.
 - 4. Concealed in Ceilings and Interior Walls and Partitions: EMT (use of MC cable in administration areas is allowed).
 - 5. Connection to Vibrating Equipment (Including Transformers and Hydraulic, Pneumatic, Electric Solenoid, or Motor-Driven Equipment): FMC, except use LFMC in damp or wet locations.
 - 6. Damp or Wet Locations: GRC.
 - 7. Boxes and Enclosures: NEMA 250, Type 1, except use NEMA 250, Type 4 stainless steel in institutional and commercial kitchens and damp or wet locations.
- C. Minimum Raceway Size: 3/4-inch trade size.
- D. Raceway Fittings: Compatible with raceways and suitable for use and location.
 - 1. Rigid and Intermediate Steel Conduit: Use threaded rigid steel conduit fittings unless otherwise indicated. Comply with NEMA FB 2.10.
 - 2. PVC Externally Coated, Rigid Steel Conduits: Use only fittings listed for use with this type of conduit. Patch and seal all joints, nicks, and scrapes in PVC coating after installing conduits and fittings. Use sealant recommended by fitting manufacturer and apply in thickness and number of coats recommended by manufacturer.
 - 3. EMT: Use setscrew or compression, cast-metal fittings. Comply with NEMA FB 2.10.
 - 4. Flexible Conduit: Use only fittings listed for use with flexible conduit. Comply with NEMA FB 2.20.
- E. Do not install aluminum conduits, boxes, or fittings in contact with concrete or earth.
- F. Install surface raceways only where indicated on Drawings.
- G. Do not install nonmetallic conduit where ambient temperature exceeds 120 deg F.

3.2 INSTALLATION

- A. Comply with NECA 1 and NECA 101 for installation requirements except where requirements on Drawings or in this article are stricter. Comply with NECA 102 for aluminum conduits. Comply with NFPA 70 limitations for types of raceways allowed in specific occupancies and number of floors.
- B. Keep raceways at least 6 inches away from parallel runs of flues and steam or hot-water pipes. Install horizontal raceway runs above water and steam piping.
- C. Complete raceway installation before starting conductor installation.
- D. Comply with requirements in Section 260529 "Hangers and Supports for Electrical Systems" for hangers and supports.
- E. Arrange stub-ups so curved portions of bends are not visible above finished slab.
- F. Install no more than the equivalent of three 90-degree bends in any conduit run except for control wiring conduits, for which fewer bends are allowed. Support within 12 inches of changes in direction.
- G. Conceal conduit and EMT within finished walls, ceilings, and floors unless otherwise indicated. Install conduits parallel or perpendicular to building lines.
- H. Support conduit within 12 inches of enclosures to which attached.
- I. Raceways Embedded in Slabs:
 - 1. Run conduit larger than 1-inch trade size, parallel or at right angles to main reinforcement. Where at right angles to reinforcement, place conduit close to slab support. Secure raceways to reinforcement at maximum 10-foot intervals.
 - 2. Arrange raceways to cross building expansion joints at right angles with expansion fittings.
 - 3. Arrange raceways to keep a minimum of 3 inch of concrete cover in all directions.
 - 4. Do not embed threadless fittings in concrete unless specifically approved by Architect for each specific location.
 - 5. Change from ENT to GRC before rising above floor.
- J. Stub-ups to Above Recessed Ceilings:
 - 1. Use EMT, IMC, or RMC for raceways.
 - 2. Use a conduit bushing or insulated fitting to terminate stub-ups not terminated in hubs or in an enclosure.
- K. Threaded Conduit Joints, Exposed to Wet, Damp, Corrosive, or Outdoor Conditions: Apply listed compound to threads of raceway and fittings before making up joints. Follow compound manufacturer's written instructions.
- L. Coat field-cut threads on PVC-coated raceway with a corrosion-preventing conductive compound prior to assembly.

- M. Raceway Terminations at Locations Subject to Moisture or Vibration: Use insulating bushings to protect conductors including conductors smaller than No. 4 AWG.
- N. Terminate threaded conduits into threaded hubs or with locknuts on inside and outside of boxes or cabinets. Install bushings on conduits up to 1-1/4-inch trade size and insulated throat metal bushings on 1-1/2-inch trade size and larger conduits terminated with locknuts. Install insulated throat metal grounding bushings on service conduits.
- O. Install raceways square to the enclosure and terminate at enclosures with locknuts. Install locknuts hand tight plus 1/4 turn more.
- P. Do not rely on locknuts to penetrate nonconductive coatings on enclosures. Remove coatings in the locknut area prior to assembling conduit to enclosure to assure a continuous ground path.
- Q. Cut conduit perpendicular to the length. For conduits 2-inch trade size and larger, use roll cutter or a guide to make cut straight and perpendicular to the length.
- R. Install pull wires in empty raceways. Use polypropylene or monofilament plastic line with not less than 200-lb tensile strength. Leave at least 12 inches of slack at each end of pull wire. Cap underground raceways designated as spare above grade alongside raceways in use.
- S. Surface Raceways:
 - 1. Install surface raceway with a minimum 2-inch radius control at bend points.
 - 2. Secure surface raceway with screws or other anchor-type devices at intervals not exceeding 48 inches and with no less than two supports per straight raceway section. Support surface raceway according to manufacturer's written instructions. Tape and glue are not acceptable support methods.
- T. Install raceway sealing fittings at accessible locations according to NFPA 70 and fill them with listed sealing compound. For concealed raceways, install each fitting in a flush steel box with a blank cover plate having a finish similar to that of adjacent plates or surfaces. Install raceway sealing fittings according to NFPA 70.
- U. Install devices to seal raceway interiors at accessible locations. Locate seals so no fittings or boxes are between the seal and the following changes of environments. Seal the interior of all raceways at the following points:
 - 1. Where conduits pass from warm to cold locations, such as boundaries of refrigerated spaces.
 - 2. Where an underground service raceway enters a building or structure.
 - 3. Where otherwise required by NFPA 70.
- V. Comply with manufacturer's written instructions for solvent welding RNC and fittings.
- W. Expansion-Joint Fittings:
 - 1. Install in each run of aboveground RNC that is located where environmental temperature change may exceed 30 deg F and that has straight-run length that exceeds 25 feet. Install in each run of aboveground RMC and EMT conduit that is located where environmental

temperature change may exceed 100 deg F and that has straight-run length that exceeds 100 feet.

- 2. Install type and quantity of fittings that accommodate temperature change listed for each of the following locations:
 - a. Outdoor Locations Not Exposed to Direct Sunlight: 125 deg F temperature change.
 - b. Outdoor Locations Exposed to Direct Sunlight: 155 deg F temperature change.
 - c. Indoor Spaces Connected with Outdoors without Physical Separation: 125 deg F temperature change.
- 3. Install fitting(s) that provide expansion and contraction for at least 0.00041 inch per foot of length of straight run per deg of temperature change for PVC conduits. Install fitting(s) that provide expansion and contraction for at least 0.000078 inch per foot of length of straight run per deg F of temperature change for metal conduits.
- 4. Install expansion fittings at all locations where conduits cross building or structure expansion joints.
- 5. Install each expansion-joint fitting with position, mounting, and piston setting selected according to manufacturer's written instructions for conditions at specific location at time of installation. Install conduit supports to allow for expansion movement.
- X. Flexible Conduit Connections: Comply with NEMA RV 3. Use a maximum of 72 inches of flexible conduit for recessed and semirecessed luminaires, equipment subject to vibration, noise transmission, or movement; and for transformers and motors.
 - 1. Use LFMC in damp or wet locations subject to severe physical damage.
 - 2. Use LFMC or LFNC in damp or wet locations not subject to severe physical damage.
- Y. Mount boxes at heights indicated on Drawings. If mounting heights of boxes are not individually indicated, give priority to ADA requirements. Install boxes with height measured to center of box unless otherwise indicated.
- Z. Recessed Boxes in Masonry Walls: Saw-cut opening for box in center of cell of masonry block, and install box flush with surface of wall. Prepare block surfaces to provide a flat surface for a raintight connection between box and cover plate or supported equipment and box.
- AA. Horizontally separate boxes mounted on opposite sides of walls so they are not in the same vertical channel.
- BB. Locate boxes so that cover or plate will not span different building finishes.
- CC. Support boxes of three gangs or more from more than one side by spanning two framing members or mounting on brackets specifically designed for the purpose.
- DD. Fasten junction and pull boxes to or support from building structure. Do not support boxes by conduits.
- EE. Set metal floor boxes level and flush with finished floor surface.
- FF. Set nonmetallic floor boxes level. Trim after installation to fit flush with finished floor surface.

3.3 INSTALLATION OF UNDERGROUND CONDUIT

- A. Direct-Buried Conduit:
 - 1. Excavate trench bottom to provide firm and uniform support for conduit. Prepare trench bottom as specified in Section 312000 "Earth Moving" for pipe less than 6 inches in nominal diameter.
 - 2. Install backfill as specified in Section 312000 "Earth Moving."
 - 3. After installing conduit, backfill and compact. Start at tie-in point, and work toward end of conduit run, leaving conduit at end of run free to move with expansion and contraction as temperature changes during this process. Firmly hand tamp backfill around conduit to provide maximum supporting strength. After placing controlled backfill to within 12 inches of finished grade, make final conduit connection at end of run and complete backfilling with normal compaction as specified in Section 312000 "Earth Moving."
 - 4. Install manufactured duct elbows for stub-ups at poles and equipment and at building entrances through floor unless otherwise indicated. Encase elbows for stub-up ducts throughout length of elbow.
 - 5. Install manufactured rigid steel conduit elbows for stub-ups at poles and equipment and at building entrances through floor.
 - a. Couple steel conduits to ducts with adapters designed for this purpose, and encase coupling with 3 inches of concrete for a minimum of 12 inches on each side of the coupling.
 - b. For stub-ups at equipment mounted on outdoor concrete bases and where conduits penetrate building foundations, extend steel conduit horizontally a minimum of 60 inches from edge of foundation or equipment base. Install insulated grounding bushings on terminations at equipment.
 - 6. Warning Planks: Bury warning planks approximately 12 inches above direct-buried conduits but a minimum of 6 inches below grade. Align planks along centerline of conduit.
 - 7. Underground Warning Tape: Comply with requirements in Section 260553 "Identification for Electrical Systems."

3.4 INSTALLATION OF UNDERGROUND HANDHOLES AND BOXES

- A. Install handholes and boxes level and plumb and with orientation and depth coordinated with connecting conduits to minimize bends and deflections required for proper entrances.
- B. Unless otherwise indicated, support units on a level bed of crushed stone or gravel, graded from 1/2-inch sieve to No. 4 sieve and compacted to same density as adjacent undisturbed earth.
- C. Elevation: In paved areas, set so cover surface will be flush with finished grade. Set covers of other enclosures 1 inch above finished grade.
- D. Install handholes with bottom below frost line, below grade.
- E. Install removable hardware, including pulling eyes, cable stanchions, cable arms, and insulators, as required for installation and support of cables and conductors and as indicated. Select arm

lengths to be long enough to provide spare space for future cables but short enough to preserve adequate working clearances in enclosure.

F. Field-cut openings for conduits according to enclosure manufacturer's written instructions. Cut wall of enclosure with a tool designed for material to be cut. Size holes for terminating fittings to be used, and seal around penetrations after fittings are installed.

3.5 SLEEVE AND SLEEVE-SEAL INSTALLATION FOR ELECTRICAL PENETRATIONS

A. Install sleeves and sleeve seals at penetrations of exterior floor and wall assemblies. Comply with requirements in Section 260544 "Sleeves and Sleeve Seals for Electrical Raceways and Cabling."

3.6 FIRESTOPPING

A. Install firestopping at penetrations of fire-rated floor and wall assemblies. Comply with requirements in Section 260500

3.7 PROTECTION

- A. Protect coatings, finishes, and cabinets from damage and deterioration.
 - 1. Repair damage to galvanized finishes with zinc-rich paint recommended by manufacturer.
 - 2. Repair damage to PVC coatings or paint finishes with matching touchup coating recommended by manufacturer.

SECTION 260544 - SLEEVES AND SLEEVE SEALS FOR ELECTRICAL RACEWAYS AND CABLING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Sleeves for raceway and cable penetration of non-fire-rated construction walls and floors.
 - 2. Sleeve-seal systems.
 - 3. Sleeve-seal fittings.
 - 4. Grout.
 - 5. Silicone sealants.
- B. Related Requirements:
 - 1. Section 078413 "Penetration Firestopping" for penetration firestopping installed in fireresistance-rated walls, horizontal assemblies, and smoke barriers, with and without penetrating items.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

PART 2 - PRODUCTS

2.1 SLEEVES

- A. Wall Sleeves:
 - 1. Steel Pipe Sleeves: ASTM A53/A53M, Type E, Grade B, Schedule 40, zinc coated, plain ends.
 - 2. Cast-Iron Pipe Sleeves: Cast or fabricated "wall pipe," equivalent to ductile-iron pressure pipe, with plain ends and integral waterstop unless otherwise indicated.
- B. Sleeves for Conduits Penetrating Non-Fire-Rated Gypsum Board Assemblies: Galvanized-steel sheet; 0.0239-inch minimum thickness; round tube closed with welded longitudinal joint, with tabs for screw-fastening the sleeve to the board.

- C. PVC-Pipe Sleeves: ASTM D1785, Schedule 40.
- D. Molded-PVC Sleeves: With nailing flange for attaching to wooden forms.
- E. Molded-PE or -PP Sleeves: Removable, tapered-cup shaped, and smooth outer surface with nailing flange for attaching to wooden forms.
- F. Sleeves for Rectangular Openings:
 - 1. Material: Galvanized sheet steel.
 - 2. Minimum Metal Thickness:
 - a. For sleeve cross-section rectangle perimeter less than 50 inches and with no side larger than 16 inches, thickness shall be 0.052 inch.
 - b. For sleeve cross-section rectangle perimeter 50 inches or more and one or more sides larger than 16 inches, thickness shall be 0.138 inch.

2.2 SLEEVE-SEAL SYSTEMS

- A. Description: Modular sealing device, designed for field assembly, to fill annular space between sleeve and raceway or cable.
 - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by the following:
 - a. Advance Products & Systems, Inc.
 - b. <u>Metraflex Company (The)</u>.
 - c. <u>Pipeline Seal and Insulator, Inc.</u>
 - 2. Sealing Elements: EPDM rubber interlocking links shaped to fit surface of pipe. Include type and number required for pipe material and size of pipe.
 - 3. Pressure Plates: Stainless steel.
 - 4. Connecting Bolts and Nuts: Stainless steel of length required to secure pressure plates to sealing elements.

2.3 SLEEVE-SEAL FITTINGS

- A. Description: Manufactured plastic, sleeve-type, waterstop assembly made for embedding in concrete slab or wall. Unit shall have plastic or rubber waterstop collar with center opening to match piping OD.
 - 1.

2.4 GROUT

A. Description: Nonshrink; recommended for interior and exterior sealing openings in non-firerated walls or floors.

- B. Standard: ASTM C1107/C1107M, Grade B, post-hardening and volume-adjusting, dry, hydraulic-cement grout.
- C. Design Mix: 5000-psi, 28-day compressive strength.
- D. Packaging: Premixed and factory packaged.

2.5 SILICONE SEALANTS

- A. Silicone Sealants: Single-component, silicone-based, neutral-curing elastomeric sealants of grade indicated below.
 - 1. Grade: Pourable (self-leveling) formulation for openings in floors and other horizontal surfaces that are not fire rated.
- B. Silicone Foams: Multicomponent, silicone-based liquid elastomers that, when mixed, expand and cure in place to produce a flexible, nonshrinking foam.

PART 3 - EXECUTION

3.1 SLEEVE INSTALLATION FOR NON-FIRE-RATED ELECTRICAL PENETRATIONS

- A. Comply with NECA 1.
- B. Comply with NEMA VE 2 for cable tray and cable penetrations.
- C. Sleeves for Conduits Penetrating Above-Grade Non-Fire-Rated Concrete and Masonry-Unit Floors and Walls:
 - 1. Interior Penetrations of Non-Fire-Rated Walls and Floors:
 - a. Seal annular space between sleeve and raceway or cable, using joint sealant appropriate for size, depth, and location of joint. Comply with requirements in Section 079200 "Joint Sealants."
 - b. Seal space outside of sleeves with mortar or grout. Pack sealing material solidly between sleeve and wall so no voids remain. Tool exposed surfaces smooth; protect material while curing.
 - 2. Use pipe sleeves unless penetration arrangement requires rectangular sleeved opening.
 - 3. Size pipe sleeves to provide 1/4-inch annular clear space between sleeve and raceway or cable unless sleeve seal is to be installed.
 - 4. Install sleeves for wall penetrations unless core-drilled holes or formed openings are used. Install sleeves during erection of walls. Cut sleeves to length for mounting flush with both surfaces of walls. Deburr after cutting.
 - 5. Install sleeves for floor penetrations. Extend sleeves installed in floors 2 inches above finished floor level. Install sleeves during erection of floors.

- D. Sleeves for Conduits Penetrating Non-Fire-Rated Gypsum Board Assemblies:
 - 1. Use circular metal sleeves unless penetration arrangement requires rectangular sleeved opening.
 - 2. Seal space outside of sleeves with approved joint compound for gypsum board assemblies.
- E. Roof-Penetration Sleeves: Seal penetration of individual raceways and cables with flexible boot-type flashing units applied in coordination with roofing work.
- F. Aboveground, Exterior-Wall Penetrations: Seal penetrations using [steel] [cast-iron] pipe sleeves and mechanical sleeve seals. Select sleeve size to allow for 1-inch annular clear space between pipe and sleeve for installing mechanical sleeve seals.
- G. Underground, Exterior-Wall and Floor Penetrations: Install cast-iron pipe sleeves. Size sleeves to allow for 1-inch annular clear space between raceway or cable and sleeve for installing sleeve-seal system.

3.2 SLEEVE-SEAL-SYSTEM INSTALLATION

- A. Install sleeve-seal systems in sleeves in exterior concrete walls and slabs-on-grade at raceway entries into building.
- B. Install type and number of sealing elements recommended by manufacturer for raceway or cable material and size. Position raceway or cable in center of sleeve. Assemble mechanical sleeve seals and install in annular space between raceway or cable and sleeve. Tighten bolts against pressure plates that cause sealing elements to expand and make watertight seal.

3.3 SLEEVE-SEAL-FITTING INSTALLATION

- A. Install sleeve-seal fittings in new walls and slabs as they are constructed.
- B. Assemble fitting components of length to be flush with both surfaces of concrete slabs and walls. Position waterstop flange to be centered in concrete slab or wall.
- C. Secure nailing flanges to concrete forms.
- D. Using grout, seal the space around outside of sleeve-seal fittings.

SECTION 260553 - IDENTIFICATION FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Examine all other Sections of the Specifications for requirements that affect work under this Section whether or not such work is specifically mentioned in this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Identification for conductors.
 - 2. Equipment identification labels.

1.3 SUBMITTALS

A. Product Data: For each electrical identification product indicated.

1.4 QUALITY ASSURANCE

- A. Comply with ANSI A13.1 and ANSI C2.
- B. Comply with NFPA 70.
- C. Comply with 29 CFR 1910.145.

1.5 COORDINATION

- A. Coordinate identification names, abbreviations, colors, and other features with requirements in the Contract Documents, Shop Drawings, manufacturer's wiring diagrams, and the Operation and Maintenance Manual, and with those required by codes, standards, and 29 CFR 1910.145. Use consistent designations throughout Project.
- B. Coordinate installation of identifying devices with completion of covering and painting of surfaces where devices are to be applied.
- C. Coordinate installation of identifying devices with location of access panels and doors.
- D. Install identifying devices before installing acoustical ceilings and similar concealment.

IDENTIFICATION FOR ELECTRICAL SYSTEMS

PART 2 - PRODUCTS

2.1 CONDUCTOR MATERIALS

- A. Color-Coding Conductor Tape: Colored, self-adhesive vinyl tape not less than 3 mils (0.08 mm) thick by 1 to 2 inches (25 to 50 mm) wide.
- B. Marker Tapes: Vinyl or vinyl-cloth, self-adhesive wraparound type, with circuit identification legend machine printed by thermal transfer or equivalent process.

2.2 UNDERGROUND-LINE WARNING TAPE

- A. Tape:
 - 1. Recommended by manufacturer for the method of installation and suitable to identify and locate underground electrical lines.
 - 2. Printing on tape shall be permanent and shall not be damaged by burial operations.
 - 3. Tape material and ink shall be chemically inert, and not subject to degrading when exposed to acids, alkalis, and other destructive substances commonly found in soils.
- B. Color and Printing:
 - 1. Comply with ANSI Z535.1 through ANSI Z535.5.

2.3 EQUIPMENT IDENTIFICATION LABELS

A. Engraved, Laminated Acrylic or Melamine Label: Punched or drilled for screw mounting. White letters on a black background. Minimum letter height shall be 3/8 inch (10 mm).

PART 3 - EXECUTION

3.1 APPLICATION

- A. Branch-Circuit Conductor Identification: Where there are conductors for more than three branch circuits in same junction or pull box, use color-coding conductor tape. Identify each ungrounded conductor according to source and circuit number.
- B. Equipment Identification Labels: On each unit of equipment, install unique designation label that is consistent with wiring diagrams, schedules, and Operation and Maintenance Manual. Apply labels to disconnect switches and protection equipment, central or master units, control panels, control stations, terminal cabinets, and racks of each system. Systems include power, lighting, control, communication, signal, monitoring, and alarm systems unless equipment is provided with its own identification.
 - 1. Labeling Instructions:

- a. Indoor Equipment: Engraved, laminated acrylic or melamine label.
- 2. Equipment to Be Labeled:
 - a. Panelboards, electrical cabinets, and enclosures.
 - b. Transformers.
 - c. Disconnect switches.
 - d. Push-button stations.

3.2 INSTALLATION

- A. Verify identity of each item before installing identification products.
- B. Location: Install identification materials and devices at locations for most convenient viewing without interference with operation and maintenance of equipment.
- C. Apply identification devices to surfaces that require finish after completing finish work.
- D. Self-Adhesive Identification Products: Clean surfaces before application, using materials and methods recommended by manufacturer of identification device.
- E. Underground-Line Warning Tape: During backfilling of trenches install continuous underground-line warning tape directly above line at 6 to 8 inches below finished grade.
- F. Attach nonadhesive signs and plastic labels with screws and auxiliary hardware appropriate to the location and substrate.
- G. Color-Coding for Phase and Voltage Level Identification, 600 V and Less: Use the colors listed below for ungrounded service, feeder, and branch-circuit conductors.
 - 1. Colors for 208/120-V Circuits:
 - a. Phase A: Black.
 - b. Phase B: Red.
 - c. Phase C: Blue.
 - d. Neutral: White
 - e. Ground: Green
 - 2. Colors for 480/277-V Circuits:
 - a. Phase A: Brown.
 - b. Phase B: Orange.
 - c. Phase C: Yellow.
 - d. Neutral: White
 - e. Ground: Green
 - 3. Field-Applied, Color-Coding Conductor Tape: Apply in half-lapped turns for a minimum distance of 6 inches (150 mm) from terminal points and in boxes where splices or taps are

made. Apply last two turns of tape with no tension to prevent possible unwinding. Locate bands to avoid obscuring factory cable markings.

SECTION 284621 - FIRE DETECTION AND ALARM SYSTEM

PART 1 - GENERAL

1.1 WORK INCLUDED

- A. Provide all labor, materials, tools, and equipment required for the complete installation of work called for in the Contract Documents.
- B. Basis of design is the replacement of all devices, hardware, cabinets, components and wiring and provide additional devices as noted on contract documents to bring system into compliance for detection and notification.
- C. Contractor shall be responsible for providing a fire watch during all hours that the existing system and new system is offline in the building.
- D. Contractor shall be responsible for having existing system back on line at end of shift and or day of work. In the event the existing fire alarm system or devices are unable to be brought back on-line, contractor shall provide a fire watch until said devices and system are back on-line.
- E. New fire alarm devices shall be brought on-line as soon as installed or at the end of each day or shift as to not allow any area, section or portion of the building without fire detection.
- F. Labeling of addressable devices to be approved by owner and each addressable device shall be provided with a custom label designation (e.g. M1-44) in black text on an adhesive backed plastic label. Labeling on device to be by Electrical Contractor (EC).
- G. Provide Carbon Monoxide (CO) detection and notification in accordance with Part 1228 of Title 19 NYCRR, section 1228.4 in all commercial buildings.

1.2 DESCRIPTION OF WORK

- A. This section includes minimum requirements for the following:
 - 1. Fire Alarm Control Panel
 - 2. Fire Alarm Remote Processing Unit
 - 3. Remote Annunciator Panel
 - 4. Notification Appliance Circuit Extender Panel
 - 5. Monitor Modules
 - 6. Control Modules
 - 7. Input Modules
 - 8. Manual Pull Stations

- 9. Photoelectric Smoke Detectors
- 10. Fixed Temperature Heat Detectors
- 11. Carbon Monoxide Detectors
- 12. Audible/Visual Signal Devices
- 13. Visual Signal Devices
- 14. Digital Communicator
- 1.3 QUALITY ASSURANCE
 - A. All installations shall be accompanied in a professional manner by qualified personnel regularly engaged in have a minimum of 5 year of experienced in this type of Work. All fire alarm installers shall possess a state license for installation of fire alarm systems where required.
 - B. All raceways shall be installed in a neat and workmanlike manner. All methods of construction that are not specifically described or indicated in the contract documents shall be subject to the control and approval of the Owner's Representative. Equipment and materials shall be of the quality and manufacture indicated. The equipment specified is based upon the acceptable manufacturers listed. Where "approved equal" is stated, equipment shall be equivalent in every way to that of the equipment specified and subject to approval.
 - C. Materials specified herein shall comply with the applicable requirements of:
 - 1. The following Articles of the National Electric Code (NFPA 70)
 - a. Article 760 Fire Alarm Systems
 - 2. The following National Fire Protection Agency (NFPA) standards:
 - a. NFPA 72 National Fire Alarm Code
 - b. NFPA 90A Installation of Air Conditioning and Ventilating Systems
 - c. NFPA 101 Life Safety Code
 - 3. The following U.L. Standards:
 - a. UL 864/UOJZ,APOU Control Units for Fire Protective Signaling Systems
 - b. UL 268 Smoke Detectors for Fire Protective Signaling Systems
 - c. UL 268A Smoke Detectors for Duct Applications
 - d. UL 521 Heat Detectors for Fire Protective Signaling Systems

- e. UL 228 Door Holders for Fire Protective Signaling Systems
- f. UL 464 Audible Signaling Appliances
- g. UL 1638 Visual Signaling Appliances
- h. UL 38 Manually Activated Signaling Boxes
- i. UL 346 Waterflow Indicators for Fire Protective Signaling Systems
- j. UL 1481 Power Supplies for Fire Protective Signaling Systems

1.4 SUBMITTALS

- A. Provide standard product data for all equipment indicating the type, size, rating, style, catalog number, and listing of the equipment.
- B. Provide calculations for sizing all batteries and power supplies. System Power and battery charts with performance graphs and voltage drop calculations to assure that the system will operate per the prescribed backup time periods and under all voltage conditions per UL and NFPA standards.
- C. Provide power supply calculations listing total current and inrush total current for FACP, and all Notification Appliance Power Supplies and Power Extender Panels.
- D. Provide standard wiring diagrams for all devices
- E. Architectural floor plans and drawings showing system details including specific location of FACP, all system devices, device addresses, raceway sizes, raceways routings cabling in raceways, end of line devices, power supplies and any other system components.
- F. Provide a complete riser diagram indicating all devices with addresses, number of initiation and signal loop circuits, class of wiring system, and type of wiring.

1.5 SYSTEM DESCRIPTION

- A. Point addressable fire alarm system with manual and automatic initiation devices.
- B. System shall be supervised to continuously monitor the integrity of the circuit conductors and power supplies.
- C. Performance of the fire alarm system circuits shall be in accordance with Class B, Style B operation for Initiating Device Circuits (IDC) and Class B, Style Y operation for Notification Appliance Circuits (NAC's).
- D. The fire alarm control panel shall permit on-site programming to accommodate facility expansions, renovations, or fire alarm system modifications. All memory shall be non-volatile.
- E. The control panel shall have 24 VDC output power supplies for notification appliance circuits. System shall be capable of adding additional power supplies as required to

power all notification appliances.

- F. Summary Reports:
 - 1. The Fire Alarm Control Panel shall be capable of displaying and printing summary reports. The summary reports shall include:
 - a. A list of all alarm points not in their normal state.
 - b. A list of all points in the system, including their current status.
 - c. A list of data for all control by event programs.
 - d. A list of data for all time initiated programs.

G. Alarm Priority:

- 1. Alarms shall be processed at three levels of priority:
 - a. Fire alarms shall have the highest priority.
 - b. Other alarms that require interaction by the attendant shall have the second level of priority.
 - c. Monitored points which do not require interaction by the attendant shall be the lowest level of priority.

H. System Access:

- 1. Access to the system shall be controlled by at least three levels of security to prevent programming modifications by unauthorized personnel.
 - a. The lowest level of access, shall permit the attendant to view the system display, print alarms and perform life safety control by event functions. The Attendant has minimal access to the system functions.
 - b. The mid-level access shall permit the attendant to change user programmable parameters.
 - c. The highest level of access shall permit the modification of system software. This level shall be accessed only by a qualified representative of the equipment manufacturer.

1.6 SEQUENCE OF OPERATION

- A. Upon an abnormal condition on the fire alarm system, the appropriate LED (alarm, supervisory, or trouble) shall flash. The panel audible alarm shall pulse for alarm conditions and sound steadily for trouble or supervisory conditions. All abnormal events shall be logged into the database, along with the date and time.
- B. Operation of any smoke detector, heat detector, or manual pull station alarm initiating

device shall cause the following to happen:

- 1. Sound all audible alarm signals throughout the building in a temporal Code. Exterior building mounted sprinkler alarm bell shall operate only upon activation of any system flow switch and shall not operate upon building general alarm.
- 2. Activate all visual strobe lights throughout the building. Strobes shall continue to operate until Fire Alarm Control Panel is reset.
- 3. Display the points in alarm on the LCD display at the fire alarm control panel and at all remote alarm annunciator panels and print at all system printers. The visual indication shall remain until the alarm condition is reset.
- 4. Notify the UL listed central station via dial up digital communicator.
- 5. Operate alarm relay contacts to initiate the elevator recall sequence and trip the "blinking fire hat" notification light in the elevator car.
- 6. Operate alarm relay contacts to release all magnetically held doors throughout the building.
- 7. Operate the fan shut-down relay for the HVAC systems in the same smoke compartment or smoke zone.
- 8. Operate all smoke dampers in the same smoke compartment or smoke zone. Dampers shall close 30 seconds after their respective fan systems have shut down.
- 9. Subsequent initiating alarms shall repeat the respective sequence of operations.
- C. Operation of any carbon monoxide detector shall cause the following to happen:
 - 1. Signal an alarm signal to the fire alarm control panel and remote annunciator.
 - 2. All carbon monoxide detector self-contained audible base shall provide an temporal code 4 alarm.
 - 3. All addressable fire alarm panel connected carbon monoxide detectors shall be interconnected to trip amber lens visible strobes in white housing in the same location of initiating device and location of detected CO. Alarms shall continue until Fire Alarm Control Panel is reset.
 - 4. Subsequent initiating alarms shall repeat the respective sequence of operations.
- D. Operation of any sprinkler system supervisory device shall cause the following to happen:
 - 1. Sound a distinct pulsed audible alarm at the fire alarm control panel.
 - 2. Flash the yellow common trouble LED.

- 3. Display the points in alarm on the LCD display at the fire alarm control panel and at all remote alarm annunciator panels and point at all system printers. The visual indication shall remain until the alarm condition is reset.
- 4. Notify the UL listed central station via dial up digital communicator.
- 5. Subsequent supervisory alarms shall repeat the respective sequence of operations.
- E. The Fire Alarm System wiring and power supplies shall be electrically supervised and report trouble conditions to the fire alarm control panel. Any opens, shorts or grounds on the system wiring shall cause the following to happen:
 - 1. Sound a distinct pulsed audible alarm at the fire alarm control panel.
 - 2. Flash the yellow common trouble LED.
 - 3. Display the points in alarm on the LCD display at the fire alarm control panel and at all remote alarm annunciator panels and point at all system printers. The visual indication shall remain until the alarm condition is reset.
 - 4. Notify the UL listed central station via dial up digital communicator.
 - 5. Subsequent trouble alarms shall repeat the respective Sequence of Operation.
- F. Alarm Silencing:
 - 1. Pressing the "Alarm Silence" button shall cause all notification appliances to be deactivated. A yellow LED located in the fire alarm control panel shall illuminate to indicate the alarm has been silenced.
- G. Elevator Operational Devices:
 - 1. Program elevator ACM's for primary and secondary elevator level 1 recall and "Red Hat" light operation. Primary recall floor shall be the first floor and secondary recall floor shall be the ground floor. Machine room and elevator lobby area detectors shall activate the recall function and Fireman' Hat or Jewel function.
 - 2. Coordinate with the elevator vendor and provide final connections to the elevator controller. Program all ACM's and test system functionality completely.
 - 3. Elevator Machine Room Smoke Detection: Activation of smoke detection in this space will initiate "Primary Recall" and "Flashing Fire Hat" in elevator car. If existing car is not equipped with flashing hat function the control module will be supplied and programmed for future elevator upgrade.
 - 4. Elevator Lobby Smoke Detection: Activation of smoke detection on floors other than the designated primary floor will initiate "Primary Elevator Recall" and open elevator hoistway hatch if one is present. Primary Elevator Recall floor shall be the first floor.

- 5. Elevator Lobby Primary Recall Floor: Smoke detection initiation will activate "Alternate Floor Secondary Recall" and open elevator hoistway hatch if one is present. Alternate Floor Secondary Recall shall be the basement.
- H. Breaching or Opening of access/Security Door.
 - 1. When an Access/Security Door is opened without depressing the green exit to request button the security system will sound a local alarm. A dry set of contacts will also be triggered and be monitored by the fire alarm system.
 - 2. When the Access/ Security system is alarmed at a door a trouble alarm will be activated on the fire alarm system. The remote annunciators and fire alarm control panel will sound and location of breach will be displayed.
 - 3. Upon closure of door or clearing of the alarm from the security system the fire alarm system will return back to its normal state and clear the trouble.
 - 4. Alarm will be recorded in the fire alarm history for review at any given time.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS/SUPPLIERS AND EQUIPMENT

- A. The system described in this specification is the Simplex 4100ES platform. The design make platforms listed below are acceptable manufacturers for the system.
 - 1. Simplex 4100E platform.
 - 2. Honeywell Platform.
 - 3. Mircom FX-2000 platform.
 - 4. FCI E3 Platform

2.2 FIRE ALARM CONTROL PANEL

- A. Modular in construction to allow easy expandability.
- B. Enclosure:
 - 1. Surface mounted, steel with enamel finish.
 - 2. Hinged, lockable door with viewing window.
 - 3. Sized to house power supplies, batteries, and charger.
- C. Controls shall provide switches to reset, lamp test, walk test, drill, and silence alarm and trouble signals. Horns and strobes shall be stopped on Alarm silence.
- D. Indicators shall include power on, system trouble, zone disabled, alarm silenced, alarm, ground fault, and indicating appliance circuit trouble.

- E. LCD Display
 - 1. Membrane construction with four line by 20 character LCD display.
 - 2. 40 characters reserved for user programmable messages.
 - 3. Four pairs of display keys for selection of event display by type (alarm, supervisory, trouble, or monitor) and forward/backward scrolling through event listing.
 - 4. Provide at Main Entrance.
- F. The control panel shall be completely supervised, site programmable, and expandable to minimum 1000 detectors or initiating devices. Notification appliance power supplies shall be expandable from one to four power supplies.
- G. All system memory shall be stored in non-volatile memory.
- H. The system shall utilize digital communications to supervise all addressable loop devices for placement, correct location, and proper operation.
- I. The system shall support distributed processor detectors with the following attributes:
 - 1. Automatic device mapping
 - 2. Electronic addressing
 - 3. Environmental compensation
 - 4. Pre-alarm for dirty detectors
 - 5. Automatic day/night sensitivity adjustment
- J. System circuits shall be configured as follows:
 - 1. Analog addressable circuits: Class B in conduit
 - 2. Zone Address Module (where specified only) Initiating device circuits: Class B in conduit
 - 3. Notification Appliance Circuits: Class B in conduit
- K. Capable of performing a U.L. listed detector sensitivity test.
- L. The power supplies shall be high efficiency, switched mode type, and shall monitor the incoming line. Upon power outage or brownout conditions, the power supplies shall automatically switch to the batteries.
 - 1. The power supply shall provide internal power and 24 VDC for notification appliance circuits.

- 2. All output circuits shall be power limited.
- 3. The battery shall be sized to support the system for 24 hours, and then operate all notification appliances for 5 minutes.
- M. Design Make: Simplex 4100ES

2.3 REMOTE ANNUNCIATOR PANEL

- A. Flush mounted annunciator panel with backlit alpha-numeric display, minimum 4 lines of 20 characters each.
- B. Minimum 50 user definable messages for each annunciator.
- C. Communications between annunciators utilizing RS-485 port at minimum 19.2 kbps.
- D. RS-232 printer output at minimum 9.6 kbps.
- E. Provide with necessary flush or surface mounted backboxes. Boxes shall be LCD YJ9 series as made by Space Age Electronics Inc.
- F. Design Make: Simplex 4600 Series

2.4 NOTIFICATION APPLIANCE CIRCUIT (NAC) EXTENDER PANEL

- A. Supervises for power loss, brownout, and batteries, and has power-on and trouble LEDs.
- B. Supervises for power loss, brownout, and batteries, and has power-on and trouble LEDs
- C. Provides four (expandable to eight) power-limited NACs with general alarm operation, available as Class B or Class A, each rated 2 A. Provide power supplies sized to accommodate all devices shown on drawing plus a minimum of 50% spare capacity. Output shall for class A/B NAC circuits with strobe synchronization
- D. Provide with batteries and charger sized to support the system for 24 hours, and then operate all notification appliances for 15 minutes.
- E. Design Make: Simplex 4009 or Approved Equal

2.5 MANUAL PULL STATIONS

- A. Semi-flush, single action, break glass type.
- B. Constructed of red lexan with raised white lettering reading "Pull For Fire".
- C. Upon activation, handle shall lock in the alarm condition. A key shall be required to reset the manual pull station. Cylinders shall be keyed to match the fire alarm control panel.
- D. Unless directly connected to a central station alarm service, municipal alarm system, or local fire alarm dispatch station, provide a clearly legible sign above each manual pull station stating "Local Alarm Only Call Fire Department By Telephone".

- E. Provide U/L listed NFPA approved STI lexan covers for all pull stations with integral alarm. Similar to Safety Technology International 1DPD7
- F. Provide intelligent monitor module.
- G. Design Make: Simplex 4099 Series

2.6 PHOTOELECTRIC SMOKE SENSOR

- A. Detector shall operate on a light scattering principal. The detector shall have a photooptic chamber with an infrared light emitting diode and a high speed light sensing photo diode. Capable of sensing visible products of combustion.
- B. Alarm conditions shall be indicated by a steady red glow from the LED mounted on the sensor.
- C. Sensor shall be microprocessor based, with electronic point addressing to indicate to the system which device is in alarm.
- D. The sensor shall be continuously monitored to measure any changes in sensitivity due to dirt, smoke or humidity. Any buildup of foreign material shall cause trouble signal at the control panel indicating that maintenance is required.
- E. Sensor shall be capable of automatic device mapping and day/night sensitivity adjustment.
- F. Sensors shall be twist lock mounted to a separate base provided with screw terminals for field wiring. The detector shall be tamper resistant and shall be removable only with a special tool.
- G. Provide auxiliary relays and 24 VDC power for elevator capture or smoke evacuation control where indicated.
- H. Design Make: Simplex True Alarms 4098 Series

2.7 FIXED TEMPERATURE HEAT DETECTOR

- A. Self-restoring thermal detector.
- B. Rated at 135°F fixed temperature. Provide 200°F fixed temperature in boiler room and as indicate on plans.
- C. Design Make: Simplex True Alarms 4098 Series

2.8 ADDRESSABLE CARBON MONOXIDE (CO) DETECTOR

- A. The FACP shall receive separate trouble status, current threshold conditions, and alarms from the CO and smoke or heat detectors.
- B. Flush mounts over a standard 4"x4" two-gang backbox.

- C. Audible alarm for CO signal shall be different than smoke alarm signal.
- D. Single analog addressable consumes only one address. CO detector receive both communications and sensor power from the FACP battery backed power source.
- E. Alarm conditions shall be indicated by a steady red glow from the LED mounted on the sensor.
- F. Sensors shall be twist lock mounted to a separate base provided with screw terminals for field wiring. The detector shall be tamper resistant and shall be removable only with a special tool.
- G. CO detector allows interconnection where provided with a separate addressable input module or single piece audible base/CO detector. Combination systems shall be listed in accordance with UL 2075 and UL 864.
- H. Includes CO gas warning module (temporal code 4) for a repeated sequence of four cycles of 100 msec on with 100 msec off, followed by 5 seconds off per NFPA 720, Standard for the Installation of Carbon Monoxide (CO) Warning Equipment in Dwelling Units.
- I. UL 2034 CO alarm detection.
- J. Design Make: Simplex, System Sensor, or Approved Equal.

2.9 CONTROL RELAY MODULE

- A. Addressable device with a form "C" dry relay contact used to control external appliances such as door closers, fans, dampers, etc.
- B. Relay contact rating:
 - 1. 24 VDC = 2amps (pilot duty)
 - 2. 120 Vac = .5 amps
- C. Polling and alarm/active status provided by on board red and green LEDs.
- D. Design make: Simplex 4090 Series

2.10 INPUT MODULE

- A. Addressable device used to connect 2 class B analog initiating device circuits.
- B. Input circuit wiring requirements
 - 1. Maximum allowable wire resistance 50 ohms per circuit
 - 2. Maximum allowable wire capacitance .1uF per circuit
- C. Polling and alarm/active status provided by on board red and green LEDs.

FIRE DETECTION AND ALARM SYSTEM

D. Design make: Simplex 4098 Series

2.11 DUCT TYPE SMOKE DETECTORS

- A. Smoke detector shall be solid state, unipolar type with dual chamber construction and operate on the ionization principle.
- B. Capable of detecting both visible and non-visible products of combustion.
- C. Self-compensating circuitry to provide stability against aging and dust.
- D. Field adjustable sensitivity, pre-set in the factory.
- E. Enclosure suitable for mounting on an air duct, with a sampling tube that extends into the duct air stream.
- F. Suitable for installation within an air-duct system with air velocities from 300-4,000 feet per minute.
- G. Provide a remote LED alarm and key operated test switch for each duct smoke detector. Install remote test switches in visible (below ceiling space) and accessible locations adjacent each duct smoke detector.
- H. Design Make: Simplex True Alarms 4098 series

2.12 VISUAL SIGNAL DEVICE

- A. Provide backbox for recessed installations except for installations on existing walls.
- B. 24 VDC.
- C. Visual strobe shall have the following characteristics:
 - 1. Addressable.
 - 2. ADA compliant.
 - 3. Adjustable White light output of 15, 30 or 75 candela as indicated on drawings. If no setting is indicated on the drawings set to 75cd.
 - 4. Flash rate from 1 Hz to 3 Hz.
 - 5. Pulse duration of 0.2 seconds.
 - 6. Reflector and lexan lens with the word "Fire" imprinted.
 - 7. Provide with wireguard when installed in Gym, Gym Halls, and Locker Rooms.
- D. Design Make: Simplex 49VO Series

2.13 CARBON MONOXIDE VISUAL SIGNAL DEVICE

FIRE DETECTION AND ALARM SYSTEM

- A. Provide backbox for recessed installations.
- B. 24 VDC.
- C. Visual strobe shall have the following characteristics:
 - 1. Addressable
 - 2. Amber colored snap in lens.
 - 3. Set to 75 candela.
 - 4. Flash rate from 1 Hz to 3 Hz.
 - 5. Pulse duration of 0.2 seconds.
 - 6. Housing color: White
 - 7. Label on housing: Red text "ALERT"
- D. Design Make: Simplex TrueAlert 49VO-WWA-A (-BA) Addressable Notification Appliances.
- 2.14 AUDIO-VISUAL SIGNAL DEVICE
 - A. Provide backbox for recessed installations except for installations on existing walls.
 - B. 24 VDC.
 - C. Audio output shall be rated for 93 dB at 10', 520Hz compatible.
 - D. Visual strobe shall have the following characteristics:
 - 1. Addressable.
 - 2. ADA compliant.
 - 3. Adjustable White light output of 15, 30 or 75 candela as indicated on drawings. If no setting is indicated on the drawings set to 75cd.
 - 4. Flash rate from 1 Hz to 3 Hz.
 - 5. Pulse duration of 0.2 seconds.
 - 6. Reflector and lexan lens with the word "Fire" imprinted.
 - 7. Provide with wireguard when installed in Gym, Gym Halls, Locker Rooms, and Bathrooms.
 - E. Design Make: Simplex 49AV series

2.15 MAGNETIC DOOR HOLDERS

- A. Magnetic door holders are existing to be reused.
- B. Surface mounted 24VDC. Power shall be from separate power supply and not the FACP.
- C. Electrical Contractor shall mount and connect all magnetic door holders.

2.16 DIGITAL COMMUNICATOR

- A. Dual telephone line interface, electronically supervised.
- B. Reports in six major communication formats including SK4/2, SK FSK1, BFSK14/BFSK23, SiA8, SIA20, SK3/1, and SESCOA 3/1.
- C. Auxiliary relay, programmable to indicate trouble or alarm.
- D. Automatic 24 hour test.
- E. Provide all required programming required to communicate with the central station chosen by the Owner.
- F. Design Make: Simplex 4100 Series

2.17 NOTIFICATION APPLIANCE CIRCUIT (NAC) EXTENDER PANEL

- A. Supervises for power loss, brownout, and batteries, and has power-on and trouble LEDs.
- B. Supervises for power loss, brownout, and batteries, and has power-on and trouble LEDs.
- C. Provides four (expandable to eight) power limited NACs with general alarm operation, available as Class B or Class A, each rated 2 A. Provide power supplies sized to accommodate all devices shown on drawing plus a minimum of 50% spare capacity. Output shall for class A/B NAC circuits with strobe synchronization
- D. Provide with batteries and charger sized to support the system for 24 hours, and then operate all notification appliances for 15 minutes.
- E. Design Make: Simplex 4009 series

2.18 BATTERIES AND CHARGER

- A. Provide battery and charger to provide 24 VDC standby power for the fire alarm system.
- B. Provide lead-calcium maintenance free batteries. Size batteries to permit 24 hours under supervisory condition, and then sound all alarms for 5 minutes.
- C. Cell reversal protection.
- D. 10 year minimum life expectancy.

- E. Battery charger shall be self-regulating, solid state type, capable of full charging a deleted battery within five hours.
- F. Install battery charger within the fire alarm control panel.
- G. Install batteries with fire alarm control panel or in a vented enclosure located adjacent to the fire alarm control panel.
- H. Design Make: Simplex.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. General:
 - 1. During installation and testing, and prior to the system being put into service, all manual stations shall be appropriately marked "NOT IN SERVICE" by the Contractor.
 - 2. Provide all 120 volt, 60 cycle AC required to power the system and all remote power supplies.
 - 3. Wiring to all initiation and signal circuits shall be two wire class B. A fault on a circuit loop shall cause a trouble alarm to initiate for its associated zone at the fire alarm control panel.
 - 4. All wiring shall conform to N.E.C. Articles 725 and 760, and to NFPA-72, "National Fire Alarm Code".
 - 5. Detection and initiating equipment shall be listed by UL or approved by FM.
 - 6. Install smoke detectors a minimum of 3 feet away from any air supply or return diffuser.
 - 7. All surface mounted devices shall be mounted on a special box furnished by fire alarm equipment manufacturer. Total assembly shall be secure, smooth contour and have no protrusions.
 - 8. Where detectors are installed on wood or masonry surfaces, attach brackets directly to the surface with tamperproof fasteners. Where detectors are installed on suspended ceilings, provide additional supports in the ceiling, such as channel support system, angle iron or additional runner bars. Fasten the additional supports rigidly to the ceiling runner bar system. Attach bracket to the supports with tamperproof fasteners. Install metal spacers between the bracket and supports so that the ceiling tiles will not be a part of the support system.
 - 9. Mount FACP and all sub panels at working height.
 - 10. Provide and wire fan shutdown relay contacts in series with starters ahead of all

control devices.

- 11. All controlled devices such as smoke dampers, fire dampers, elevator control and door control shall be supervised to within 4' of the controlled device.
- B. Audible/Visible Device Installation:
 - 1. Devices shall be installed at eighty inches (80") minimum above the floor, or six inches (6") below the ceiling, whichever is lower, in accordance with ADA guidelines.
 - 2. Audible devices intended for operation in public spaces shall have a sound level of not less than seventy-five (75) dBA at ten feet (10'), nor more than 110 dBA at the minimum hearing distance from the device.
 - 3. Audible devices intended for operation in private spaces shall have a sound level of not less than forty-five (45) dBA at ten feet (10'), nor more than 110 dBA at the minimum hearing distance from the device.
 - 4. All audible emergency alarm signals shall be at least 15 dbA over the existing sound level within a space or shall exceed the maximum sound level by 5 dbA for at least 60 seconds, whichever is louder. Within areas occupied by persons with hearing impairments, audible emergency alarms must have the intensity and frequency to provide notification of an alarm condition.
 - 5. Do not exceed 80% loading on any NAC power circuit.
- C. Addressable Carbon Monoxide Detectors
 - 1. Provide SLC circuit connection, 24V power supply, and necessary relays. Connect SLC circuit to addressable base carbon monoxide detectors from area fire alarm panel per. manufacturer guidelines. Where addressable base CO detectors are not available from fire alarm system manufacturer provide addressable input module connected to conventional UL 2075 and UL 864 Compliant type CO detector.
 - 2. All carbon monoxide detectors shall be interconnected to provide notification thru all other CO devices and any indicated audible or visual strobes.
- D. Wiring:
 - 1. Install all wiring in accordance with manufacturer's recommendations and the National Electric Code.
 - 2. All wiring shall be installed as noted below:
 - a. Surface metal raceway shall be used in finished areas for new devcies.
 - b. All wiring in mechanical rooms, crawl spaces and exterior shall be run in conduit. All conduit system junction boxes shall be painted RED.

- c. Concealed wiring above accessible ceiling space shall be in "J" hooks.
- 3. All wire shall be copper and installed in separate raceway system.
- 4. Type AC or MC Fire Alarm Cable is not permitted as a wiring method for this project.
- 5. Wire and cable shall be #14 AWG size, solid copper, THHN/TWN for horns, manual stations, smoke or heat detectors, waterflow switches, valve supervisory switches and other initiating and indicating devices. Communication loop wiring shall be shielded in accordance with the Manufacturer's recommendations.
- 6. Wiring shall be continuous from device to device. Splicing shall be accomplished by use of terminal blocks in locked cabinets keyed alike with the fire alarm control unit, or junction boxes. No connections or splices shall be made underground.
- 7. Control cabinets shall not be used as pull boxes or raceways. Wiring gutters and locked terminal cabinets shall be used.
- 8. The Fire Alarm System wiring shall be installed in a workmanlike manner, subject to the approval of the project manager.
- 9. All harnessing of wires shall be accomplished by use of approved nylon tie wraps.
- 10. All wiring shall be numbered and color coded in accordance with this Specification.
- 11. Tests of all wiring shall be conducted for proper connection, continuity, and resistance to ground. The minimum allowable resistance between any two conductors or between conductors and ground is one (1) megohm as checked by a "megger" after all conduit, conductors, detector bases, etc. have been installed, but before the detector devices are plugged into the base or end-of-line devices installed.
- E. Routing:
 - 1. All fire alarm system conduits shall be installed either parallel or perpendicular to building structural members.
 - 2. All fire alarm system conduits shall be provided at a height so as not to obstruct any portion of a window, doorway, stairway, or a passageway, and shall not interfere with the operation of any existing mechanical or electrical equipment.
 - 3. All fire alarm system conduits and cable shall be routed to minimize the potential for physical damage, either mechanical or by fire.
 - 4. All fire alarm system junction boxes, pull boxes, terminal cabinets, control enclosures and device backboxes shall be readily accessible for testing, service

and maintenance.

- F. Wall, Floor and Ceiling Penetrations:
 - 1. All conduit penetrations of walls shall be provided with escutcheon plates on either side of the wall.
 - 2. All conduit penetrations of walls, floors, and ceiling shall be sealed around the conduits, restoring the walls, floors and ceilings to their original condition, fire resistance and integrity.
- G. Concealment:
 - 1. Conduit shall be concealed except where shown on the drawings.
 - 2. All conduit, raceways, junction boxes, panels, electrical enclosures, relays and device backboxes shall be concealed in ceiling spaces, electrical shafts or closets in all finished areas.
 - 3. Conduit, raceways, junction boxes, panels, electrical enclosures, relays and device backboxes may be exposed in unfinished areas.
 - 4. All fire alarm system components, including devices, junction boxes, electrical enclosures, relays and device backboxes shall be provided so as to be readily accessible for inspection, testing, service and maintenance.
- H. Terminations:
 - 1. All fire alarm conductor terminations shall be on numbered terminals or terminal strips. All fire alarm conductor terminations shall be within junction boxes, device backboxes, terminal cabinets, control panels or other satiable metal enclosures. Terminals and terminal strips shall be suitable for the size and number of conductors connected to them.
 - 2. All connections and end-of-line devices shall be accessible for inspection, testing and servicing.
 - 3. Terminations to terminals other than barrier/pressure plate type terminals shall use crimp-on ring-type or Y-type spade connectors.
 - 4. Splices shall be permitted only when routing of existing conductors prohibits point-to-point terminations in existing junction boxes, terminal cabinets, etc. All such splices shall be provided with new terminal strips with proper labeling in junction boxes, terminal cabinets, etc.
- I. Control Panel Location and Wiring:
 - 1. Install annunciator panels in locations indicated on the drawings.
 - 2. All control panel wiring shall be fully dressed and bundled with nylon tie wraps.

Bundled wiring shall be routed parallel to terminal strips within control panels, with individual conductors turned out at 90 degree angles to their associated terminal connections. AC power conductors shall be bundled and routed separately from low voltage conductors. A minimum 2-inch separation shall be maintained between AC power conductors and low voltage conductors wherever possible. All control cabinets shall be sized to accommodate the requirements of this section.

- 3. Each conductor terminating within a control panel shall be uniquely numbered with durable plastic tags or uniquely identifiable by a combination of numbers and color codes. These conductor numbers shall be shown on the record (As-Built) drawings in a manner allowing ready identification of any field wiring conductor in any control panel.
- J. Mounting and Labeling of Devices:
 - 1. Contractor shall coordinate with owner of the actual in field room names and number for labeling and programming of the fire alarm system. Contractor shall receive revised floor plans after award of bid with room and wing nomenclature that the owner would like used for labeling and annunciating.
 - 2. All fire alarm devices shall be rigidly mounted, using appropriate backboxes, to building structural members, permanent walls, ceilings or fixtures designed for the purpose.
 - 3. All devices shall be labeled with device address or device count as appropriate. Label shall be sticky back type attached to base of device. Label identification shall be consistent with As-Built drawings.
- K. Color Coding and Wire Numbering:
 - 1. All conductors entering and leaving terminal cabinets and junction boxes shall be numbered in a logical and consecutive manner.
 - 2. All conductors shall be color coded. Color coding shall be by wire insulation, not taping or banding. The numbering and color coding shall be continuous for each circuit wire.
 - 3. Wires shall be numbered at each connection, termination, and junction point. Wire numbering tags shall be Brady Perma-Code, Westline, or equal.
 - 4. Color coding shall be as follows:

CIRCUITS	COLOR CODES
Alarm Initiating Circuits	Yellow (-) and Orange (+), red (alarm) blue (alarm)
Horns, 24VDC	Slate(-) and Brown (+)
Smoke Detector	Yellow (-) Orange (+) red (alarm) blue (alarm)

Heat Detectors, Pull Stations	Purple (alarm) Black (alarm), connected to the same zone
Fan Shutdown	Blue (-) White (+)
Strobes, 24VDC	Violet (-) and Pink (+)
System AC Power	Black and White
Sprinkler Horn	Black and White
Valve Supervision	Orange and Yellow
DC Power, Door holds	Black (-) and Red (+)

3.2 INTERRUPTIONS TO EXISTING FIRE ALARM SYSTEM

- A. General:
 - 1. Do not remove any portion of the existing fire alarm system from operation while installing new work without written approval of the Owner's Representative.
 - 2. In order to accomplish the above requirements, temporary wiring and relocations of some existing and/or new equipment may be necessary. These temporary locations should be approved by the Owner's Representative and arranged so as to avoid safety problems.
 - 3. Existing system and remaining devices shall be operational at the end of each day and each shift. During hours of work contractor shall provide a fire watch and provide fire watch as required until existing system and devices are back on line at the end of each day and shift.
- 3.3 INSTALLED SPARES Designer to edit for project as needed
 - A. Provide the following installed spares. Installed spare include the device, backbox, wiring, programming and up to 50 feet of raceway.
 - B. (5) smoke detectors, (3) heat detectors, (5) strobes, (5) Audio/Visual Devices, (2) pull stations, (5) Addressable Modules and associated system tie-ins.
 - C. Turn over all unused spare to owner for spare parts.

3.4 TESTING

- A. General:
 - 1. After complete installation of the equipment and submittal of as-built drawings, the Contractor shall perform complete tests of the system. After these tests have been completed, the Contractor shall request final acceptance inspection and tests in the presence of the Project Manager and local authority. Coordination of final acceptance test date and times with those to be present is the responsibility of the Contractor. The Contractor shall demonstrate that all conditions of the plans and specifications have been met. The tests shall include proper operation of all devices and testing of supervised circuits. The installation will be checked

> against the as-built drawings. The Contractor shall furnish all testing materials and instruments. A punch list will be developed and the Contractor shall correct punch list items. There will be a reinspection of punch list items. If additional reinspections are found necessary to assure compliance with the Contract, they shall be made at the Contractor's expense.

- a. The Contractor shall provide, at no additional cost to the Contract price, the following services by the Manufacturer's representative:
 - 1) Prior to the final inspection, "pre-test" the entire fire alarm system to assure that all new equipment is properly installed and functions in accordance with plans and specifications.
 - 2) The Manufacturer's representative shall certify that the entire new and existing installation was tested and performed satisfactorily.
- 2. Final acceptance tests shall be coordinated by the contractor and performed in the presence of the owners representative as follows:
 - a. Operation of the fire alarm control panel and indicating components in accordance with factory recommended procedures.
 - b. Operational tests of all devices (i.e., detector, waterflow indicator, manual pull box, and valve supervisory device) in accordance with the factory recommended procedures.
 - c. Audible/visible testing of all indicating appliances. Tests shall include sound level (dBa) and light intensity (lumens).
 - d. Checks of each initiating circuit or device address for correct indications at the control unit, and any remote annunciator.
 - e. A checkout report shall be prepared by the contractor and submitted to the Owner's Representative. The checkout report shall include a listing of detector sensitivity for each detector. The report shall summarize the results of all tests and shall serve as the contractor's certification that the system is properly installed and fully functioning.

3.5 IDENTIFICATION

- A. All system devices shall be labeled in the field.
- B. For each smoke detector, heat detector, flame detector, duct mounted type smoke detector, manual pull station and/or other alarm initiating device, provide the following:
 - 1. Adhesive backed, vinyl cloth, numbered labels, identifying the device specifically by system address.
 - 2. Labels shall be white background color with solid black numbers. Numbers shall

be not less than 5/8" high x 1/8" stroke wide.

- 3. Design Equipment: Seton Nameplate Co.- Style M3847 or equivalent.
- C. For each shut down relay and/or auxiliary control relay and for specific remote lamps, provide the following:
 - 1. Adhesive backed, engraved lamicoid type labels specifically identifying what the fan shut down relay is shutting down, what relay is controlling or what the remote lamp is connected to.
 - 2. Labels shall be black face with white sandwich color, nom: 1/2" tall x 2" wide, with capital letters not less than 3/16" tall engraved into the surface.
 - 3. Design Equipment: Local fabrication by contractor.
- D. Provide labels for all smoke detectors that activate elevator recall, smoke hatch operation or fireman's car operation.
- E. All labels shall be visible once device is installed.
- F. Provide label on each power supply indicating power supply designation, 120 volt panel and associated circuit breaker number.
- G. All concealed covers for all system outlet and pull boxes installed shall be factory or field painted red.
 - 1. On the inside face of each outlet box cover, Contractor shall provide labeling, indicating; System address, Circuit Number, Horn/Speaker/Strobe Circuit Number, etc.
- H. Provide identification of each circuit breaker feeding on each FACP, Notification Appliance Power Supply Panel and Notification Appliance Power Supply Extender Panel indicating that the circuit feeds the fire alarm system per NFPA 72 by marking in RED "Fire Alarm System".

3.6 CLEANING AND ADJUSTMENT

- A. Remove paint splatters and other spots, dirt, and debris. Clean unit internally using methods and materials recommended by the manufacturer.
- B. Occupancy Adjustments: Within one year of the date of Substantial Completion, provide on-site assistance in adjusting sound levels, controls, and sensitivities to suit the actual occupied conditions.

3.7 PROGRAMMING REQUIREMENTS

A. Provide documentation of all FACP messages. FACP messages must be approved by the engineer and owners representative, prior to start of system programming. Provide Custom messages as directed.

- B. FACP descriptors utilize room/space designations and numbers to be used by the facility after occupancy and those descriptors shall be approved by the engineer and Owner's representative. Descriptors shall be no longer than (1) full line of characters on the FACP display and shall contain the room number and room use type.
- C. Contractor shall allow for two fire alarm system re-programming as directed by the Owner's representative. Contractor shall include all time and travel expenses for (2) two all day site visits for system re-programming during the warranty period.
- D. Verify that all points show at the existing Proprietary Supervising Station at the Hudson Ave Security center.

3.8 RECORD DOCUMENTS

- A. Provide complete set of as-built record drawings and documents.
- B. Record Documents shall include all documents required by the Submittal Section of this specification updated to reflect as-built project conditions.

3.9 WARRANTY AND INSTRUCTION

- A. The complete fire protection system shall be fully tested and guaranteed for a period of one year after Owner's Representative written acceptance.
- B. Provide a minimum of 4 hours of instruction to the operating personnel designated by the Owner's Representative with regard to use and operation of the system. Content of the training shall include:
 - 1. Overview of system operations.
 - 2. Overview of system equipment and device locations.
 - 3. Detailed operation guidelines.
 - 4. Periodic maintenance procedures.
 - 5. Periodic testing procedures.
- C. Provide 3 sets of keys to all panels, manual stations, etc., to the Owner's Representative.
- D. Prior to request for final payment submit a quantity of bound Operator Manuals that shall include as a minimum:
 - 1. Shop drawings.
 - 2. Bill of Material.
 - 3. Manufacturer's equipment description for each piece of equipment, each device and each initiation and control module type used.
 - 4. Record Drawings for fire alarm wiring diagrams showing typical connection

diagrams for each type of device and a complete riser diagram showing all devices, zones, and wiring requirements. Record Drawings for fire alarm wiring diagram shall show all terminal connections at all panels.

- 5. Instruction report stating when instruction was given and who was in attendance, signed by the Owner's Representative.
- 6. Submit a written test report from an authorized representative of the equipment manufacturer that each device and overall system operation has been 100% tested and approved. (Both new and existing systems).
- 7. Certificate of Completion, Fire Alarm System Inspection and testing form and all other system acceptance documents as described in NFPA-72.

3.10 MAINTENANCE SERVICE

- A. Initial Maintenance Service: Beginning at Substantial Completion, maintenance service shall include 12 month warranty period and 36 month' full maintenance for a total of 48 months of full maintenance by skilled employees of manufacturer's designated service organization. Include preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper operation. Parts and supplies shall be manufacturer's authorized replacement parts and supplies.
 - 1. Include visual inspections according to the "Visual Inspection Frequencies" table in the "Testing" paragraph of the "Inspection, Testing and Maintenance" chapter in NFPA 72.
 - 2. Perform tests in the "Test Methods" table in the "Testing" paragraph of the "Inspection, Testing and Maintenance" chapter in NFPA 72.
 - 3. Perform tests per the "Testing Frequencies" table in the "Testing" paragraph of the "Inspection, Testing and Maintenance" chapter in NFPA 72.

END OF SECTION 284621