

SPECIFICATIONS, INSTRUCTIONS, AND BID FORMS

FOR

Invitation to Bid #21206

Elevator Replacement and Modernization at Joseph Gallagher, Wilbur Wright, and South High Schools

FOR THE

CLEVELAND MUNICIPAL SCHOOL DISTRICT

DBA: CLEVELAND METROPOLITAN SCHOOL DISTRICT 1111 Superior Avenue E, Suite 1800 Cleveland, Ohio 44114

UNDER THE DIRECTION OF TRADES DIVISION OF THE BOARD OF EDUCATION OF THE CLEVELAND METROPOLITAN SCHOOL DISTRICT CUYAHOGA COUNTY, OHIO

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SECTION I: INVITATION TO BID #21206

Separate, sealed bids for the requirement set forth below will be received in the Cashiers Office of the Board of Education of the Cleveland Metropolitan School District, 1111 Superior Avenue E, Suite 1800, Cleveland, Ohio 44114, on or before **1:00 pm** current local time on **January 10, 2017** Bids will be opened immediately following in the 5th floor conference room at 1111 Superior Ave E, Cleveland, Ohio 44114.

Elevator Replacement and Modernization at Joseph Gallagher, Wilbur Wright, and South High Schools

Copies of Instructions to Bidders, Specifications, Affirmative Action and Diversity Business Enterprise Forms may be obtained directly from the District's Web Page: www.clevelandmetroschools.org/purchasing. Please click on the Bid number. If you need assistance please contact **Denyse.Hirsch@clevelandmetroschools.org** - telephone # (216) 838-0413.

There will be a pre-bid conference for this Invitation to Bid on December 22, 2016 at 10:00 am. The pre-bid conference for this Bid will be located at 3840 Ridge Road, Cleveland, Ohio 44144. All questions and/or concerns must be submitted, in writing **ONLY**, by 12:00 pm on **January 3**, 2017 at the email address given above.

A certified check for 10% of the total amount of the bid payable to the Treasurer of the Cleveland Metropolitan School District, or a satisfactory bid bond for 100% the bid amount executed by the bidder and a Surety company shall be submitted with each bid on a form supplied by the bondsman. The Surety Company must be licensed to do business in the State of Ohio and acceptable to the Chief Financial and Administrative Officer. The successful bidder will be required to furnish a satisfactory performance bond amounting to 100% of the contract amount.

No Bid may be withdrawn for at least ninety (60) days after the scheduled closing time for receipt of Bids by order of the Board of Education of the Cleveland Metropolitan School District, Cuyahoga County, Ohio.

The Cleveland Metropolitan School District reserves the right to reject any and all Bids, to waive any and all informalities or irregularities, and to disregard all non-conforming responsive conditional Bids.

The Cleveland Metropolitan School District does not discriminate in educational programs, activities or employment on the basis of race, color, national origin, sex, age, religion or disability.

Bidders on this work shall be required to comply with all applicable requirements pertaining to fair labor, state and local government.

M. Angela Foraker Executive Director of Procurement

SECTION I: LETTER TO BIDDERS

Date: December 12, 2016

Subject: Elevator Replacement and Modernization at Joseph Gallagher, Wilbur Wright, and South

High Schools

In order to be considered, all bids must be received at the Cashiers Office of the Cleveland Metropolitan School District, 1111 Superior Avenue E, Suite 1800, Cleveland, Ohio 44114 on or before **1:00 p.m.**, **January 10, 2017** All bids must be submitted in a sealed envelope or package. One (1) original, with blue ink signatures, two (2) copies of the bid, and one (1) electronic format bid on a USB flash drive including supporting documentation, must be submitted. The Bid Name and Bid number must be stated on the exterior of the submission envelope(s). This includes shipping labels.

There will be a pre-bid conference for this Invitation to Bid on December 22, 2016 at 10:00 am. The pre-bid conference will be at 3840 Ridge Road, Cleveland, Ohio 44144. Written questions will be accepted via e-mail or fax until **12:00 pm on January 3, 2017.** No telephone calls will be permitted. Send questions via e-mail to: **Denyse.Hirsch@clevelandmetroschools.org** Bid number and title must be included. All questions/concerns with corresponding answers will be sent to every prospective vendor. Any errors and/or omissions reported will be addressed via Addenda which will be issued no later than **January 5, 2017.**

Under no circumstances should any person or firm interested in providing services identified in this Bid, their designees, or any affiliated with their firm, contact any other District employee or official during the Bid process in an attempt to lobby or influence the selection of a vendor pursuant to this Bid.

Bids will be opened immediately following the deadline in the 5th floor conference room at 1111 Superior Ave, Cleveland, Ohio 44114. After all submissions have been reviewed, the final evaluations of the committee will determine the awarded vendor. Vendors will be notified, in writing, of award and non-award status upon receipt of an approved resolution.

A certified check for 10% of the total amount of the bid payable to the Treasurer of the Cleveland Metropolitan School District, or a satisfactory bid bond for 100% the bid amount executed by the bidder and a Surety company shall be submitted with each bid on a form supplied by the bondsman. The Surety Company must be licensed to do business in the State of Ohio and acceptable to the Chief Financial and Administrative Officer. The successful bidder will be required to furnish a satisfactory performance bond amounting to 100% of the contract amount.

The Cleveland Metropolitan School District has a Diversity Business Enterprise and Affirmative Action Program in effect. Information about this program and forms for compliance are enclosed. All firms submitting a bid must complete the appropriate forms and submit same with their bid. While the District no longer certifies DBE companies, we accept any company certified through the City of Cleveland, Cuyahoga County, or the State "EDGE" program.

The Cleveland Metropolitan School District accepts no obligations for costs incurred by bidder in preparing or submitting a bid and reserves the right to reject any and all bids received.

Sincerely,

M. Angela Foraker Executive Director of Procurement

SECTION II: INSTRUCTIONS TO BIDDERS

Elevator Replacement and Modernization at Joseph Gallagher, Wilbur Wright, and South High Schools

- 1. All Bids shall be made upon the Bid Form(s) furnished. All information requested in the bid and in the bid package must be filled in legibly and completely with blue ink signatures, or the bid may be considered non-responsive. No oral, telephonic or telegraphic bids or modifications will be considered. Bid name "Elevator Replacement and Modernization at Joseph Gallagher, Wilbur Wright, and South High Schools" and number: "#21206" must be on outside envelope of submittals including shipping labels.
- 2. Bids are due at the Cashier's Office of the Board of Education, Cleveland Metropolitan School District, Administration Building, 1111 Superior Avenue E, Suite 1800, Cleveland Ohio, 44114, on or before 1:00 pm current local time on January 10, 2017.
- 3. All submissions must include One (1) original, with blue ink signatures, two (2) copies, and one (1) electronic format bid on a USB flash drive. Vendors not complying with this requirement will be notified that they have twenty-four (24) hours in which to comply with this requirement or their Bid will be disqualified. This applies to copies only.
- 4. No Bid may be withdrawn for at least ninety (60) days after receipt of bids at 1:00 pm current local time, on January 10, 2017.
- **5.** Written questions may be directed to the Purchasing Division via email to: **Denyse.Hirsch@clevelandmetroschools.org.** The District will **NOT ACCEPT** any telephone calls regarding any of the submittals and/or "short lists." Under no circumstances should any firm interested in providing the services identified in this Bid, their designees, or anyone affiliated with their form, contact any other District employee or official during the Bid process, in an attempt to lobby or influence the selection of a vendor pursuant to this Bid. No oral, telephonic, telegraphic, or electronic modifications will be considered. All materials submitted are as is.
- 6. The Cleveland Metropolitan School District reserves the right to reject any and all Bids, to waive any and all informalities or irregularities, and to disregard all non-conforming responsive conditional bids.
- 7. Bidder understands and agrees that subsequent to submission of the Bid, any District resolution authorizing the award of a contract or agreement does not vest any contractual rights in the bidder.
- **8.** Bidder understands and agrees that any such District resolution operates only to encumber funds necessary for the project and does not create a binding contract.
- **9.** Bidder further acknowledges and agrees that any such District resolution may be revoked, at any time prior to execution of a formal, written contract.

- **10.** Bidder acknowledges and agrees that it has no vested contractual right until such time as a purchase order and contract have been issued.
- 11. Bidder further acknowledges and agrees that execution of a contract and issuance of a purchase order is not a ministerial function, but is a formal requirement for acceptance of the bid.
- 12. Bidder must present evidence to the District, upon request, that they are fully competent and have the necessary facilities, equipment and financial resources to perform the work required in the Specifications within the time frame required.
- **13.** Each and every page must have the bidder's company name in the header or footer.
- 14. No binding of any kind should be used: use only binder clips. No staples, No paper clips, No binders, No tabs should be used; use colored paper to separate sections. Failure to comply with submission formation may result in the submittal being disqualified.
- **15.** Any and all changes must be initialed by the bidder.
- 16. The District reserves the right to award the bid in whole or in parts, by item, by group of items, to a single vendor; or to multiple vendors, where such action serves the best interests of the District.
- 17. This Bid should be submitted before 1:00 pm current local time, January 10, 2017 to the Cleveland Metropolitan School District, Cashiers Office of the Cleveland Metropolitan School District, 1111 Superior Avenue E, Suite 1800 Cleveland, Ohio 44114, the submission to include One (1) original, with blue ink signatures, two (2) copies, and one (1) electronic format bid on a USB flash drive of the following:
 - a. Completed Bid Form including evidence of State certification to perform the work required.
 - b. Signed Acknowledgement for Instructions to Bidders.
 - c. Completed and notarized Bidder's Qualification Form.
 - d. Signed Conflict of Interest Form
 - e. Completed and notarized Non-Collusion Affidavit.
 - f. Completed and notarized EOA Compliance Declaration documents.
 - g. Completed and notarized Diversity Business Enterprise Participation Forms.
 - h. Properly executed Affidavit and/or Company Board of Directors Resolution authorizing certain person to sign legal documents such as the Bid Form, Bidder's Qualification Form, etc.
 - i. Completed Debarment Form
 - j. A certified check for 10% of the total amount of the bid payable to the Treasurer of the Cleveland Metropolitan School District, or satisfactory bid bond for 100% the bid amount executed by the bidder and a Surety company shall be submitted with each bid on a form supplied by the bondsman

18. Bidder shall not include Ohio Sales Tax in the price quoted. The Cleveland Metropolitan School District will provide tax exempt certificate to the successful Bidder upon request.

19. SECURITY

Vendor's workmen, foremen, other personnel, and subcontractors on CMSD sight will be required to meet Cleveland Metropolitan School District security requirements. Contractor must issue personnel I.D. badges. Any worker not complying with CMSD security requirements will immediately be ordered off project and without prejudice or recourse to CMSD.

 Vendor agrees to successfully complete background checks on all of its employees, agents, and subcontractors who provide services under this Agreement to CMSD facilities.
 Vendor agrees to warrant that it will not at any time hire or utilize any individual to provide services under this Agreement on CMSD premises where such person has been convicted of, or pleaded guilty to, any criminal offense enumerated in O.R.C. 3319.39(B).

20. INSURANCE

The successful company, their subcontractors and suppliers of labor and/or materials for providing Repair Services for the Cleveland Metropolitan School District, including organizations having personnel, equipment and vehicles on District property, shall provide evidence of insurance as follows:

a.	Commercial General Liability \$1,000,000.00 Limit of Liability	-	including limited contractual liability (per occurrence)
b.	Automobile Liability \$1,000,000.00 Limit of Liability	-	including non-owned, and hired (per occurrence)
c.	Workers Compensation	-	Workers compensation and employer's Insurance to the full extent as required
d.	Professional Liability \$1,000,000/ \$3,000,000	-	By applicable law per occurrence/in the aggregate

This requirement must be fulfilled by the successful vendor providing the Purchasing Office of the CMSD with a current Certificate of Insurance (standard ACORD form), showing the Board of Education of the Cleveland Municipal School District as an additional insured (Certificate Holder does not constitute being an additional insured), within five (5) days of Notice of Intent to Award Agreement. The certificates of insurance shall contain a provision that the policy or policies shall not be canceled without thirty (30) days' prior written notice to the District.

The required insurance must be provided by a company licensed by the State of Ohio, which company must be financially acceptable to the Administration of the Cleveland Municipal School District

The District is not liable for vandalism which results in damage(s) to the property or vehicles of the Vendor. The school District will not reimburse for private insurance deductibles for such vandalism.

• Vandalism damage is defined as damage resulting from criminal conduct for which an individual may (but not necessarily be processed under the Ohio Revised Code

21. DIVERSITY BUSINESS GOAL

The Diversity Business and Vendor Contract Compliance Programs shall make every good faith effort to ensure that certified diversity business enterprises in the Cleveland Metropolitan

School's relevant geographic market area shall be afforded the maximum opportunity to compete for contracts, services, and purchases. The general goals for diversity business participation are: 15% service, 20% goods and supplies, and 30% maintenance, construction/repair.

Non-diversity vendors will have their diversity business participation counted toward their goal attainment only with minority vendors who are certified and demonstrate previous experience in the respective business classification of the prime contractor. Only direct participation in the subcontract will be counted toward diversity business enterprise goal attainment.

The diversity business goal for this Bid is: 30% for maintenance, construction/repair

22. ADVERTISING

In submitting a bid, Vendors agree, unless specifically authorized in writing by an authorized representative of CMSD on a case by case basis, that it shall have no right to use, and shall not use, the name of Cleveland Metropolitan School District, its officials or employees, (a) in any advertising, publicity, promotion, nor (b) to express or imply any endorsement of Agent's services.

SECTION II: ACKNOWLEDGEMENT

(Name of Company) Hereby
Acknowledges receipt of this Bid and the reading of these Instructions to Bidders. We further
agree that if awarded the contract, we will submit the required Performance Bond, if applicable
and/or Insurance Certificate within five (5) days of written notification that the District has
adopted a resolution authorizing the encumbrance of funds for the project. We understand,
however, that a formal written contract, similar to the one contained in the Bid Package, will
need to be executed and purchase order issued by the District before we have any vested
contractual rights. We agree to commence the work as required herein and timely complete the
project pursuant to the Specifications by the date stated in the Notice to Proceed.
By:
(Name) (Title)
Date:

SECTION II: VENDOR REQUEST FORM

NEW () YES () NO	CORRECTION () YES	() NO
CONTACT PERSON TELEPHONE NUMBER		_
VENDOR INFORMATION		
VENDOR NUMBER (IF APPLICABL VENDOR NAME	LE)	
ADDRESS LINE 1		
CITY ST	TATEZIP	
Email Address	FAX NO. ()	
REMIT TO (IF DIFFERENT FROM	ABOVE	
VENDOR NAME		
ADDRESS LINE I		
CITYS7	TATE ZIP	 -
TELEPHONE NO. () EMAIL ADDRESS	FAX NO. ()	
1099 INFORMATION		
1099 VENDOR YES () NO ()		
SS NO	FEDERAL I.D. NO	_
PRIMARY SERVICE, PRODUCT, OF	R SPECIALTY:	_
NOTE: VENDOR NAME AND ID N REVENUE SERVICE.	UMBER MUST BE AS FILED WITH THE IN	ΓERNAL
PLEASE INDICATE WHERE APPI DIVERSITY BUSINESS ENTERPRIS	EE: YES NO	
MINORITY BUSINESS ENT FEMALE BUSINESS ENTER	ERPRISE:	
RETURN TO:	CLEVELAND MUNICIPAL SCHOOLS PURCHASING DEPARTMENT	

Cleveland, Ohio 44114

1111 Superior Avenue E, Suite 1800

SECTION II: TAXPAYER ID FORM

Form W-9
(Rev. December 2014)
Department of the Treasury

Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

Departme Internal R	ent of the Treasury Revenue Service	racinalication raini	oei and ceitin	cation			1	send	to th	e IRS.
		on your income tax return). Name is required on this line;	do not leave this line blank.	•						
CA	2 Business name/o	disregarded entity name, if different from above								
age		1000								
0	Individual/sole single-membe	rLLC	tion Partnership	☐ Trust/e	estate	certain	entitie tions o	s (code s, not on page e code	individ 3):	ily only to luals; see
Print or type	Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) Note. For a single-member LLC that is disregarded, do not check LLC; check the appropriate box in the line above for the tax classification of the single-member owner. Exempt payee code (if any)					ΓCA re	porting			
트드	Other (see inst	ructions) >						ts maintai	ned outs	side the U.S.)
pecifi	5 Address (number	r, street, and apt. or suite no.)		Requester's	s name a	ind addi	ess (o	ptional	,	
See	Gity, state, and Z	IP code		la .						
7	List account num	ber(s) here (optional)							-	
Part		yer Identification Number (TIN)								
		propriate box. The TIN provided must match the na individuals, this is generally your social security nu			ocial sec	urity nu	mber	7 -		
esident entities,	alien, sole propi it is your employ	rietor, or disregarded entity, see the Part I instruction reridentification number (EIN). If you do not have a	ons on page 3. For other]-[] -[
TIN on p				or					II VII COLOR	
		more than one name, see the instructions for line	1 and the chart on page	4 for Er	nployer	identific	ation	numbe	er	
Juidelin	es on whose nun					-				
Part I	Certific	eation		0.000 A Well to 0.000 pp 1						
	enalties of perjur	y, I certify that: n this form is my correct taxpayer identification nur								
Servi no lo 3. I am	ce (IRS) that I am nger subject to b a U.S. citizen or	uckup withholding because: (a) I am exempt from b n subject to backup withholding as a result of a faile backup withholding; and other U.S. person (defined below); and stered on this form (if any) indicating that I am exem	ure to report all interest	or dividend	s, or (c)	otified the IR	by the	e Inter notifie	nal Re	evenue that I ar
ertifica ecause nterest penerally enerally estruction	ation instruction you have failed paid, acquisition	ns. You must cross out item 2 above if you have be to report all interest and dividends on your tax retu- or abandonment of secured property, cancellation or than interest and dividends, you are not required	en notified by the IRS then. For real estate transfordebt, contributions to	nat you are actions, iter o an individ	current	s not a ement	pply. arran	For m	ortga	ge N. and
Sign Here	Signature of U.S. person ▶		Da	nte ►			270			
	ral Instruc	tions s Internal Revenue Code unless otherwise noted.	• Form 1098 (home mo (tuition)	rtgage intere	st), 1098	-E (stud	ent loa	n inter	est), 10	098-T
		mation about developments affecting Form W-9 (such	Form 1099-C (canceled debt)							
s legislat	tion enacted after v	we release it) is at www.irs.gov/fw9.	 Form 1099-A (acquisition Use Form W-9 only if 	you are a U.					t alien), to
		WO are the bar to the state of the state of	provide your correct TIP If you do not return F		ha raawa	ctor with	o TIN		niaht h	
turn with	h the IRS must obto y be your social se	W-9 requester) who is required to file an information ain your correct taxpayer identification number (TIN) curity number (SSN), individual taxpayer identification ayer identification number (ATIN), or employer	to backup withholding. By signing the filled-co	See What is it out form, you:	backup v :	vithhold	ing? oi	n page	2.	
lentificat ou, or oti	ion number (EIN), to her amount reporta	o report on an information return the amount paid to able on an information return. Examples of information	Certify that the TIN to be issued), Certify that you are						g for a	number
	99-INT (interest ea	mited to, the following: rned or paid)	 Certify that you are Claim exemption fr 						vemnt	navee If
		including those from stocks or mutual funds)	applicable, you are also	certifying the	at as a U	.S. pers	on, yo	ur alloc	able s	hare of
		types of income, prizes, awards, or gross proceeds)	any partnership income withholding tax on forei	gn partners'	trade or share of	ousines: effective	s is no	t subjected	incon	ne ne, and
• Form 1099-B (stock or mutual fund sales and certain other transactions by 4. Certify that FATCA code(s) entered on this form (if any) ind brokers) 4. Certify that FATCA code(s) entered on this form (if any) independent			indica	ting th	at you are					
		m real estate transactions) rd and third party network transactions)	page 2 for further inforn	навоп.						

Cat. No. 10231X

Form **W-9** (Rev. 12-2014)

SECTION II: NO BID FORM

This form only needs to be completed by vendors who are not submitting a bid under Bid #21206

To All Prospective Bidders/Proposers:

Each company or person receiving this packet has at some point in time requested to be placed on the Bid list of the Cleveland Metropolitan School District for this product and/or service.

It is the intent of the District to update this list subsequent to the bidding cycle. Please note the following and take action accordingly.

If you are making a bid/proposal this cycle, disregard the remainder of this letter. Your name will remain on the active bidder list.

	(1) If you are not making a bid/proposal this cycle, but want to remain on the active bidder's list for future bids, place a check mark in the box to the left. Complete the name and address section below and return this letter to Purchasing at the address below.
	(2) If you do not wish to remain on the active bidder's list, place a check mark to the left. Complete the name and address section below and return this letter to Purchasing at the address below.
Name of Company:	
Company Representative:	
Address:	
City; State:	Zip Code:
Email Address:	
Telephone No: ()	Fax No:
(Toll Free) Telephone No:	Date:

Purchasing Division 1111 Superior Avenue E, Suite 1800 Cleveland, Ohio 44114

SECTION II: CONFLICT OF INTEREST FORM

Statement of Potential Conflicts of Interest

Vendor Name:	Primary Contact:
Address 1:	Telephone #:
Address 2:	Fax #:
City:	Email:
State, Zip:	Website:
Cleveland Metropolitan School District (CMSD) the opinions of the Ohio Ethics Commission. As statement declaring any potential conflicts of interanswer the following two questions, providing al 1. Do any current Cleveland Metropolitan School of Education members, or any of their immediate board of directors, hold ay officer position with the issued by the vendor?	such, each vendor is requested to submit this erest in doing business with the District. Please Il requested information. Il District (CMSD) employees, Cleveland Board e family members, also members of the vendor's
Yes	No
If Yes, and if the CMSD employee, CMSD board member of the vendor's board of directors or hol person's name and position with the vendor.	
Name:	
Position:	
If Yes, and if the CMSD employee, CMSD board share of any stock in the vendor organization or company shares owned by the CMSD employee	company, state the percentage of all outstanding
	%
2. Are any current CMSD employees, CMSD bo also employees of the vendor? Yes	
If yes, please state the person's name and provider:	provide a description of their jobs duties for the
Name:	
Job Duties:	

_	hat the vendor will have with the CMSD employee or of providing services to the District:
CEF	RTIFICATION
below attests to the authenticity of my identicated below attests.	nents are true and accurate, and that my signature tity as the person actually signing this form. This anding Agreement to exist, a signed Agreement will nmitment by the District.
NOTARI	ZED STATEMENT
	being duly sworn and deposes says
that he/she is the(title	of
(organization)	, and answers to all
the foregoing questions and all statements t	herein contained are true and correct.
(Signature)	
Subscribed and sworn before	me this day of
, 20	

Notary Public:_____

My commission expires:_____

SECTION II: DEBARMENT FORM



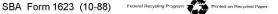
Certification Regarding Debarment, Suspension, and Other Responsibility Matters Primary Covered Transactions

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 13 CFR Part 145. The regulations were published as Part VII of the May 26, 1988 Federal Register (pages 19160-19211). Copies of the regulations are available from local offices of the U.S. Small Business Administration.

(BEFORE COMPLETING CERTIFICATION, READ INSTRUCTIONS ON REVERSE)

- (1) The prospective primary participant certifies to the best of its knowledge and belief that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for disbarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - (b) Have not within a three-year period preceding this application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification: and
 - (d) Have not within a three-year period preceding this application had one or more public transactions (Federal, State, or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective primary participant shall attach an explanation to this proposal.

Business Name		
Date	Ву	Name and Title of Authorized Representative
		Signature of Authorized Representative



This form was electronically produced by Elite Federal Forms, Inc.

SECTION II: DEBARMENT FORM

- 2 -

INSTRUCTIONS FOR CERTIFICATION

- 1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below
- 2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
- 3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If is is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.
- 4. The prospective primary participant shall provide immediate written notice to the department or agency to which this proposal is submitted if at any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations (13 CFR Part 145).
- 6. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- 7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion.--Lower Tier Covered Transactions," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- 8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the ineligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
- 9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 10. Except for transactions authorized under paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

SECTION III: BIDDER QUALIFICATIONS FORM

Bidder must answer all questions or attach a written explanation for each question.

BIDD	ER NAME:_	
ADD	RESS:	
CITY	; STATE:	ZIP
CON	TACT PERSC	N:
TITL	E:	
TELE	EPHONE: ()TOLL FREE :()
TAXI	PAYER IDEN	TIFICATION NUMBER:
1.	What type o	forganization? (i.e., corporation, partnership, etc.)
2.	How many y	rears has your organization been in business?
3.	How many y	rears has your organization been in business under its current name?
4.	List any othe Business.	er aliases your organization has utilized in the last two years and the form of
5.	If you are cu	rrently a corporation, list the following:
	A.	State of incorporation
	В.	Date of incorporation
	C.	President's name
	D.	Secretary's name

	E.	Treasurer's name
	F.	Statutory agent's name
	G.	Name of shareholders, if less than 10
	H.	Principal place of doing business
5.	If you are curr	rently a partnership, list the following:
	A.	Name and address of all general and limited partners.
	В.	Original name and date of organization's inception.
7.	If you are neit list principals.	her a corporation nor a partnership, please describe your organization and
3.	Are you legall	y qualified to do business in the State of Ohio?
9.	Are you legall Cleveland?	y qualified to do business in Cuyahoga County and the City of
10.	•	nization ever been sued by a customer for failure to timely complete a operly perform services? If yes, please state where, when and why?
11.	violation of a	nization ever been cited by a local, county, state, or federal authority for regulation or statute or failing to timely complete a contract in accordance tions? If yes, please state date, Agent, and final disposition.

12.	Has your organization ever filed for bankruptcy? If yes, please state where, when and why?
13.	On a separate sheet, list the major customers for whom your organization has provided this type of equipment or service in the past five years. Include owner's name and type of work performed.
14.	Has your organization ever been sued by a supplier for failure to timely pay for materials or equipment provided? If yes, please provide details.
15.	What is the dollar limit of your firm's General (CLS) Liability Insurance? Name of insuring company Policy number
16.	What is the dollar limit of your firm's Automotive Liability Insurance?
	Owned vehicles Non-Owned vehicles Name of insuring company Policy number
17.	List the name and address of every person having an interest in this bid.

Has any federal, state or local government entity ever cited or taken any action against

18.

your organization or any of its principals for failure to pay or remit any taxes including but not limited to income, withholding, sales, franchise or personal property taxes? If yes, please give name of Agent, date and amount of taxes overdue and resolution of the issue.

- 19. Is your organizations and its' principals current in payment of personal property taxes?
- 20. The prospective lower tier participant certifies, by submission of this bid, that neither it nor its principals is presently debarred, suspended, proposed for debarment or suspension, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal Department or Agent.
- 21. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participants shall attach an explanation to this bid.

SECTION III: BIDDER'S QUALIFICATION FORM

NOTARIZED STATEMENT

being duly swo	orn and deposes says
that he/she is the	of
(title)	
	_, and answers to all
(organization)	
the foregoing questions and all statements therein contained are true and cor	rect.
(Signature)	
Subscribed and sworn before me this day of	
, 20	
Notary Public:	
My commission expires:	

SAMPLE: STATE OF OHIO INSURANCE S A M P L E

STATE OF OHIO

DEPARTMENT OF INSURANCE

CERTIFICATE OF COMPLIANCE

As Superintendent of Insurance of the State of Ohio I

certity that	
certify that	<u></u>
ion located at	
in the State of	
with the laws of this state applicable to it, and is	
authorized to transact in this state its appropriate	
business of insurance as prescribed under Section 3941.02.	ı
of Ohio, including Fidelity Insurance.	
20 , until	
•	

In witness whereof, I have hereunto subscribed my name and caused my seal to be affixed at Columbus, Ohio this day and date.

Superintendent of Insurance of Ohio

SAMPLE: STANDARD ACORD INSURANCE FORM

AÇORD.	CERTIFICATE	OF INSURANCE	IBSUE DATE (MM/DD/YY)
PRODUCER	Sank () od się	THIS CERTIFICATE IS ISSUED AS A NO RIGHTS UPON THE CERTIFICAT	MATTER OF INFORMATION ONLY AND CONFERS TE HOLDER. THIS CERTIFICATE DOES NOT AMEND, E AFFORDED BY THE POLICIES BELOW
		COMPANIES	AFFORDING COVERAGE
		COMPANY A	
ODE	SUB-CODE	COMPANY B	
ISURED		COMPANY C	
		COMPANY IN	
		COMPANY E	
OVERAGES		CETTER -	
THIS IS TO CERTI	/ITHSTANDING ANY REQUIREMEN / DE ISSUED OR MAY PERTAIN T	ANCE LISTED BELOW HAVE BEEN ISSUED TO THE IN IT, TERM OR CONDITION OF ANY CONTRACT OR OT HE INSURANCE AFFORDED BY THE POLICIES DESC LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAI	ISURED NAMED ABOVE FOR THE POLICY PERIOD HER DOCUMENT WITH RESPECT TO WHICH THIS PRIBED HEREIN IS SUBJECT TO ALL THE TERMS,
O TYPE OF IN	SURANCE POLIC	CY NUMBER POLICY EFFECTIVE POLICY EXPIR	ATION ALL LIMITS <u>IN THOUSANDS</u> DYY)
GENERAL LIABILITY			GENERAL AGGREGATE \$
COMMERCIAL	GENERAL LIABILITY		PRODUCTS-COMP/OPS AGGREGATE \$
CLAIMS			PERSONAL & ADVERTISING INJURY \$
OWNER'S & C	ONTRACTOR'S PROT.		EACH OCCURRENCE \$
			FIRE DAMAGE (Any one fire) \$ MEDICAL EXPENSE (Any one person) \$
			COMBINED
AUTOMOBILE LIABII	ITY		SINGLE \$ LIMIT
ANY AUTO	UTOO		BODILY
ALL OWNED A			INJURY \$ (Per person)
SCHEDULED A	0103		BODILY
NON-OWNED	NUTOS	·	INJURY \$ (Per accident)
GARAGE LIAB			PROPERTY S
EXCESS LIABILITY			EACH AGGREGATE OCCURRENCE \$
OTHER THAN	UMBRELLA FORM		STATUTORY
WORKER'S C	OMPENSATION		\$ (EACH ACCIDENT)
A	ND		\$ (DISEASE—POLICY LIMIT)
EMPLOYER	S' LIABILITY		\$ (DISEASEEACH EMPLOY
OTHER			
DESCRIPTION OF OPERA	ATIONS/LOCATIONS/VEHICLES/RESTRIC	CTIONB/BPECIAL ITEMS	
Certificate Hol	DER		had the control of the court, such the propagation for the
			DESCRIBED POLICIES BE CANCELLED BEFORE THE
		EXPIRATION DATE THEREOF,	THE ISSUING COMPANY WILL ENDEAVOR TO
		MAIL DAYS WHITTEN NO	TICE TO THE CERTIFICATE HOLDER NAMED TO THE
			SUCH NOTICE SHALL IMPOSE NO OBLIGATION OF
			HE COMPANY, ITS AGENTS OR REPRESENTATIVES.
		AUTHORIZED REPRESENTATIVE	

PACORD CORPORATION 1988

ACCINE SIA (A/AB)

SECTION IV: NON-COLLUSION AFFIDAVIT

This Affidavit must be executed and shall accompany the bid in order for the bid to be considered

NON-COLLUSION AFFIDAVIT

State of Ohio, Cuyahoga County

	, being first duly sworn, deposes and says
that he/she is	of
(sole o	owner, partner, president secretary, etc.)
	of the party making the
	enuine and not collusive or sham; that said Bidder has not
<u> </u>	greed, directly or indirectly, with any Bidder or person, to put
	rson shall refrain from proposing, and has not in any manner
	reement or collusion, or communication or conference, with
• •	affiant or any other Bidder, to fix any overhead, profit or cost
	of any Bidder, or to secure any advantage against the Board opolitan School District, or any person or persons interested
	ontained in said Bid are true; and further that such Bidder has
	I this Bid, or the contents thereof, or divulged information or
	ion or to any member or agent thereof.
•	
	A CC
	Affiant
Sworn to and subscribed before	
me thisday of	, 20 .
Notary Public in and for Cuyahoga	
County, Ohio	
My commission expires:	

SECTION V: DIVERSITY BUSINESS ENTERPRISE PARTICIPATION FORMS

PART I

THE DISTRICT'S DBE PROGRAM

It is the goal of the Diversity Business Enterprise (DBE) program to ensure the firms owned and/or controlled by minorities and women have the opportunity to compete for any expenditure of funds including but not limited to contracts, lease purchase requisitions, and all forms of equipment, work services, supplies, materials, construction, etc.

The DBE program shall make every good faith effort to ensure that certified DBE's in the relevant Cleveland Municipal School District geographic market have the maximum opportunity to bid for contracts. The Cleveland Municipal School District geographic market is Cuyahoga, Summit, Lake and Lorain counties.

The district has established goals for DBE participation in all contracts that it awards. The goals range from 15 to 30 percents and vary by the type of contract awarded:

- ♦ 15% service contracts
- ♦ 20% goods and supplies
- ♦ 30% maintenance/construction repair

For example if the District awards a roof repair contract in the amount of \$ 100,000 to a Non-DBE contractor, 30% or \$ 30,000 of the contract work could be awarded to a DBE subcontractor.

A Diversity Business Enterprise encompasses Minority Business Enterprise (MBE's) and Female Business Enterprises (FBE's).

A DBE is an enterprise in which minorities, African Americans, Native Americans, Hispanic or Latino Americans, Asian Pacific Islander Americans and/or women own at least 51% of the shares of stock or controlling interest.

An FBE is a female-owned enterprise with at least 51% of the shares of stock or controlling interest, which is held by a female.

A company may be in compliance with the District's DBE program although the applicable numerical goal is not met if the company makes a good faith commitment to comply with DBE regulations. The Purchasing Director determines whether a company has made a good faith commitment.

DBE requirements under certain circumstances can be waived by the district with convincing proof of good faith efforts.

CLEVELAND MUNICIPAL SCHOOL DISTRICT, CUYAHOGA COUNTY, OHIO

Terms and Conditions Of Notice and Requirements to Ensure Diversity Business Enterprise (DBE) Opportunity

Definition of DBE: A Diversity Enterprise (DBE)

"Small Diversity business concern" means a small business concern that is at least (51) percent unconditionally owned by one or more individuals who are both socially and economically diverse, or a publicly owned business that has at least (51) percent of its stock unconditionally owned by one or more socially and economically diverse individuals and that has its management and daily business controlled by one or more such individuals. This term also means a small business concern that is at least (51) percent unconditionally owned by an economically diverse Indian tribe or Native Hawaiian Organization, or a publicly owned business that has at least (51) percent of its stock unconditionally owned by one of these entities, that has its management and daily business controlled by members of an economically diverse Indian tribe or Native Hawaiian Organization.

- (a) "Socially diverse individuals" means individuals who have been subjected to racial or ethnic prejudice or cultural bias because of their identity as a member of a group without regard to their qualities as individuals.
- (b) "Economically diverse individuals" means socially diverse individuals whose ability to compete in the free enterprise system is impaired due to diminished opportunities to obtain capital and credit as compared to others in the same line of business who are not socially diverse. Individuals who certify that they are members of named groups (African Americans, Hispanic Americans or Latino Americans, Native Americans, Asian-Pacific Islander Americans, Subcontinent-Asian Americans) are to be considered socially and economically diverse.

A Female Business Enterprise (FBE)

"Female-owned small business concern" means a small business concern:

- (a) Which is at least (51) percent owned by one or more women; or, in the case of any publicly owned business, at least (51) percent of the stock of which is owned by one or more women; and
- (b) Whose management and daily business operations are controlled by one or more women.
- 1. DBE participation will be counted toward meeting the goals outlined in the notice as follows:
 - a. The total dollar value of a direct contract or subcontractor indirect subcontract Awarded to a certified DBE will be counted toward the applicable goal.
 - b. In the case of a joint venture, certified by the Cleveland Municipal School District, the portion of the total dollar value of the contract equal to the percentage

- of the ownership and control of the DBE partner in the joint venture will be counted toward the applicable goal, (PLEASE RETURN DBE FORM B).
- c. Only expenditures to DBE that perform a commercially useful function in the work of a contract or subcontract or indirect subcontract will be counted toward DBE goals. A DBE is considered to perform a commercially useful function when it is responsible for execution of a distinct element of the work of a contract or subcontract and carries out its responsibilities by actually performing, managing, and supervising the work involved. If a DBE contractor subcontracts a significantly greater portion of the work of the contract than would be expected on the basis of normal industry practices, the DBE is presumed not to be performing a commercially useful function. The DBE may present evidence to rebut this presumption.
- d. The total dollar value of materials and supplies obtained from DBE suppliers and manufacturers will be counted toward DBE goals if the DBE assumes the actual and contractual responsibility for the provision of the materials and supplies.
- 2. A bidder who fails or refuses to complete and return this Notice may be deemed a non-responsive bidder.
- 3. The contractor's goals as set forth in this Notice shall express the contractor's commitment to the percentage of DBE utilization during the term of this contract. The contract shall be deemed to have met its commitment for DBE utilization if the DBE utilization rate of the contractor meets the goals established by this Notice.
- 4. The contractor must receive the approval of the District before making substitutions for any subcontractors listed in the Notice. Substitution of DBE is not allowed unless the contractor receives District approval.
- 5. The contractor's commitment to a specific goal is to meet the DBE objectives and is not INTENDED and shall not be used to discriminate against any qualified company or group or companies.
- 6. The contractor's commitment to a specific goal for DBE utilization as required by this Notice shall constitute a commitment to make every good faith effort to meet such goal by a subcontracting to or undertaking to joint venture with DBE firms. If the contractor fails to meet the goal, it will carry the burden of furnishing sufficient documentation as part of the bid response of its good faith efforts to justify a grant of relief from the goals set forth in this Notice. Such justification will take the forms of a detailed report which will document at least the following information.
- a. Attendance at the pre-bid meeting, if any, scheduled by the District to inform DBE's of Subcontracting opportunities under a given solicitation.
- b. Advertisement in general circulation media, trade association publications, and minority-focus media for at least twenty (20) days before bids or proposals are due. If twenty (20) days are not available, publication for a shorter reasonable time is acceptable.
- c. Written notification to DBE that their interest in the contract is solicited, and follow-up contact to determine whether the DBE's were interested.

- d. Efforts made to select portions of the proposed work to be performed by DBE in order to increase the likelihood of achieving the stated goals.
- e. Efforts to negotiate with DBE for specific sub-bids, including at a minimum:
 - I. The names, addresses, and telephone numbers of DBE's that were contacted.
 - II. A description of the information provided to DBE regarding the plans and specifications for portion of the work to be performed; and
 - III. A statement of why additional agreements with DBE were not reached.
 - IV. Completion of (Form E) if DBE's are not involved in the bid.
- f. Concerning each DBE the supplier/contractor contacted but rejected as unqualified, the reasons for the supplier's/contractor's conclusion.
- g. Efforts made to help the DBE's contacted that needed assistance in obtaining required bonding, lines of credit, or insurance.
- h. Use of the services of minority community organizations, minority contractor's groups, governmental minority business assistance offices, and other organizations that assist in the recruitment and placement of DBE's.
- 7. Suppliers/contractors that fail to meet DBE goals and fail to demonstrate sufficient good faith efforts are may not eligible for contract awarded
- 8. The District, through its Diversity Officer will review the contractor's minority business enterprise involvement efforts during performance of this contract. Such review will include, but not be limited to, contractor's quarterly statement of income from the District and what portion of said income went to the DBE enterprise(s) as evidenced by affirmation of the DBE enterprise(s) which the contractor hereby agrees to supply each quarter during the term of its contract with the District. If the contractor meets its goal or if the contractor demonstrates that every reasonable effort has been made to meet its goal, the contractor shall be presume to be in compliance. Where the Diversity Officer finds that the contractor shall be presume to be in compliance. Where the Diversity Officer finds that the contractor has failed to comply with the requirements of this Notice, said Diversity Officer shall inform the Purchasing Director who shall immediately notify the contractor to take corrective action. If the contractor fails or refuses to comply promptly, then the Purchasing Director, upon approval of the District, shall issue an order shopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to any such stop orders shall be made subject of claim for extension of time or for excess costs or damages by the contractor. When the District proceeds with such formal action it has the burden of proving that the contractor has not met the requirements of coming forward and showing that it has met the good faith requirements of the Notice, specifically including paragraph 7 hereof. Where the contractor is found to have failed to exert every good faith effort to involve DBE in the work provided, the District may declare that the contractor is ineligible to receive further District funds, whether as a contractor, subcontractor, or as a consultant, for a period of up to three

- (3) years.
- 9. The contractor will keep records and documents for three (3) years following performances of this contract to indicate compliance with this Notice. These records and documents, or copies thereof, will be made available at reasonable times and places for inspection by any authorized representative of the District upon request together with any other compliance information which such representative may require.
- 10. Bidders and contractors are bound by all requirements, terms and conditions of this Notice.
- 12. Nothing in this Notice shall be interpreted to diminish the present contract compliance review.

SECTION V: DIVERSITY BUSINESS ENTERPRISE PARTICIPATION FORMS

PART II DBE Form A: General Information

Name of Firm:	
Address:	
City, State, Zip Code:	
Telephone Number:	
Type of Business (Product or Service):	
Date of Proposed Contract Award:	
Amount of Proposed Contract Award:	
Diversity Business Enterprise Subcontractor(s):	
Dollar Amount Subcontract Award:	
Percent of Subcontract Award:	
D.B.E. Participation	\$
F.B.E. Participation	\$
Name of EEO Officer:	
Signature of owner, partner or authorized officer Name (name or print):	
Compliance Compliance-pending Compliance Date	Non-compliance
Signature, Diversity Business Enterprise Department	

DBE Form B

CLEVELAND MUNICIPAL SCHOOL DISTRICT

NOTICE OF REQUIREMENT TO ENSURE DIVERSITY BUSINESS ENTERPRISE (DBE) OPPORTUNITY

Note: All eligible bidders for award of the contract should comply with the Requirements, Terms, and Conditions of this Notice.

The undersigned bidder hereby agrees that the goal it has established for DBE participation in this project through either subcontracting or entering into a joint Venture with DBEs in conformity with the Requirements. Terms and Conditions of this Notice is a goal of thirty 30% percent for a construction/repair/ maintenance contract, twenty (20%) percent for a supply contract, and fifteen (15%) for a service contract of the total contract amount of this project. In no event will the absence of goals as stated above be deemed as compliance with the requirements, terms and conditions of this notice.

In addition, the undersigned will complete and attach hereto the DBE (Form C) Schedule for DBE participation, showing all DBE/FBE that will participate as subcontractors or joint ventures in this contract and a DBE (Form D), DBE Letter of Intent form for each DBE/FBE listed on the Schedule.

Bidder		
Date		
By		
 Title		

Definition of DBE: A Diversity Business Enterprise (DBE)

"Small Diversity business concern" means a small business concern that is a least (51) percent unconditionally owned by one or more individuals who are both socially and economically diverse, or a publicly owned business that has at least (51) percent of its stock unconditionally owned by one or more socially and economically diverse individuals and that has its management and daily business controlled by one or more such individuals. This term also means a small business concern that is at least (51) percent unconditionally owned by an economically diverse Indian tribe or Native Hawaiian Organization, or a publicly owned business that has least (51) percent of its stock unconditionally owned by one of these entities, that has its management and daily business controlled by members of an economically diverse Indian tribe or Native Hawaiian Organization.

DBE Form C

CLEVELAND MUNICIPAL SCHOOL DISTRICT

Schedule MBE/FBE Participation

Project Name:
Name of NON-DBE Contractor
Identification No.:
Location:
Name of minority contractor
Address
City, State, Zip
Type of work to be performed and work hours involved
Projected commencement and completion dates for work:
Agreed price in dollars or percentage:
The undersigned will enter into a formal agreement with DBE for work listed in this schedule conditioned upon execution of a contract with the Cleveland Municipal School District.
TO BE RETURNED WITH THE BID
Signature of NON-DBE Prime Contractor

DBE Form D

DBE Letter of Intent

To:	
Non-DBE Prime or General Bidder	
Project:	
NON-DBE PRIME OR GENERAL BIDDI	ER
The Undersigned intends to perform work in (check one):	connection with the above-referenced project as
an individual a corporati	ion a partnership a joint venture
DBE status of the undersigned is confirmed in	n the Cleveland Municipal School District's DBE on date of:
The Undersigned is prepared to perform the following designed in detail particular work items or parts thereof to be	cribed work in connection with the above referenced project. performed:
at the following price or percent of contract: S	\$
You have projected the following commences projecting completion of such work as follow Items	ment date of such work, and the undersigned is vs:
Projected Commencement Date Projected Completion Date	
	nt) of the dollar value of the subcontract will be or (s) and/or NON-FBE SUPPLIERS.
The undersigned will enter into a formal agupon your execution of a contract with the Cl	greement for the above work with you conditioned leveland Municipal School District.
Date	Name of DBE Firm (where applicable)
Signature of DBE (where applicable)	Signature of MBE Firm
(TO BE RETURNEDWITH BID)	
Name of FBE Firm	Signature of FBE Firm

DBE Form E DBE Unavailability Certification

Name	,, Title
Ivame	Tille
Of	, certify that on
Non-DBE Prime Bidder I contacted the following DBE busine	ess enterprise to obtain a bid for work items to be performed
on:	out of personal to the persona
Board Project:	
Minority Contractor:	
Work Items Sought:	
Form of Bid Sought:	
Female Contractor:	
Work Items Sought:	
Form of Bid Sought:	
·	lief said minority business enterprise was unavailable o lack of agreement on price) for work on this project or ving reason (s):
Signature, Non-DBE prime Bidder	Date
was	offered an opportunity to bid on the above-referenced work
on	by
Date	by Non-DBE Prime Bidder
Signature, Non-DBE Prime Bidder	
The above statement is a true and acc	curate account of why I did not submit a bid on this project.
Signature, Non-DBE prime Bidder	

TO BE COMPLETED BY NON-MINORITY PRIME

STATE OF	}	
COUNTY OF	} SS.	AFFIDAVIT

The undersigned swear that the foregoing statements are correct and include all material information necessary to identify and explain the items and operation of our subcontract and the intended participation by each party in the undertaking. Further, the undersigned covenant and agree to provide to the Cleveland Municipal School District current, complete, and accurate information regarding actual subcontract work and the payments thereof, and any proposed changes in any of the subcontract arrangements and to permit the audit and examination of the books, records and files of the subcontract or those of each party relevant to the subcontract, by authorized representatives of the Cleveland Municipal School District. Any material misrepresentation will be grounds for terminating any contract which may be awarded and for initiating action under federal and state laws concerning false statements.

Name of Firm:		
Signature:		
Name and Title:_		
Date:		
STATE OF COUNTY OF	} } SS.	
On this	day of	20, before me appeared
		, to me personally known, who being duly sworn,
did execute the for	egoing affidavit, and	did state that they were properly authorized by
	to	execute the affidavit and did so as their free act and deed.
(Seal)		Notary Public
		Commission expires

DBE FORM F Information for Determining Joint Venture Eligibility

(This form need not be completed if all joint venture firms are diversity business enterprises).

	1.	Name of Joint Venture:
	2.	Address of Joint Venture:
	3.	Phone Number of Joint Venture:
	4.	Identify the firms which comprise the joint venture. (The DBE partner must complete DBE Form A or have current DBE certification)
(a)	De	scribe the role of the DBE firm in the joint venture:
(b)	De	scribe briefly the experience and business qualifications of each non-DBE Joint Venture:
	5.	Nature of Joint Venture's business:
	6.	Provide a copy of the Joint Venture Agreement.
	7.	What is the percentage of DBE ownership? DBE% FBE%
	8.	Ownership of Joint Venture: (This need not be completed if described in the Joint venture agreement provided in response to question 6).
(a)		ofit and loss sharing
(b)	Ca	pital contributions, including equipment:
(c)	Otl	ner applicable ownership interests:

decision making, including, but not limited to, those with prime responsibility for:	
(a) Financial decisions	
(b) Management decisions, such as	
(1) Estimating	
(2) Marketing and Sales	_
(3) Hiring and firing of Management Personnel	-
(4) Purchasing of major items or supplies	
(c) Supervision of Field Operations	_
	_

9. Control of and participation in this contract. Identify by name, race and "firm" those individuals and their titles who are responsible for day-to-day management and policy

NOTE: If, after completing the DBE Form B and before the completion of the joint venture's work on any contract awarded, there is any significant change in the information submitted, the joint venture must inform the Cleveland Municipal School District, either directly or through the non-DBE prime contractor if the joint venture is a subcontractor.

CLEVELAND MUNICIPAL SCHOOL DISTRICT Finance Department

TO BE COMPLETED BY NON-MINORITY PRIME (JOINT VENTURE)

STATE OF]	
COUNTY OF	JSS.	AFFIDAVIT

The undersigned swear that the forgoing statements are correct and include all material information necessary to identify and explain the items and operation of our subcontract and the intended participation by each joint venture in the undertaking. Further, the undersigned covenant and agree to provide to the Cleveland Municipal School District current, complete, and accurate information regarding actual joint venture work and the payments thereof and any proposed changes in any of the subcontract arrangements and to permit the audit and examination of the books, records and files of the joint venture or those of each party relevant to the joint venture, by authorized representatives of the Cleveland Municipal School District. Any material misrepresentation will be grounds for terminating any contract which may be awarded and for initiating action under federal and state laws concerning false statements.

Name of Firm (Prime)		Name of Firm (DBE)						
Signature		Signature						
Name and Title		Name and Title						
Date		Date						
STATE OF COUNTY OF] JSS.							
On this	day of	20 , before me						
	regoing affidavit, and	, to me personally known, who being a did state that they were properly authorized to the affidavit and did so as their free act and						
deed.	to execute	the afficient and all so as their free act and						
(Seal)	Notary Public	:						
	Commission	expires						

SECTION VI: EOA CONTRACTIONAL DECLARATION FORMS

PART III

CLEVELAND MUNICIPAL SCHOOL DISTRICT

AFFIRMATIVE ACTION PROGRAM VENDOR CONTRACT COMPLIANCE PROCEDURES AND GUIDELINES

NOTE: Please read carefully all of the information contained in these documents.

Pursuant to the Affirmative Action Policy adopted by the Cleveland Municipal School District, the following guidelines and procedures will be implemented to ensure that all vendors doing business with the District are in compliance with Equal Employment Opportunity Standards.

A. SUBMISSION OF VENDOR EMPLOYMENT PRACTICE REPORT

All vendors and contractors who bid to provide goods, services, supplies and equipment through formal bids, informal bids, and contract term agreements are required to submit a Vendor Employment Practice Report with each bid. Approved status by the Vendor Employment Practice Report includes the following documents which must be completed in their entirety and returned with the bid.

Please note, compliance approval consists of both DBE and Vendor Contract Compliance approval.

1. General Information Sheet (Form 1) - Provides basic information on the vendor.

1a. SMSA/OR RECRUITMENT AREA

Indicates the relevant labor area in which your facility is located. <u>Designate</u> the <u>Standard Metropolitan Statistical Area</u>, county or city from which the facility can draw applicants or recruit for most positions.

In making relevant labor area determinations, examine the statistics on racial, ethnic, and gender composition of the Standard Metropolitan Statistical Area, county, or city surrounding your organization, as well as other appropriate adjacent areas.

The relevant labor area should be the SMSA, county or city with the highest population of minorities and women.

DEFINITION:

As defined by the U.S. Bureau of the Census, SMSA is:

"Except in the New England States, a county or group of contiguous counties which contains at least one city of 50,000 inhabitants or more, or 'twin cities' with a combined population of at least 50,000; in addition contiguous counties if they are socially and economically integrated within the central city; in the New England States towns and cities instead of counties. Each SMSA must include at least one central city."

- 2. **Compliance Declaration Form** (Form 2) The Agreement indicating the vendor is In compliance with Equal Employment Opportunity requirements, will take affirmative action, and will comply with all Fair Labor Standard practice.
- 3. **Current Employment Data Form** (Form 3) Current personnel data indicating employees in each job category classified by gender and race.
- 4. **Existing Affirmative Action Program** If any, and copies of any agreement between the vendor and the Equal Employment Opportunity Commission, Office of Federal Contract Compliance Program or court order pertaining to equal employment opportunity.

B. EVALUATION OF COMPLIANCE DATA

- 1. The Diversity Officer will evaluate data submitted by vendors who are recommended to receive District bids and contracts. Vendors found in compliance with the District's Equal employment opportunity standards (Affirmative Action and DBE Program) will be placed on the approved vendor's list.
- 2. In the event that a vendor is found not in compliance with the District's equal employment opportunity standards, the Diversity Officer will inform the Purchasing Director of the Reason(s) and ask that the Purchasing Director not award the contract or bid to the vendor pending compliance. The Purchasing Director or Manager of Diversity will inform the vendor of reason(s) for noncompliance. Vendors found not in compliance will be given ten (10) business days from the time of notification by the Purchasing Director or Manager of Diversity to submit an acceptable affirmative action program to the Diversity Officer.
- 3. If the vendor which has been found not in compliance, submits an <u>acceptable</u> affirmative action plan to the Diversity Officer within ten (10) business days of notification, the vendor may be given conditional approval.
- If the vendor fails to submit an acceptable affirmative action program to the Diversity Officer, the officer will notify the Purchasing Director who will disallow the bid. Vendors who fail to comply with the District's equal employment opportunity standards may be disapproved to do business with the District by the Cleveland Municipal School District.
- Any company which believes that it has been wrongly found not in compliance thus preventing business opportunities with the District because it does not meet the District's equal employment opportunity standards may request reconsideration by the Diversity Officer. However, the decision of the Cleveland Municipal City School District will be considered final.

C. AFFIRMATIVE ACTION PLAN

- 1. Vendors found not in compliance with the District's equal employment opportunity standards are expected to develop and implement affirmative action programs if they expect to be eligible to successfully bid for District contracts.
- 2. While it is the vendor's responsibility to develop an affirmative action program which will result in equal employment opportunity for persons from all sectors of the community, the Officer in Charge of the Diversity Program may refer prospective bidders to resources which may be of assistance in developing affirmative action programs.
- 3. In the event that a vendor who has been awarded a District contract does not make satisfactory progress towards goals in the affirmative action program, the District will not negotiate a new contract until the vendor assures the Diversity Officer, that significant progress will make.

D. CONDITIONS UNDER WHICH BIDS MAY BE REJECTED OR CONTRACTS TERMINATED ON EQUAL EMPLOYMENT OPPORTUNITY GROUNDS

- 1. Vendor fails to submit completed and signed EEO documents with bids or other requested information in a timely manner.
- 2. The vendor is found not to be in compliance with EEO laws, regulations and District policy, and does not have an acceptable Affirmative Action Program, or if the vendor has an acceptable Affirmative Action Program but the Diversity Officer determines the vendor has not made satisfactory progress toward goals in the plan and shows no promise of achieving the goals.
- 3. Any inconsistencies or misrepresentation of the facts in any of the requested information designed to portray the vendor in a more favorable position with respect to Equal Employment Opportunity Compliance will be grounds for cancellation of the contract by the Purchasing Director, upon recommendation by the Diversity Officer and confirmation by the Cleveland Municipal School District.

FORM 1

Vendor Contract Compliance Program General Information

Name of	Firm	÷				
Address:	•					
City, Stai	te, Zi _l	p Code:				-
Telephon	ne Nu	mber:				-
Standara	l Meti	ropolitan Statistical Area				-
Recruitm	ıent A	rea:				
Type of I	Busine	ess (product or service):				
Name of	EEO	Officer:				
Signatur	e of C	Owner, Partner or Authorized Office	r:			-
Name (ty	vpe or	· print):				
DATE: _			TITLE:			_
		DO NOT COM	MPLETE BE	ELOW THIS L	INE	
	STAT	TUS OF VENDOR				
		Compliance			Conditional (-
		Non-Compliance			Compliance 1	Pending
	Con	nments:				
	Date	?		Signature Affirmative A	Action Division	

EODM 2

FORM 2

Compliance Declaration

The following must be filled out completely.	
It is the policy ofafforded to all qualified persons without regard or handicap.	that equal employment opportunity be to race, religion, color, sex, national origin, age,
In support of this policy, employee or applicant for employment because or handicap.	will not discriminate against any of race, religion, color, sex, national origin, age,
	ke affirmative action to insure that applicants are g employment without regard to race, color, sex, ill include, but not be limited to:
Recruitment, advertising, or solicitation for emplementation, selection for training, including approximation, layoffs or termination.	ployment, hiring, placement, upgrading, transfer or renticeship rates of pay or other forms of
The undersigned company states that they are of Labor Standards and Non-Discriminatory Pract	of current applicable requirement pertaining to Fair cices of Federal, State and Local Governments.
The undersigned further acknowledges that if the undersigned will comply with all Fair Labor States	he contract is awarded to the undersigned, that the andard Practice.
Name of Company	Signature of company Official
Date:STATE OF (COUNTY OF ())SS.
BEFORE ME, a Notary Public in and for said C named Company	County and State personally appeared the above—by
Its the aforesaid instrument, and that the same is the act and deed of said company.	_, who acknowledged that they knowingly signed neir free act and deed duly authorized and the free
IN TESTIMONY WHEREOF, I have hereunto	set my hand and affixed seal at, this
,	
day of	20

DESCRIPTION OF JOB CATEGORIES

OFFICIAL, MANAGERS AND SUPERVISORS

Occupations requiring administrative personnel who set District policies, exercise overall responsibility for execution of the plaices, and direct individual departments or special phases of a firm's operations includes: officials, executives, middle management, plant managers, department managers and superintendents, salaried supervisors who are members of management, purchasing agents and buyers, and kindred workers.

PROFESSIONALS

Occupations requiring either college graduation or experience of such kind and amount as to provide a background. Includes: accountants and auditors, airplane pilots and editors, engineers, lawyers, librarians, mathematicians, natural scientists, personnel and labor relations workers, physical scientists, physicians, social scientists, teacher's and kindred workers.

TECHNICIANS

Occupations requiring a combination of basic scientific knowledge and manual skill which can be obtained through (about) two years of post high school education, such as that which is offered in many technical institutes and junior colleges, or through equivalent on-the-job training. Includes: drafters, engineering aides, junior engineers, mathematical aids, nurses, photographers, radio operators, scientific assistants, surveyor of technical illustrators, technicians (medical, dental, electronic physical sciences), and kindred workers.

SALES WORKERS

Occupations engaging wholly or primarily in direct selling. Includes: advertising agents and salespersons, insurance agents and brokers, real estate agents and brokers, stock bond salespersons, demonstrators, sales persons, sales clerks, and kindred workers.

OFFICE AND CLERICAL

Includes all clerical-type work regardless of level of difficulty, where the activities are predominantly non-manual, includes: bookkeepers, cashiers, collectors (bills and account), messengers and office clerks, office machine operators, shipping and receiving clerks, stenographers, typists and secretaries, telegraph and telephone operators and kindred workers.

CRAFTWORKERS (SKILLED)

Manual workers of relatively high skill level having a thorough and comprehensive knowledge of the process involved in their work, exercise considerable independent judgment, and usually receive an extensive period of training. Includes: the building trades hourly paid foremen who are not members of management, mechanics and repairers, skilled machine operators, compositors and typesetters, electricians, engravers, job setters (metal), motion picture projectionists, pattern and model makers, stationary engineers, tailors and kindred workers.

OPERATIVE (SEMI-SKILLED)

Workers who operate machine or processing equipment or perform other factor-type duties of intermediate skill level which can be mastered in a few weeks and require limited training

LABORERS (UNSKILLED)

Workers in manual occupations which generally require no special training. Perform elementary duties that may be learned in a few days and require the application of little or no independent judgment. Includes: garage laborers, car washers and greasers, gardeners (except farmers), ground-keepers, long-shore workers, craftsperson and stevedores, lumber's and wood chippers, laborers performing lifting, digging, mixing, loading, and pulling operations, and kindred workers.

SERVICE WORKERS

Workers in both protective and non-protective service occupations. Includes: attendants (hospital and other instruction, professional and personal service), barbers, and cleaners, cooks, guards, doorkeepers, stewards, janitors, police officers and detectives, porters, food servers, and kindred workers.

APPRENTICES

Persons employed in a program including work training and related instruction to learn a trade or craft which is traditionally considered an apprenticeship, regardless of whether the program is registered with a Federal or State Agent.

SECTION VI: EMPLOYMENT DATA FORM

Please note this data may be obtained by visual survey or post-employment records. Neither visual surveys nor post-employment records are															
	prohibited by any Federal, State or local law. All specified data is required to be filled in by District policy.														
		ATT EMDI	OVEEC			MALEC					DEMAI EC				<u> </u>
		ALL EMPI	LOYEES			MALES					FEMALES				
JOB CATEGORIES	TOTAL MALES & FEMALES	MALES	FEMALES	HISPANIC	BLACK (NOT OF HISPANIC ORIGIN)	ASIAN AMERICAN OR PACIFIC ISLANDER	AMERICAN INDIAN OR ALASKAN NATIVE	HISPANIC	WHITE (NOT OF HISPANIC ORIGIN)	BLACK (NOT OF HISPANIC ORIGIN)		AMERICAN INDIAN OR ALASKAN NATIVE	HISPANIC		
OFFICIALS MGRS & SUPERVISORS															
PROFESSIONALS															
TECHNICIANS															
SALES WORKERS															
OFFICE/CLERICAL CRAFTWORKERS															
(SKILLED) OPERATIONS (SEMI-															
SKILLED)															
LABORERS (UNSKILLED)															
SERVICE WORKERS															
APPRENTICES															
TOTALS													ļ		
ADDITIONAL INFO	MATION (ODTIONAT)							-					
ADDITIONAL INFUI	NIVIA I IUN (OF HUNAL	<u>.)</u>												
Describe any other	action tak	ken which	show that	all emplo	yees are r	ecruited, hi	red, or trai	ined or pro	moted wit	hout regar	d to their r	ace, religio	ı, color, sex	, handicap	,
age or national ori	gin. Use se	econd shee	t if additi	onal spece	is needed	•		_							
The undersigned c	 ertifies tha	t they are	legally an	thorized b	v the bide	ler to make	the staten	l nents and re	 epresentat	ions conta	ined in this	report, and	 that thev	ave read	
all of the foregoing															
FIRM OR CORPORA	TE NAME:								DATE:						
CIONATUDE.									THE E.						
SIGNATURE:									TITLE:						

CLEVELAND MUNICIPAL SCHOOL DISTRICT CONSTRUCTION AGREEMENT

by and between THE CLEVELAND MUNICIPAL SCHOOL DISTRICT, 1111 Superior

This Construction Agreement (the "Agreement") is made as of ______, 2015

[C	re. E, Suite 1800, Cleveland, Ohio 44114 (the "District") and [CONTRACTOR NAME] , ONTRACTOR ADDRESS] (the "Contractor" and, together with District, the "Parties") and is the purposes described below.
1.	CONTRACT PURPOSE. The purpose of this contract is (the "Project"). The Contractor shall perform all work ("Work") described in the bidding documents, drawings and specifications (attached hereto as Exhibit A and, together with this Agreement, the "Contract Documents") or reasonably inferable therefrom.
	2. TERM. This Agreement shall commence on the date first written above, and Contractor shall attain final completion of the Work not later than unless an extension is granted in writing by the District; provided, however, that the District may terminate this Agreement at any time without obligation and without cause by giving fourteen (14) days' written notice to the Contractor under the Termination for Convenience clause below. Contractor acknowledges that time is of the essence in this Agreement and that the Project shall be completed on or before the date set forth herein for final completion. If Contractor fails to complete the Project on or before the date set forth herein for final completion for any reason other than a default or delay caused by the District, the Contractor hereby agrees to pay the District, as liquidated damages, the sum of \$ per day for each calendar day beyond the date set forth herein for final completion that the Contractor fails to complete the Project. The amount of liquidated damages is fixed and agreed on between the District and the Contractor because of the impracticality and difficulty of ascertaining the true value of damages that the District will sustain by failure of the Contractor to complete the Project on time. Contractor may work on the Project during ordinary business hours unless otherwise agreed to by the District.
3.	<u>COMPENSATION.</u> This is a fixed-price contract. Subject to the terms and conditions of this Agreement, the District shall pay the Contractor the amount of [INSERT FEE] (the "Contract Sum"), based upon the Base Bid and Alternates on the bid form submitted by Contractor submitted by the Contractor on [INSERT DATE]. The Contractor shall submit to the District, before the first invoice, a schedule of values, allocating the entire Contract Sum to the various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as the District may require. This schedule, unless objected to by the District, shall be used in reviewing the Contractor's invoices. If all or part of any funds of the Contractor that are held by the District, whether it be retainage, escrowed funds or

otherwise, should be attached, garnished or levied upon under any order of court, or if the delivery thereof shall be stayed or enjoined by any order of court, or if any other writ, order,

judgment, or decree shall be made or entered by any court affecting the held funds, or any part thereof whether with or without jurisdiction, and in case District obeys and complies with any such writ, order judgment, or decree, District shall not be liable to the Contractor, its successors, or assigns, and Contractor shall indemnify and hold District harmless for its compliance with such writ, order, judgment or decree, notwithstanding that such writ, order, judgment or decree be subsequently reversed, modified, annulled, set aside, or vacated.

- 4. COORDINATION OF THE WORK. The Contractor is responsible for scheduling the Work and coordinating the subcontractors. The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures, and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit as well as other permits, fees, licenses, tests, and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded. The Contractor shall give the District timely notice of when and where tests and inspections are to be made so that the District may be present for such procedures.
- 5. PAYMENTS. Subject to the retainage provisions of Ohio Revised Code Sections 153.12, 153.13 and 153.14, the Contractor will provide an invoice each month on or about the 15th day of the month containing a detailed summary of the Work completed by the Contractor for the previous month. Each invoice shall be accompanied by a certified payroll report as more specifically set forth in Article 37 herein. The District will render payment to Contractor within ninety (90) days after receiving such invoice. Contractor shall provide such documentation as requested by the District that the Work described in the invoice was actually provided. Failure to provide such documentation upon the District's request shall excuse the District from paying for the invoiced Work. Contractor will not submit invoices for materials stored off site unless the off-site storage has been approved by the District, which approval may be withheld in the District's sole discretion. The Contractor warrants that title to all Work covered by an invoice will pass to the District no later than the time of payment. The Contractor further warrants that upon submittal of an invoice, all Work for which payments have been received from the District shall be free and clear of liens, claims, security interests or other encumbrances adverse to the District's interests.

The Contractor shall pay in full all bills incurred by the Contractor for the Contractor's Work, and shall submit upon the District's request receipted invoices or waivers of lien as evidence of payment in full of Contractor's bills. The District reserves the right to withhold from any payment hereunder amounts claimed against the Contractor or the Contractor's surety company representing obligations arising out of the Contractor's Work, until Contractor provides to the District evidence of payment of such obligations. The District also reserves the right to withhold from any payment hereunder the amount of any expense, loss or damage that the District sustained or reasonably expects to sustain as a result of

nonperformance or faulty or delayed performance by the Contractor under this Agreement. The District may apply such amount in payment of the expense, loss or damage sustained.

Final payment on this Agreement shall be payable within ninety (90) days after final completion of the Contractor's Work, the final acceptance thereof by the District, and receipt of a final invoice from the Contractor. No payment made shall be evidence of the performance of Contractor's Work, either in whole or in part, and no payment, including the final payment, shall be construed to be an acceptance of defective Work or improper materials used by the Contractor. Anything herein contained to the contrary notwithstanding, acceptance by the Contractor of the final payment shall constitute a full and final release by the Contractor of all claims against the District. As a condition precedent to the Contractor receiving final payment the Contractor shall also submit to the District (a) as-built drawings, (b) a complete list of Subcontractors and principal vendors on the Project, including addresses and telephone numbers, (c) an indexed, loose leaf binder containing complete installation, operation, and maintenance manuals, including all manufacturers' literature, of equipment and materials used in the Work, (d) an indexed, loose leaf binder containing all inspection reports, permits, and temporary and final certificates of occupancy and licenses necessary for the occupancy of the project, and (e) any and all other items required pursuant to the Contract Documents. The making of final payment shall constitute a waiver of claims by the District except those arising from (1) liens, claims, security interests or encumbrances arising out of the Contract and unsettled; (2) failure of the Work to comply with the requirements of the Contract Documents; (3) terms of special warranties required by the Contract Documents; or (4) Contractor's indemnity obligations under this Agreement

The Contractor is not entitled to payment of the Contract Sum if the Work under this Agreement is no longer needed, required or requested by the District, or if this Agreement is terminated by the District with or without cause. The District is not liable in any manner for expenses incurred by the Contractor through its utilization of third-party vendors or contractors.

6. **FUNDING SOURCE**

			_			_									-		
Budget											•						
Number/Code	FUNI)	•	SC		•	FL	INCT	ΓΙΟΝ	I		OF	RIEC	T	•	OF	

7. **INDEMNIFICATION AND HOLD HARMLESS.** The Contractor shall indemnify, defend, and hold harmless the District, all of its members, officers, employees, and agents, from and against any and all liability (whether real or asserted), claims, demands, expenses, costs (including legal fees) and causes of action of any nature whatsoever for injury or death of persons, or damage or destruction of property which may result from or arise out of the negligence or intentional misconduct of the Contractor or its employees, officers, or agents, in the course of the Contractor's performance of this Agreement or the Contractor's failure to

- perform. This indemnification and hold harmless obligation survives the term of this Agreement.
- 8. **INDEPENDENT CONTRACTOR STATUS.** Contractor and the District acknowledge and agree that Contractor is an independent contractor and has no authority to bind the District or otherwise act as a representative of the District. The District will provide **no** benefits such as health insurance, unemployment insurance, or worker's compensation insurance to the Contractor. Contractor will be responsible for payment of all federal, state and local income taxes, unemployment and workers' compensation coverage.
- 9. **CONFIDENTIALITY/OWNERSHIP.** The Contractor agrees that all information provided by the District or any information that the Contractor may acquire, directly or indirectly, if any, which relates to the District and which the District identifies to the Contractor as confidential will be kept confidential and not used by or released to any third party or parties without the prior written consent of the District.
- 10. **NO DAMAGES FOR DELAY.** The District shall not be held responsible for any loss, damage, costs, or expenses sustained by the Contractor as the result of any project delays, disruptions, suspensions, Work stoppages, or interruptions of any kind, whether reasonable or unreasonable or whether occasioned by changes ordered in the Work or otherwise caused by an act or omission of the District, its agents, employees, or representatives, or by any cause whatsoever beyond the control of the Contractor.
- 11. **FINDINGS FOR RECOVERY/ DEBARMENT OR SUSPENSION.** Contractor represents that it has no unresolved findings for recovery against it by the Ohio Auditor of State or any notice of debarment or suspension from any Federal Agency. The District may terminate this contract at any time if the vendor or any of its directors or officers is found at any time to have any unresolved findings for recovery by the Auditor of State or any notice of debarment or suspension from any Federal Agency. Certification from the Ohio Auditor of State's website and the Federal System for Award Management (SAM) website is attached to this Agreement as **Exhibit B**.
- 22. CRIMINAL BACKGROUND CHECK. Contractor shall perform or cause to be performed an Ohio Bureau of Criminal Investigation and Identification and Federal Bureau of Investigation criminal background check of the employees of Contractor or of any subcontractor that will perform Work or services or otherwise be present at the Project site within the proximity of students of the District. Prior to the performance of any services by such employees, the criminal background check shall be performed and completed at Contractor's sole cost and expense. No person shall be employed on site by Contractor or by any subcontractor who has been found guilty of any of the criminal offenses enumerated in Ohio Revised Code Section 3319.39 or any equivalent provisions under Federal law or the laws of any of the other states. Contractor shall remove (and shall cause its subcontractor to remove) any person from the Project site found (during the criminal background check or otherwise) to have violated any of the offenses listed in Section 3319.39 of the Ohio Revised Code or equivalent provisions thereof under Federal law or the laws of any of the other states. The foregoing shall not (i) be cause for any claim against the District for any reason,

including without limitation, interference or delay, and (ii) excuse Contractor or any subcontractor from meeting the construction schedule.

- 13. **DISCRIMINATION.** Contractor agrees that (A) in the hiring of employees for the performance of Work under the contract or any subcontract, Contractor, by reason of race, color, religion, sex, age, disability or military status as defined in section 4112.01 of the Revised Code, national origin, or ancestry, shall not discriminate against any citizen of this state in the employment of a person qualified and available to perform the Work to which the contract relates; (B) Contractor or any subcontractor or person acting on behalf of Contractor or its subcontractors, in any manner, shall not discriminate against, intimidate, or retaliate against any employee hired for the performance of Work under the contract on account of race, color, religion, sex, age, disability or military status as defined in section 4112.01 of the Revised Code, national origin, or ancestry; (C) Contractor shall have a written affirmative action program for the employment and effective utilization of economically disadvantaged persons, as referred to in division (E)(1) of section 122.71 of the Revised Code and shall file a description of the affirmative action program and a progress report on its implementation with the equal employment opportunity office of the Department of Administrative Services; and (D) Any provision of a hiring hall contract or agreement which obligates the Contractor to hire, if available, only employees referred to the Contractor by a labor organization shall be void as against public policy and unenforceable with respect to employment under any public improvement contract unless at the date of execution of the hiring hall contract or agreement, or within thirty (30) days thereafter, the labor organization has procedures in effect for referring qualified employees for hire without regard to race, color, religion, national origin, military status as defined in Revised Code Section 4112.01, or ancestry and unless the labor organization includes in its apprentice and journeyperson's membership, or otherwise has available for job referral without discrimination, qualified employees, both whites and non-whites (including African-Americans).
- 14. **PERSONNEL.** Upon the District's request, and in its sole discretion, Contractor shall replace any personnel assigned to the Project by the Contractor.
- 15. **LABOR DISPUTE.** If the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this Agreement, the Contractor shall immediately give notice, including all relevant information, to the District.
- 16. **PROMPT PAYMENT DISCOUNT.** If the Contractor offers a prompt payment discount on any other contract, public or private, then the District shall be extended the same discount on this Agreement and shall be so notified of the existence of the discount and the terms thereof.
- 17. **DAMAGE TO BUILDINGS, EQUIPMENT, AND VEGETATION.** The Contractor shall use reasonable care to avoid damaging existing buildings, equipment, and vegetation on the District premises. If the Contractor's failure to use reasonable care causes damage to any District property, the Contractor shall replace or repair the damage at no expense to the District as the District directs. If the Contractor fails or refuses to make such repair or replacement, the Contractor shall be liable for the cost, which may be deducted from the contract price.

- 18. NOTICE OF BANKRUPTCY. In the event that Contractor enters into bankruptcy proceedings, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail or electronic mail, written notification of the bankruptcy to the District office responsible for administering the contract. This notification shall be furnished within five (5) days of the initiation of proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of District contract numbers and contracting offices for all District contracts against which final payment has not been made. This obligation remains in effect until the District makes final payment under this Agreement.
- 19. **AVAILABILITY OF FUNDS.** The Parties acknowledge and agree that the District is a governmental entity and due to statutory provisions cannot commit to the payment of funds beyond its current fiscal year (July 1 through June 30). If funds are not allocated for the Project for any succeeding fiscal year during which this Agreement may continue, the District may terminate this Agreement at the end of the last fiscal period for which funds have been allocated without liability for any termination charges, fees, or penalties. The District shall be obligated to pay all charges incurred through the end of the last fiscal period for which funds were appropriated.
- 20. **RECORDS.** The Contractor shall maintain all records pertaining to this Agreement on file for not less than ten (10) years and until any audit issues are resolved. The Contractor shall make such records available to the District or any duly authorized representative of the District upon request. If this is a federally funded contract, the Contractor shall comply with all federal records retention rules, regulations and laws and shall allow access to such records as required by federal law.

21. TERMINATION BY THE OWNER FOR CAUSE.

- 21.1The District may terminate the Contract if the Contractor:
- .1 refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to Subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the Subcontractors;
- .3 disregards applicable laws, statutes, ordinances, codes, rules and regulations or lawful orders of a public authority; or
- .4 otherwise is guilty of breach of a provision of the Contract Documents.
- 21.2. When any of the above reasons exists, the District may, without prejudice to any other remedy the District may have and after giving the Contractor seven days' written notice, terminate the Contract and take possession of the site and of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor and may finish the Work by whatever reasonable method the District may deem expedient. Upon request of the Contractor, the District shall furnish to the Contractor a detailed accounting of the costs incurred by the District in finishing the Work.

- 21.3 When the District terminates the Contract for one of the reasons stated in this Article 21, the Contractor shall not be entitled to receive further payment until the Work is finished.
- 21.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including expenses of the District made necessary thereby, and other damages incurred by the District and not expressly waived, such excess shall be paid to the Contractor to the extent of Work that was actually and satisfactorily performed by the Contractor. If such costs and damages exceed the unpaid balance, the Contractor and/or the Contractor's surety shall pay the difference to the District.
- 22. <u>WAIVER OF DEFAULT</u>. If the District consents to or waives the breach of any provision of covenant in this Agreement, such waiver shall not constitute a waiver of such provisions or covenant as to the future, and the District shall not be estopped from later enforcing any provision or covenant it may have previously waived or elected not to enforce; nor shall such waiver have any effect on the enforcement of any other provision of this contract.
- 23. **TERMINATION FOR CONVENIENCE OF DISTRICT**. The District may terminate this Agreement at its option without obligation upon fourteen (14) days written notice to the Contractor. The District may terminate this Agreement for any reason or no reason at all. Should the District terminate this Agreement for cause, but that cause be subsequently found to be insufficient to support termination, the termination shall be deemed one of convenience.
- 24. **EFFECT OF TERMINATION FOR CONVENIENCE**. If the District terminates this Agreement for its convenience, then the District shall only remit payment to the Contractor for Work satisfactorily performed up to the date of termination. In no event shall the Contractor be entitled to lost or anticipatory profits. Upon receipt of written notice from the District of a termination for convenience, the Contractor shall with respect to the Work that is terminated: (i) cease operations as directed by the District in the notice; (ii) take actions necessary, or that the District may direct, for the protection and preservation of the Work; and (iii) except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

25. MISCELLANEOUS

- a. Contractor represents and warrants that it possesses the requisite qualifications and personnel to provide the services agreed to herein.
- b. Neither party may assign or sub-contract this Agreement or any right or interest herein without the prior written consent of the other party. The subcontract form between the Contractor and a subcontractor shall meet the applicable requirements of Ohio Administrative Code 153:1-3-01 and 153:1-3-02.
- c. This Agreement shall be binding upon and inure to the benefit of the Parties, their successors, and permitted assigns.

- d. In the event of inconsistencies within or between parts of the Contract Documents or between the Contract Documents and applicable standards, codes, and ordinances that are not clarified through a modification, the Contractor shall (i) provide the better quality or greater quantity of Work or (ii) comply with the more stringent requirement; either or both in accordance with the Owner's interpretation. Anything shown in the drawings and not mentioned in the specifications, or mentioned in the specifications and not shown on the drawings, shall have the same effect as if shown or mentioned respectively in both. Any Work shown on one drawing shall be construed to be shown in all drawings.
- e. The paragraph headings are for convenience only and shall not affect the interpretation of this Agreement.
- f. The validity and construction of this Agreement shall be determined in accordance with the laws of the State of Ohio, without regard to any conflict of law provisions. The Court of Common Pleas of Cuyahoga County, Ohio shall have exclusive jurisdiction over any action concerning this Agreement except that if the U.S. District Court is determined to have exclusive jurisdiction, then the forum shall be the U.S. District Court for the Northern District of Ohio.
- g. The Contractor and all subcontractors shall comply with all local, state and federal laws, rules, regulations and ordinances.
- h. No travel expense reimbursement is authorized unless specifically stated in this contract. If so stated, the meals, travel, and lodging are reimbursable only in strict compliance with the Ohio Auditor of State Technical Bulletins, Guidance and Rules and Regulations and, if this contract is federally funded in whole or in part, in strict compliance with all rules, regulations and guidance of the U.S. Office of Management and Budget and any other federal office or agency having jurisdiction over federally funded contracts.
- i. This document contains the entire Agreement between the parties with respect to the services to be provided hereunder. The Parties hereby represent that there are no representations, understandings or agreements between the Parties related to the Project, whether oral or written, which are not included herein.
- 26. CONFLICT OF INTEREST. The Contractor represents that none of its employees, directors, officers or agents is an employee or board member of the Cleveland Municipal School District. The Contractor further represents that no employee or board member of the Cleveland Municipal School District has any ownership interest in or fiduciary duties to the Contractor or any of its affiliates. The District's signatory to this Agreement represents that neither he/she or any family member have any ownership interest in or fiduciary duties to the Contractor or any of its affiliates.
- 27. <u>TAXES.</u> The Contractor shall pay applicable sales, consumer, use and other similar taxes that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect. District will provide to Contractor, upon request, a completed State of Ohio Sales and Use Tax Construction Contract Exemption Certificate.

- 28. **INSURANCE.** During the term of this Agreement, the Contractor shall, at its own expense, purchase and maintain insurance in no less that the following amounts and with the following conditions:
 - a. Workers' Compensation and employers' liability insurance to the fullest extent required by applicable law;
 - b. Commercial general liability coverage for bodily injury and property damage, including stopgap employers' liability coverage, contractual liability coverage and an exception to any applicable pollution or asbestos exclusion. If a claims policy is used, it must have an unaltered extended discovery period provision, in not less than the following amounts:
 - i. General Aggregate Limit: \$2,000,000 CSL per location;
 - ii. Each Occurrence Limit: \$1,000,000 CSL per location; and
 - c. Commercial automobile liability coverage, including non-owned and hired automobiles, in an amount not less than \$1,000,000; and
 - d. property insurance on an "all-risk" or equivalent policy form, including builder's risk. The amount of the insurance shall be equal to the Contractor's Contract Sum plus the value of subsequent modifications and cost of materials supplied and installed by others, comprising total value for the entire Project at the site on a replacement cost basis without optional deductibles. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made or until no person or entity other than the District has an insurable interest in the property required by this Article to be covered, whichever is later. This insurance shall include interests of the District, the Contractor, Subcontractors and sub-subcontractors in the Project.
 - e. The Contractor shall provide the District with certificates of insurance evidencing the required coverages and amounts, including without limitation any certificates of renewal. Each policy required to be purchased or maintained by the Contractor, with the exception of the Workers' Compensation policy, shall name the District as an additional insured (for the purposes of this Agreement, being a certificate holder does not constitute being named as an additional insured). The certificates of insurance shall contain a provision that the policy or policies will not be cancelled without thirty (30) days' prior written notice to the District. Upon the District's request, the Contractor shall provide complete copies of any or all policies for the District to review. All certificates must be received and approved by the District before any Work under this Agreement commences.
- 29. **PAYMENT AND PERFORMANCE BONDS.** If applicable, the Contractor shall furnish payment and performance bonds as required by Ohio Revised Code Section 153.54, in the form required by Ohio Revised Code Section 153.57 and 153.571, and shall provide the District with proof of such bonds at the time of entering into this Agreement.

30. **PROTECTION OF PERSONS AND PROPERTY.** The Contractor will take no action that would jeopardize the safety of the District's students, employees or guests. The Contractor will not take any action that would interfere with the District's activities without the District's prior written approval. The District reserves the right to require Contractor, its employees and agents to wear identification and stay in designated Work areas at all times while on the District's property. The District shall have the right to require Contractor to remove any of its employees or agents from the Project for failing to wear proper identification, being outside the designated Work area, fraternizing with or engaging in any improper behavior directed towards or in the vicinity of students, employees or guests of the District, or for any other good cause shown.

The Contractor shall take all reasonable safety precautions with respect to its Work and shall comply with all safety measures of the District and all applicable laws, ordinances, rules and regulations for the safety of persons or property in connection with the Contractor's performance under this Agreement. Contractor shall take any precautions necessary to protect the Work of other trades from damages cause by its operations.

31. WARRANTY AND CORRECTION OF WORK. Contractor warrants that (i) all materials and equipment furnished and incorporated by it in the Project shall be new, (ii) all materials, equipment and Work provided by it shall be of good quality, free from any faults and defects and (iii) all materials, equipment and Work provided by it shall be in conformity with all applicable laws, rules and regulations and with the Contract Documents. Contractor shall correct any Work that fails to conform with any applicable law, rule or regulation or with the requirements of the Contract Documents if such failure to conform appears during the progress of the Project. The Contractor agrees to assign to the District at the time of final completion of the Work any and all manufacturer's warranties relating to materials and labor used in the Work and further agrees to perform the Work in such manner so as to preserve any and all such manufacturer's warranties.

In addition to, and not in limitation of the foregoing warranties, Contractor shall also remedy any defects due to faulty materials or workmanship which appear within a period of one (1) year from the date of completion of the Project. One month prior to the expiration of the one (1) year period, the Contractor shall attend a walk-through of the Project.

- 32. **ANTI-ABUSE OF DRUGS AND ALCOHOL.** The Contractor shall make a good-faith effort to ensure that no employee of the Contractor will purchase, transfer, use, possess or be under the influence of alcohol or illegal drugs or abuse legally-obtained drugs while on or about the Project. Except for the term "employee," terms in this paragraph are used as defined in Rule 123:1-76 of the Ohio Administrative Code.
- 33. CHANGES TO THE PROJECT. By appropriate modification, changes in the Project may be accomplished after execution of this Agreement. The District, without invalidating this Agreement, may order changes within the general scope of the Project consisting of additions, deletions or other revisions, with the Contract Sum and term of the Agreement being adjusted accordingly. Such changes in the Project shall be authorized by either (i) mutual agreement of the Parties through a written Change Order signed by the

District and the Contractor, or (ii) in the absence of mutual agreement, by written Construction Change Directive signed only by the District.

In the case of a Construction Change Directive signed only by the District, adjustments in the Contract Sum shall be determined by calculating the Contractor's cost of additional labor, material and equipment and a reasonable allowance for overhead and profit, unless the Parties agree on another method for determining the cost or credit. Pending final determination of the total cost of a Construction Change Directive, the Contractor may request payment for Work completed pursuant to the Construction Change Directive, and the District will make an interim determination of the amount of payment due for purposes of certifying the Contractor's invoice for payment. When the District and Contractor agree on adjustments to the Contract Sum and/or the term of this Agreement arising from a Construction Change Directive, the District will prepare a Change Order. The Contractor shall proceed diligently with the performance of the changes in the Project following receipt of and as set forth in the Construction Change Directive pending resolution of a Change Order.

The District will have authority to order minor changes in the Project not involving adjustment in the Contract Sum or extension of the term of this Agreement and not inconsistent with the intent of the Contract Documents. Such changes shall be effected by written order and shall be binding on the District and Contractor. The Contractor shall carry out such written orders promptly.

Agreement on any Change Order shall constitute a final settlement of all claims of the Contractor relating to the change in the Project that is the subject of the Change Order, including, but not limited to, all direct and indirect costs associated with such change and any and all adjustments to the Contract Sum and the construction schedule.

34. <u>SUBMITTALS.</u> The Contractor shall review for compliance with the Contract Documents and submit to the District shop drawings, product data, samples and similar submittals required by the Contract Documents in such sequence as to allow the District reasonable time for review. By submitting shop drawings, product data, samples and similar submittals, the Contractor represents to the District that the Contractor has (1) reviewed and approved them; (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so; and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents. The Work shall be in accordance with approved submittals. shop drawings, product data, samples and similar submittals are not Contract Documents. In the event of a conflict between submittals and the Contract Documents, the Contract Documents take precedence and govern the Work unless the variance in the submittals is accepted by Change Order.

35. <u>OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS AND</u>

OTHER INSTRUMENTS OF SERVICE. Instruments of service, including drawings and documents that are required to be provided or prepared by the Contractor or Subcontractor pursuant to this Agreement shall become, upon payment of all undisputed payments due the

Contractor, the property of the District whether or not the Project for which they are prepared is commenced or completed. The Contractor may retain copies, including reproducible copies of such instruments of service for information and reference. Such instruments of service may be used by the District or others employed by the District for reference in any completion, correction, remodeling, renovation, reconstruction, alteration, modification of or addition to the Project, without compensation to the Contractor or Subcontractors. Such instruments of service shall not be given or sold by the District to be used by others on other projects except by agreement in writing and with agreed upon appropriate compensation to the Contractor or Subcontractor, as applicable. The Contractor shall not be held liable if (i) a third party receives the instruments of service and either modifies, changes or uses them for the Project in a way not originally anticipated when the documents were created, or (ii) the instruments of service are used by others not related to the Project without the involvement of the Contractor. If any event occurs for which the Contractor may be liable, the District shall notify the Contractor of such event as soon as practical after such event and shall provide access to the Project to the Contractor, Subcontractor and their representatives.

36. <u>COMMUNITY INCLUSION PLAN PROGRAM.</u> Contractor shall adhere to the requirements of the District's Community Inclusion Plan Program, Exhibit C, and the District's goals with respect to its Diversity Business Enterprise Program and Workforce Participation Program.

37. CLAIMS AND DISPUTES.

- 37.1 The parties are fully committed to working with each other throughout the project and agree to communicate regularly with each other at all times so as to avoid or minimize disputes or disagreements.
- 37.2 Contractor and District will first attempt to resolve any dispute, disagreement, controversy or claim (including a claim that is not resolved in accordance with Section 37.1) through direct discussions. Upon the request of either party, Contractor and District shall meet as soon as possible, but in no case later than thirty (30) days after such a request is made, to attempt to resolve such dispute or disagreement. Prior to any meetings between Contractor and District, the parties will exchange relevant information that will assist the parties in resolving their dispute or disagreement. If the meeting does not occur within the thirty (30) day period, or if after meeting Contractor and District determine that the dispute or disagreement cannot be resolved on terms satisfactory to both parties, the parties may, within thirty (30) days thereafter, follow the process set forth in Section 37.3 herein.
- 37.3 Any dispute, disagreement, controversy or claim between District and Contractor arising out of or related to this Contract, or the breach thereof not resolved through the process set forth in Section 37.2, shall be settled by litigation as the method of binding dispute resolution. In addition, the Parties may, by written agreement, submit any disputes to non-binding mediation upon such terms as shall be mutually agreeable and such mediation shall take place at an agreed-upon location in Cuyahoga County, Ohio. The mediation may occur concurrently with or prior to litigation. This Article shall not prevent either party from bringing a third party claim in pending litigation for indemnity and/or contribution.

MINIMUM WAGES. Laborers and mechanics employed on the Project will be 38. paid the full amount of wages and bona fide fringe benefits or cash equivalents thereof at rates not less than those contained in the applicable general wage determinations by the United States Department of Labor ("DOL") in accordance with the Davis-Bacon Act, 40 USC 3141 et seq. and 29 CFR, Parts 1, 3, 5, 6 and 7. The current DOL general wage determination is attached as Exhibit D. In the event that the class of work of any of the laborers or mechanics for the Project are not covered by the DOL's general wage determination, the Contractor shall use good faith efforts to obtain a classification and wage rate determination from the DOL. In the event the Contractor is unable to obtain the classification and determination from the DOL, then the Contractor shall utilize the rate and classification for Cuyahoga County, Ohio as established in the applicable collective bargaining agreement for the Work, regardless of whether the Contractor is a party to the collective bargaining agreement. The District will not seek enforcement of the wage rates through the DOL or the mechanisms of 40 USC 3141 et seq. Rather, the District shall be entitled to rely upon the accuracy and completeness of certified payroll reports of compliance with the wage rate requirements submitted by Contractor. When submitting certified payroll reports, Contractor shall utilize the DOL Form WH-347 or equivalent form. Failure to pay the wage rates will be deemed non-compliance and a material breach of the terms and conditions of this Agreement.

[Signature Page Follows] CONTRACT MUST BE APPROVED BY CMSD LEGAL DEPARTMENT PRIOR TO SIGNATURE

	Approved as to form:
	Law Department Cleveland Municipal School District
	DATE:
**********	****************
<u>NO'</u>	TICE TO VENDORS
CONTRACT HAS BEEN SIGNED	RE NOT TO BE PROVIDED UNTIL AFTER THE BY A DULY AUTHORIZED REPRESENTATIVE OF IRCHASE ORDER HAS BEEN ISSUED TO THE
FOR GOODS AND/OR SERVI	SCHOOL DISTRICT IS NOT OBLIGATED TO PAY CES PROVIDED PRIOR TO THE DATE THIS BY AN AUTHORIZED CMSD REPRESENTATIVE.
**********	*********************
· •	ies hereto have caused this Agreement to be executed by es as of the day and year first above written.
[CONTRACTOR]	CLEVELAND MUNICIPAL SCHOOL DISTRICT
Ву:	By:



PART 2

For the Cleveland Metropolitan School District

FORMS AND SPECIFICATIONS

#21206

SECTION 00100

INSTRUCTIONS TO CONTRACTOR

PART 1 GENERAL

1.01 EXAMINATION

- A. In order to discover and resolve conflicts or lack of definition which might create problems, Contractor must review Contract Documents, existing site conditions, and existing equipment specified to be retained for compatibility with its product prior to submitting bid. Site review shall include, but not be limited to adequacy of access, retained equipment, elevator hoist ways, pits, machine rooms, overhead clearances, electrical power characteristics, structural supports, etc. Investigation and structural calculations required to determine compliance of existing elevator components including machine support beams, with ASME A17.1, Rule 8.7.2.15.2, are responsibility of Contractor. Compliance with all provisions of Contract Documents is assumed and required in absence of written exception. If written exception is acceptable to Contractor and Consultant, an Addendum to the specifications will be issued. Purchaser will not pay for change to building structure, structural supports, mechanical, electrical or other systems required to accommodate Contractor's equipment.
- B. Submission of bid is considered evidence that Contractor has visited and is conversant with the site facilities, site conditions, requirements of the Contract Documents, pertinent state and local codes, state of labor and material markets, and has made due allowance in his bid for all contingencies. Should Contractor's investigation of site conditions or local codes or rules reveal requirements contrary to Contract Documents, or if Contractor finds any discrepancies or omissions from Contract Documents, or if Contractor is in doubt as to their meaning, he shall contact the Consultant for clarification at least five working days prior to bid due date.
- C. No oral explanation will be made and no oral instructions will be given before bid due date and Contractor Award. Contractor shall act promptly and allow sufficient time for a reply to reach him before submission of his bid. Any required interpretation or supplemental instructions will be issued in the form of an addendum to the specifications publicly posted.

D. Provide everything necessary for and incidental to the satisfactory completion of work required by Contract Documents. All required preparations and hoisting and movement of new equipment, reused equipment, or removal of existing equipment shall be the responsibility of the Contractor.

1.02 EXISTING MAINTENANCE CONTRACT

A. If Contractor currently providing equipment maintenance under contract with Purchaser is included on the list of invited Contractors for this Contract, Contractor acknowledges and agrees that said contract shall be immediately null and void upon award of this Contract to Contractor or alternate invited Contractor. Further, if present Maintenance Contractor is not the successful firm in regard to this Contract, Maintenance Contractor agrees to deliver existing as modified control wiring diagrams to Purchaser and immediately remove its equipment and materials from the premises with the Purchaser or Purchasers' representative present. Purchaser shall withhold final maintenance payment due until Maintenance Contractor is in compliance with this requirement.

END OF SECTION

SECTION 00310

BID FORM

SECTION 00310 "BID FORM" CONSISTS OF SIX (6) PAGES AND MUST BE SIGNED BY THE VENDOR IN THE INDICATED SPACE ON PAGE 62

PROJECT NAME: ELEVATOR RENOVATIONS AT JOSEPH GALLAGHER, SOUTH HIGH SCHOOL AND WILBURWRIGHT

BID DATE:								
NAME OF BIDDING CONTR	ACTOR							
ADDRESSSTRI	EET							
CITY	?	STATE	ZIP					
PHONE NO:	FAX NO:							
BY								
TITLE								
costs and permit fee Gallagher, South H Documents and Pur	ation, equipment, to pay for all es necessary, to complete the wigh School and Wilbur Wright, rchase Order, as described in the gall addenda issued.	ork for the Elevator Reno as required by said propo	vations at Joseph sed Contract					
	BID: Joseph Gallagher ope of Work)							
The Base Bid is to include the following items, as listed below. Any additional work beyond the unit's specified will billed at the unit cost, through change orders. Provide the interim maintenance included in the base bid proposal, the warranty maintenance should include the total cost of the twelve (12) month period, and the five (5) year maintenance should quoted per car, per month, for the first year of the agreement.								
A . 1	Replacement Elevator	\$						
В.	Related Items by Other Trades	\$						
C. 1	Interim Maintenance - Car 1	\$						
D.	Warranty Maintenance – Car 1	\$						

	E.	Five Year Maintenance – Car 1	\$
	Al	lowance 10% of Items A & B	\$
	Jos	seph Gallagher Total Project Cost	t \$
2.		E BID: South High School Scope of Work)	
	specified withe base bid	ill billed at the unit cost, through change proposal, the warranty maintenance sho	sted below. Any additional work beyond the unit's orders. Provide the interim maintenance included in uld include the total cost of the twelve (12) month sted per car, per month, for the first year of the
	<u>Ca</u>	<u>ur 1</u>	
	F.	Traction Passenger Elevator – Car 1	\$
	G.	Related Items by Other Trades - Car 1	\$
	<u>Car</u>	<u>r 2</u>	
	H.	Traction Passenger Elevator – Car 2	\$
	I.	Related Items by Other Trades - Car 2	\$
	J.	Interim Maintenance - Car 1 &2	\$
	K.	Contract Maintenance – Car 1 & 2	\$
	L.	Five Year Maintenance – Car 1 & 2	\$
	Al	lowance 10% of Items F, G, H, I	\$
	So	uth High School Total Project Co	st \$
3.		E BID: Wilbur Wright Scope of Work)	
	specified withe base bid	ill billed at the unit cost, through change proposal, the warranty maintenance sho	sted below. Any additional work beyond the unit's orders. Provide the interim maintenance included in uld include the total cost of the twelve (12) month sted per car, per month, for the first year of the
	M.	Hydraulic Elevator Modernization Car 1	\$
	N.	Related Items by Other Trades Car 1	\$

O	. Interim Maintenance - Car 1	\$	
P.	Contract Maintenance – Car 1	\$	
Q	. Five Year Maintenance – Car	r 1 \$	
Al	llowance 10% of Items M & N	\$	
•	Wilbur Wright Total Proj	ect Cost \$	
	ALL ITEMS #1, #2, & #3 Maint. Contract Maint. a		
4. AL T	ΓERNATES		
ALTERNATE #1 – New – Geared Machine at South High School For the Sum of \$			h High School
			!>
	*********** ATE #2 – New – Battery 8 School		
·	ATE #2 – New – Battery : School	Standby Power T	
ALTERN	ATE #2 – New – Battery : School	Standby Power T he Sum of \$_	ransfer at South F
ALTERN	ATE #2 – New – Battery School For tl	Standby Power T he Sum of \$_	ransfer at South F
******** 3. ADDENI	ATE #2 – New – Battery School For tl	Standby Power T he Sum of \$_ :******	ransfer at South F
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CHANGE ORDERS

5.

Change Orders reflecting work not covered by the base bid or unit prices there-in, shall be reimbursed to the Contractor. Allowable profit and overhead shall be as outlined in the general and supplementary conditions, and the Contractor will, upon request, make all records available to the owner to determine such percentage, without exception, to the owner's satisfaction

The Owner must approve, in writing all Change Order Work prior to commencement.

Provide labor cost to reflect the hourly rate affected Contractor, to complete additional work required,

Note: If labor, is required from other trades, labor costs must be documented and reviewed by the Owner's Representative prior to executing any additional required work.

6. GENERAL NOTES

NOTE #1 It is understood and agreed that work embodied in the Contract and or Purchase Order shall start and be Completed as specified in Elevator Technical Spec Section for the - ELEVATOR RENOVATIONS AT JOSEPH GALLAGHER, SOUTH HIGH SCHOOL AND WILBUR WRIGHT, unless an extension of time

is granted by the owner.

Upon failure to have all work completed within the period of time above mentioned, the Contractor shall forfeit and pay, or cause to be paid, to the Owner, for and as liquidated damages to be deducted from any payments due or to become due to the said Contractor, the sum of two hundred dollars (\$200.00) per day for each and every day thereafter that the said work remains in an unfinished condition.

- NOTE #4 Bid Bond and Performance Bond are required.
- NOTE #5 The wording of this Proposal shall be retained throughout, without change, alteration, additions or substitutions. Any change in the wording may cause the Proposal to be rejected.
- NOTE #6 Contractors are responsible for measurements, quantities of tear-off and installation, or handling that may affect their bids. No allowance shall be made for any oversight on the Contractor's part not qualified in his bid or allowed for in the specifications including measurements of areas, quantities of thickness, or amounts of materials or items to be removed and installed.
- NOTE #7 Bidders Qualifications: The experienced bidder must have completed applications similar in material and extent to those indicated for the project that have resulted in a construction record of successful in-service performance for at least the last five consecutive years unless otherwise noted within this specification.

- NOTE #8 Custodial Overtime will only apply if Contractor needs access to Building. The Custodians normal hours differ by building. If the contractor needs access to Building Interior, before or after the Custodian normal work hours, the contractor is responsible for the custodial overtime at \$40.52 for Joseph M. Gallagher, \$53.31 for South, and \$49.16 for Wilbur Wright.
- NOTE #9 This is a Lump Sum Total Cost Project for the Elevator Renovations at Joseph Gallagher, South High School and Wilbur Wright, as described in the scope of work. Cost to include permits, insurance, equipment, transportation, materials, labor management/supervision and incidentals to provide a complete job. The enclosed Bid Form must be used. The District reserves the right to award to a single vendor or multiple vendors at the discretion of the District based on the responsibleness of the vendor and their ability to execute each scope of the contract in a timely manner. The lowest responsive responsible vendor(s) will be selected for award.
- NOTE #10 Allowances #1: Any unused funds from this Allowance will be returned to the District at the end of the Project, thru a Change Order.
- NOTE #11 Schedule: Undersigned agrees to the following completion schedule for the project. The time for Contract Completion from the Notice to Proceed (NTP), or Issuance of Contract is listed below for each building:
 - -Joseph Gallagher: Between June 5th and August 7th, 2017
 - -South High School: 280 consecutive days. On site construction to begin 140 consecutive days, after NTP, or issuance of contract.
 - -Wilbur Wright: Between June 5th and August 7th, 2017

If the bidder submits a price for the building and is awarded the contract, the bidder is obligated to meet the schedule provided for the building, regardless of the amount of buildings awarded to the bidder.

Note: Start work date is date existing unit is removed from service for modernization. Wilbur Wright and Joseph Gallagher must be completed between June 5th, 2017 and August 4th, 2017. If not complete by deadline, contractor will be liable for Liquidated Damages.

Liquidated damages in the amount of \$200 per day, shall be assessed on a per calendar day rate, for completion of the project after the milestone and substantial completion deadline.

NOTE 12: Awarded vendor(s) will be required to execute a construction agreement and optional preventative maintenance agreement if the District elects to purchase long-term preventative maintenance. Samples of both agreements are enclosed.

This Bid is submitted by the following authorized individual / firm:
BIDDER
BY:
SIGNATURE
ADDRESS:
Type of Business Entity:
Individual Member of the Firm:
President of Corporation
Secretary of Corporation:
Corporation is organized under laws of the State of
Bid dated this,,

END OF BID FORM

SECTION 00800

SUPPLEMENTAL CONDITIONS

PART 1 GENERAL

1.01 DEFINITION OF TERMS

- A. Term ELEVATOR CONSULTANT or CONSULTANT as used herein refers to Lerch Bates Inc. (Lerch Bates).
- B. PURCHASER as used herein refers to Cleveland Public Schools.
- C. The term CONTRACT or CONTRACT DOCUMENTS as used herein consists of the Agreement, Conditions of Contract, Specifications, Addenda, Drawings if included, and Alternates if accepted.
- D. CONTRACTOR or ELEVATOR CONTRACTOR as used herein refers to any persons, partners, firm, or corporation having a contract with Purchaser to furnish labor and materials for the execution of work required.
- E. CONTRACT AWARD as used herein refers to Purchaser's verbal or written award for work required.
- F. SUBCONTRACTOR as used herein refers to any persons, partners, firm, or corporation having a contract with Contractor to furnish labor and materials for the execution of work required.
- G. As used in these Contract Documents "provide" shall be understood to mean "furnish and install"
- H. As used in these Contract Documents "retain or reuse existing" shall be understood to mean restore existing components or parts to like-new condition.
- I. Words in the singular shall include the plural whenever applicable or context so indicates.
- J. All technical terms in these Contract Documents have their definition given in latest edition of American National Standard Safety Code for Elevators, Dumbwaiters, Escalators, and Moving Walks ASME A17.1. and A17.2.

1.02 CONSULTANT'S STATUS

- A. Consultant shall act as Purchaser's and/or Building Management's representative on all matters pertaining to required work. Consultant shall interpret Contract Documents, analyze Contractor's bids, review Contractor suggested alternates, review all submittals of Contractor, approve billings, review technical details and construction procedure, perform work progress reviews and review and test completed work for compliance with Contract Documents prior to acceptance of work by Purchaser.
- B. Field Review Scheduling: Schedule progress and final work reviews with Consultant. Reply promptly, in writing, to corrective work indicated on Consultant's progress and/or final review reports, indicating status and schedule for completion. Consultant anticipates scheduled site review appointments will be met. Contractor's price will be reduced to reimburse Consultant at its normal billing rates for appointments not kept or for additional follow up reviews required due to Contractor's gross non-compliance with previous review requirements.

1.03 CONTRACT

- A. Contract includes all engineering, labor, tools and material required to complete the work in every respect. Contractor is cautioned to familiarize itself with existing site conditions and to include all incidental work that might occur or be required during the work. After Contract has been awarded, verbally or in writing, no extra charges will be allowed for any labor or material necessary to complete required work whether exactly described in these specifications herein or not, as long as such work, labor, and material are required to accomplish desired effect and results.
- B. Any discrepancies or ambiguities found in Contract Document or drawings shall be reported to the Consultant prior to Contractor's bid submittal.

1.04 MEASUREMENTS AND DRAWINGS

A. Drawings or measurements included with Contract Documents are for convenience of Contractor. Complete responsibility for detailed dimensions lies with Contractor. Contractor shall verify all dimensions with the actual on site conditions. Where work of Contractor is to join another trade, Contractor's shop drawings shall show actual dimensions and method of joining work of those trades.

1.05 CODES AND ORDINANCES

A. All work covered by these Contract Documents is to be done in full accord with national code, state and local codes, ordinances, and elevator safety orders as are in effect at time of Contract award. All requirements of local Building Department and fire jurisdiction

are to be fulfilled by Contractor and its Subcontractors. Also see Section 01040, Article 1.01.

1.06 CONTRACTOR'S INSURANCE

- A. Contractor shall take out and maintain during the life of this Contract Worker's Compensation Insurance with statutory limits set by the State of Ohio laws for protection of its employees.
- B. Contractor shall carry a comprehensive general liability policy including completed operations blanket contractual broad form property damage, and Purchaser's and Contractor's protective liability in a casualty or liability insurance company acceptable to Purchaser. Insurance policy shall fully protect Contractor, its Subcontractors, Purchaser, and Consultant from all loss and liability.
- C. Prior to commencing work, Contractor shall secure required insurance, at its sole cost, and submit certificate of confirmation naming indemnified parties as additional insured. Said policies, including an endorsement which states that such insurance will not be cancelled or materially changed unless Purchaser is given thirty (30) days' notice, in writing, of the intention of said insurer to cancel or change any such policy. In the event Property is owned by a joint venture or other multi-party entity, all joint venture partners or parties with an equity interest in the ownership shall be named as additional insureds. Contractor's insurance shall be primary to any applicable loss. With Purchaser's prior approval, an Owners & Contractors Protective Liability (OCPL) Policy may be substituted for commercial general liability coverage. The minimum insurance requirements are listed in Section II: Instruction to Proposers, 20. Contractor shall file with Purchaser a certificate of insurance from its insurance company, stating that such insurance is being carried and that Purchaser will be notified at least 10 days prior to any cancellation of said insurance.

1.07 PURCHASER INSURANCE

A. Purchaser's insurance policy covers work and equipment in place in building and approved and accepted by Consultant and Purchaser. All material and equipment stored on site and not actually installed is not included in Purchaser's policy and such material and equipment shall be covered under Contractor's Property Damage Insurance.

1.08 TAXES, OLD AGE PENSIONS AND UNEMPLOYMENT INSURANCE

A. Contractor's bids for required work, materials and equipment shall include all local, state, and federal occupational and sales taxes, luxury taxes, excise taxes, federal and state old age pensions, unemployment insurance contributions, and any other similar taxes and contributions in effect at time of award of Contract, verbally or in writing. Contractor

shall be liable for aforementioned taxes whether or not specifically included in his bid or in final Contract Document. In event additional sales or use taxes are imposed after award of Contract, such sales or use taxes are to be paid, in addition to original Contract amount, by Purchaser to Contractor, who in turn is to pay them to proper authorities. Reciprocally, if any of above mentioned taxes or contributions in effect at time of award of Contract should be revoked before consummation of Contract, Contractor shall rebate Purchaser amount of taxes included in original bid and Contract. Where required by law, amount of the tax is to be specifically stated in Contractor's bid; however, failing to do so will not relieve Contractor from responsibility for assumption of these taxes.

1.09 LABOR LAWS

A. Contractor and its Subcontractors performing work under this Contract shall comply with applicable provisions of all federal, state, and local labor laws.

1.10 PATENTS

- A. Contractor shall save and hold harmless Purchaser and its officers, agents, servants, employees, and Consultant from liability of any nature or kind on account of any patented or unpatented invention, process, article, or appliance manufactured or used in performance of Contract, including its use by Purchaser including all cost and expenses for defending any suits unless otherwise specifically stipulated in Contract Documents.
- B. Licenses which may be required for completion of required work are to be obtained and paid for by the Contractor.

1.11 ASSIGNMENTS

A. Neither party to this Contract shall assign Contract or sublet it as a whole without written consent of other party, nor shall Contractor assign any payment due him or to become due to him hereunder without previous written consent of Purchaser.

1.12 ADVERTISING

A. Advertising privileges will be retained by Purchaser. It is the duty of Contractor to keep premises free from posters, signs, decorations, etc., unless specifically approved by Purchaser.

1.13 PROTECTION OF WORK AND PROPERTY

A. Contractor shall continuously maintain adequate protection of all its work from damage and shall protect Purchaser property from injury or loss arising out of this Contract. Contractor shall make good any such damages, injury, or loss, except such as may be directly caused by agents, subcontractors, or employees of the Purchaser. Contractor shall provide all barricades required to protect open hoistways or shafts per OSHA

- regulations. Design of barricades in public areas shall be approved by Purchaser prior to fabrication and installation.
- B. If Contract includes work which would be disruptive during normal business operations, or would be dangerous to building occupants, said work shall be performed during hours as building management dictates. Examples of such work include, without limitation, saw cutting of concrete, jack hammering, welding, metal cutting, pouring concrete, erecting steel or hoisting equipment over occupied portions of the building, or performing tests requiring all elevators in a group. Contractor shall perform such work during off-hours and shall include all costs in its bid.
- C. Contractor shall install a suitable protective covering on all finished floors whether marble, wood, carpet or other, in areas where work is being performed. No material handling equipment shall be permitted on or over finished floors unless said floors have been protected in a manner approved by building management.
- D. Portable fire extinguishers shall be provided throughout Contractor's area of work and shall be placed so as to be accessible at all times. Extinguishers shall be multi-purpose dry chemical type, provided on a basis of one 2A-20BC rated unit for each 3,000 square feet of floor area. Extinguishers will remain property of Contractor.
- E. Contractor shall at all times maintain work areas so all portions are accessible to fire department personnel and apparatus. Fire hydrants and fire department connections to building sprinkler systems must be kept free from obstruction at all times.
- F. Contractor shall strictly supervise any welding, metal cutting or other operations employing open flame work. All welding and cutting equipment shall be safely arranged and all combustibles in vicinity of any work being performed shall either be removed or protected by a noncombustible cover. Welding or cutting shall be attended by an assistant or fire watchman who is equipped with at least one 2A-20BC rated multipurpose dry chemical fire extinguisher. Fire watchman will maintain strict surveillance during entire welding or cutting operation and extinguish flying sparks or burning slag. After welding or cutting operation fire watchman shall thoroughly search entire area for remnants of smoldering materials before he is released from his duty. Any welding or other operation employing open flame in any portion of building shall be scheduled with and receive approval of Purchaser.
- G. Contractor shall keep noise level below 80 db level during normal building hours. When it is necessary to produce noise above this level, Contractor shall advise building management of such needs and times will be scheduled as directed. The Contractor shall anticipate and schedule excessive noise generating procedures and include allowance for same in its bid and schedule.

1.14 ACCIDENT REPORTS

A. In the event of accidents of any kind, Contractor shall furnish Purchaser with copies of all accident reports. Reports shall be sent without delay and at same time that they are forwarded to any other parties.

1.15 STORAGE OF MATERIALS

A. Contractor shall confine storage of materials on job site to limits approved by Purchaser and shall not unnecessarily encumber premises or overload any portion of building with materials to a greater extent than structure design load.

1.16 REMOVAL OF EQUIPMENT AND RUBBISH

A. Contractor shall remove and properly dispose of all rubbish as fast as it accumulates including all existing parts and components not retained, keeping building and premises clean during progress of work and leave premises at completion in a condition acceptable to the Purchaser. Store parts and components identified by Consultant as useful for maintenance of units not being modernized as directed by Purchaser. All other parts and components not retained shall become property of Contractor.

1.17 MATERIALS AND WORKMANSHIP

A. All materials and equipment furnished shall be new and best quality. Installation shall be accurate, workmanlike, and subject to approval of Consultant. All materials and equipment provided shall conform to regulations of enforcement bodies having jurisdiction. Contractor shall furnish material samples for approval.

1.18 SUPERVISION

A. Contractor shall assign a competent Project Manager, superintendent, and on-site foreman for project satisfactory to Purchaser and Consultant. Such persons shall represent Contractor and all instructions given to them shall be binding as if given to Contractor.

1.19 ROUTINE BUSINESS

A. After award of Contract, all business relating to required work shall be transacted through Consultant, unless otherwise directed.

1.20 CHANGES AND EXTRA WORK

A. Purchaser may at any time make changes to Contract Documents, plans and drawings, omit work, or require additional work by Contractor. For such additional work performed hereunder, Purchaser shall pay Contractor on the basis of a mutually agreed

lump sum. See Article 1.25 for method of computing lump sum cost of additional work. Contractor shall make no additions, changes, alterations, or omissions, or perform extra work, without receipt of written authorization of Purchaser.

1.21 PAYMENTS

- A. Unless otherwise agreed, Contractor shall submit monthly applications for payment together with necessary data, information, waivers, and affidavits to Consultant. Consultant shall review data for accuracy and forward such applications to Purchaser for payment. Information shall be submitted with payment request and work progress forms included at the end of this section as Appendix A.
- B. Applications for payments are to cover 90% of the value of labor performed and material installed and delivered during the preceding month or materials delivered to Contractor's storage facility.
- C. Balance (retention) shall be paid by Purchaser upon final acceptance of entire work by Consultant and Purchaser and after performance guarantees have been satisfactorily demonstrated. See Section 01700, Article 1.02, D-G.

1.22 PAYMENT WITHHELD

- A. Purchaser and/or Consultant may withhold approval of payment on any Contractor request to such extent as may be necessary to protect Purchaser from loss on account of:
- B. Believed negligence on part of Contractor to execute the work properly or fail to perform any provision of Contract. Purchaser, after fourteen (14) days' written notice to Contractor, may without prejudice to any other remedy he may have, make good such deficiencies and may deduct its cost from the overall Contract sum.
- C. Claims filed or reasonable evidence indicating probable filing of claims by other Contractors or Subcontractors.
- D. Failure of Contractor to make proper payments to its material suppliers or Subcontractors for material and labor.
- E. A reasonable doubt that required work can be completed by Contractor for balance then unpaid or in Contract time frame.
- F. Contractor's damage to building or another Contractor.
- G. When the above grounds are removed, payment shall be made in full, less retention.

1.23 BONDS

A. Contractor to provide performance bond and 100% bid bond or 10% certified.

1.24 LIENS AND AFFIDAVITS

A. Neither final payment nor any part of billing retention shall become due until Contractor shall deliver to Purchaser a complete release of all liens arising out of this Contract or receipts marked paid in full in lieu thereof. In addition, Contractor shall furnish an affidavit to Purchaser that, so far as he has knowledge or information, releases, or receipts include all labor and materials for which a lien could be filed. If any lien remains unsatisfied after all payments are made by Purchaser, Contractor shall refund to Purchaser all monies the latter may be compelled to pay in discharging such a lien, including all costs and reasonable attorney's fees.

1.25 CLAIMS FOR EXTRA COST

A. Contractor claims for extra cost due to additions or changes to required work shall be submitted to Consultant in writing within a reasonable time after such additions or changes identified or are requested and in any event before proceeding with required work. No such claim shall be valid unless so made. Maximum charge for additions/changes to work shall be Contractor cost +15% for overhead and profit. Contractors cost shall be verifiable from actual supplier invoices, purchase orders, time tickets, etc.

1.26 DELAYS AND EXTENSION OF TIME

A. If Contractor progress is delayed due to acts of Purchaser or Consultant, acts of other Contractors, fire, floods, strikes or other casualties beyond the control or without fault or negligence of Contractor, time for completion of the work shall be extended for a period determined by Consultant to be equivalent to time of such delay. Contractor must notify Consultant, in writing, of such delay within 48 hours after delay commences, or no extension of time will be granted. Extension of time without written request within said period on one or more occasions shall not be deemed a waiver of provisions of this article.

1.27 PERMITS

A. Contractor shall obtain and pay for or cause its Subcontractor to obtain and pay for all permits required to complete required work. In addition, Contractor shall arrange, schedule, and pay for or cause its Subcontractors to arrange, schedule and pay for all required final inspections by state, local, or independent certified inspecting authorities necessary for issuance of all required Purchaser utilization permits in regard to completed work.

PART 2 SPECIAL CONDITIONS

2.01 PROGRESS OF WORK

- A. Upon award, Contractor shall reconfirm in writing, starting and completion schedule including equipment delivery dates based upon the information submitted on its bid form, Section 00310. Liquidated damages shall be assessed to the contractor, if they do not meet the schedule in Section 00310.
- B. Contractor shall submit in writing monthly reports with payment request, including current equipment delivery dates and anticipated completion dates for individual units and groups of units.

SUMMARY OF WORK

PART 1 GENERAL

1.01 WORK COVERED BY CONTRACT DOCUMENTS

- A. Request for Proposal includes the following scope of work:
 - 1. One (1) Car Hydraulic Modernization at Joseph Gallagher
 - 2. Two (2) Car Traction Modernization at South High School
 - 3. One (1) Car Replacement (Traction to Hydraulic) at Wilbur Wright
- B. Provide all labor, engineering, tools, transportation, services, supervision, materials, and equipment necessary for and incidental to satisfactory completion of required work as indicated in Contract Documents.
- C. Provide all required staging, hoisting and movement of new equipment, reused equipment, or removal of existing equipment.
- D. Applicable conditions of Purchaser's General, Special, and Supplemental Conditions.
- E. Prime contracts are defined below and each is recognized to be a major part of required work to be performed concurrently in close coordination with work of other Contractors.
 - 1. This Contract: Elevator Modernization including associated work specified in Section 01900.
 - 2. Scope of Contract includes, but is not limited to, the following:
 - i. Coordination, scheduling, and management of work of component suppliers and subcontractors.
 - ii. Modernize or furnish and install equipment as specified utilizing existing and/or modified hoistways and machine rooms and machine rooms.
 - iii. Specific item of required work which cannot be determined to be included in another contract is thereby determined to be included in prime contract.

1.02 PRIME CONTRACTOR'S DUTIES

A. Prime Contractor's duties include the following:

- 1. Provide and pay for labor, materials and equipment, tools, construction equipment and machinery, and other facilities and services necessary for proper execution and completion of required work.
- 2. Pay for legally required sales, consumer, and state remodel taxes.
- 3. Secure and pay for required permits, fees and licenses necessary for proper execution and completion of required work, as applicable at time of bid due date.
- 4. Give required notices.
- 5. Comply with codes, ordinances, rules, regulations, orders, and other legal requirements of public authorities which bear on performance of required work.
- 6. Promptly submit written notice to Consultant of observed variance of Contract Documents from legal requirements.
- 7. Enforce strict discipline and good order among employees. Do not employ persons unskilled in assigned task.

1.03 WORK SEQUENCE

- A. Construct work in stages. Joseph Gallagher and Wilbur Wright elevators to be completed between June 5th, 2017 and August 4th, 2017. Failure to meet the stated deadline will result in imposing Liquidated Damages to the Contractor.
- B. Description and proposed sequence dates are as listed on Bid Form Section 00310.
- C. Purchaser reserves the right to award each property individually, or combined. Contractor will be expected to meet all schedules as described in Section 00310, regardless of the amount of elevators awarded to the contractor.

1.04 CONTRACTOR USE OF PREMISES

- A. Confine operations at site to areas permitted by law, ordinances, permits, Contract Documents, and Purchasers specific instructions.
- B. Do not unreasonably encumber site with materials or equipment. Staging area will be located as directed by Purchaser.
- C. Do not load structure with weight that will endanger structure. Coordinate with Purchaser.
- D. Assume full responsibility for protection and safekeeping of tools and products stored on or off premises.

- E. Move stored products which interfere with operations of building or the operations of other trades.
- F. Obtain and pay for use of additional storage or work areas needed for operations.

1.05 CONCURRENT MODERNIZATION WORK AND BUILDING OPERATION

- A. This project is a major elevator modernization in an existing building which is open for public business and will continue to operate throughout all phases of required work. It is essential that Contractor give special attention and priority to all matters concerning project safety, protection from dust and loose materials, reduction of noise level, protection from water and air infiltration into building, and maintenance of neat, sightly conditions in and around work areas inside and outside of building. Packaging, scrap materials, and demolition debris shall be promptly removed from building and site on a daily basis.
- B. At all times Contractor shall provide clearly visible warning and directions signs, barricades, temporary lighting, overhead protection, and hazard-free walking surfaces throughout public area. At all times special attention must be given to building entrances, exits, and proper safe exiting through work areas as required by law.
- C. Contractor shall consult Purchaser and other Contractors to establish and maintain safe temporary routes including, but not limited to, proper barricades, walking surfaces, lighting, fire protection, exiting, warning, and directional signs, and general protection of persons from all hazards in accordance with OSHA Standards due wholly or partially to its operations.

ALTERNATES

PART 1 GENERAL

1.01 SCOPE

A. Provide material and labor required for complete execution of accepted alternates. Comply with all provisions of the Contract Documents.

B. Alternates:

- 1. New Geared Traction Hoist Machines, South High School:
 - a. Single worm geared or helical geared traction type with AC induction or P.M.S.M. ACV3F motor, brake, gear, drive shaft, deflector sheave, and gear case mounted in proper alignment on an isolated bedplate. Provide bedplate blocking to elevate deflector sheave above machine room floor.
 - b. Provide hoist machine mounted direct drive, digital, closed-loop velocity encoder.
 - c. Provide hoist machine drip pans to collect lubricant seepage.
 - d. Provide machine bedplate mounted deflector sheave A-frame or supporting steel beams and fastenings to mount deflector sheaves to building structure. Provide minimum 16 gauge easily removable sound insulated sheet metal closures in hoist way wall opening around machine.

C. Battery Standby Power Transfer – South High School:

- 1. Upon loss of normal power, provide controls to automatically lower the car to the nearest lower landing. Upon arrival at the nearest landing, the elevator doors shall open automatically and remain open until regular door time has expired. The elevator shall then become deactivated. The standby power source shall be provided via battery units installed in machine room, including solid-state charger and testing means mounted in a common metal container. Battery to be rechargeable lead acid or nickel cadmium with a 10-year life expectancy.
- 2. Upon restoration of normal power, the elevator shall automatically resume normal operation.

PROJECT PROCEDURES

PART 1 GENERAL

1.01 APPLICABLE CODES

- B. Compliance with Regulatory Agencies: Comply with most stringent applicable provisions of following Codes, laws, and/or Authorities, including revisions and changes in effect:
 - 1. Safety Code for Elevators and Escalators, ASME A17.1
 - 2. Guide for Inspection of Elevators, Escalators, and Moving Walks, ASME A17.2
 - 3. Elevator and Escalator Electrical Equipment, ASME A17.5
 - 4. National Electrical Code, NFPA 70
 - 5. Americans with Disabilities Act, ADA
 - 6. Local Fire Authority
 - 7. Requirements of most stringent provision of local applicable building code.
 - 8. Life Safety Code, NFPA 101
 - 9. Most current code enforced by the State of Ohio at the time of contract award.

1.02 STAGING AREA

A. An equipment staging area will be available for use by Contractor. Contractor shall restrict usage to area designated and shall notify Purchaser/Property Management prior to storing of any large equipment which will impose heavy concentrated loading on floor area. Do not store such equipment until approval is received.

1.03 WORK PHASE

- A. Joseph Gallagher and Wilbur Wright elevators to be completed between June 5th, 2017 and August 4th, 2017. Failure to meet the stated deadline will result in imposing Liquidated Damages to the Contractor.
- B. See Section 00310, Bid Form.

1.04 OCCUPANCY AND WORK BY OTHERS

- A. Contractor expressly affirms Purchaser's rights to let other contracts and employ other Contractors in connection with required work. Contractor will afford other Contractors and their workmen reasonable opportunity for introduction and storage of materials and equipment, for execution of their work, and will properly connect and coordinate its work with theirs. Contractor will also incorporate comparable provisions in all its subcontracts.
- B. Contractor declares that other Contractors employed by Purchaser on basis of separate contracts may proceed at such times as necessary to install items of work required by Purchaser.
- C. Contractor declares that it will cooperate with other Contractors employed by Purchaser and, in addition to other coordination and expediting efforts, will coordinate their work by written notices regarding necessity of such work to be done on or before certain dates.
- D. Contractor declares that it is responsible for review, stamped, and signed approval of all shop drawings for required work.
- E. Contractor hereby declares that content of foregoing paragraphs and influence they may have on project:
- F. Shall not cause a change in stipulated Contract Sum
- G. Shall not cause a change in Construction Time Schedule

SUBMITTALS

PART 1GENERAL

1.01 SUBMITTALS

- A. Within thirty (30) calendar days after award of contract and before beginning equipment fabrication submit shop drawings, and required material samples for review. Allow fourteen (14) days for response to initial submittal.
 - 1. Scaled or Fully Dimensioned Submittal Drawings: hoist way entrance door panels, and car/hall signal fixtures.
 - 2. Power Confirmation Information: Design for existing conditions and communicate any changes.
 - 3. Fixtures: Cuts, samples, or shop drawings.
 - 4. Finish Material: If requested by the Purchaser, the contractor shall submit 3" x 12" samples of actual finished material for review of color, pattern, and texture. Compliance with other requirements is the exclusive responsibility of the Contractor. Include, if requested, signal fixtures, lights, graphics, Braille plates, and detail of mounting provisions.
 - 5. Design Information: Provide calculations verifying the following:
 - a. Adequacy of existing electrical provisions.
 - b. Adequacy of retained equipment relative to code requirements if car weight increased by more than 5%.
 - c. Machine room heat emissions in B.T.U.
 - d. Adequacy of existing retained elevator machine beams.
 - e. Adequacy of existing car platform structure for intended loading.
 - 6. Written Maintenance Control Program (MCP) specifically designed for the equipment included under this contract. Include any unique or product specific procedures or methods required to inspect or test the equipment. In addition, identify weekly, bi-weekly, monthly, quarterly, and annual maintenance procedures, including statutory and other required equipment tests.

- B. Submittal review shall not be construed as an indication that submittal is correct or suitable or that the work represented by submittal complies with the Contract Documents. Compliance with Contract Documents, Code requirements, dimensions, fit, and interface with other work is Contractor's responsibility.
- C. Acknowledge and/or respond to review comments within fourteen (14) calendar days of return. Promptly incorporate required changes due to inaccurate data or incomplete definition so that delivery and installation schedules are not affected. Identify and cloud drawing revisions including Contractor elective revisions on each re-submittal. Contractor's revision response time is not justification for equipment delivery or installation delay.

1.02 FINAL CONTRACT DOCUMENTS

A. See Section 01700, Project Closeout.

MATERIAL AND HANDLING

PART 1 GENERAL

1.01 SITE CONDITION INSPECTION

- A. Prior to beginning installation of equipment, examine hoistway and machine room areas. Verify no irregularities exist which affect execution of work specified.
- B. Do not proceed with installation until work in place conforms to project requirements.

1.02 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver material in Contractor's original unopened protective packaging.
- B. Store material in original protective packaging. Prevent soiling, physical damage, or moisture damage.
- C. Protect equipment and exposed finishes from damage and stains during transportation, erection, and construction.
- D. Allocate available site storage areas and coordinate their use with Purchaser and other Contractors.
- E. Provide suitable temporary weather-tight storage facilities as may be required for materials that will be stored in the open.

1.03 INSTALLATION REQUIREMENTS

- A. Install all equipment in accordance with Contractor's instructions, referenced codes, specification, and approved submittals.
- B. Install machine room equipment with clearances in accordance with referenced codes and specification.
- C. Install all equipment so it may be easily removed for maintenance and repair.
- D. Install all equipment for ease of maintenance.
- E. Install all equipment to afford maximum accessibility, safety, and continuity of operation.
- F. Remove oil, grease, scale, and other foreign matter from the following equipment and apply one coat of field-applied machinery enamel.

- G. All exposed equipment and metal work installed as part of this work which does not have architectural finish.
- H. Machine room equipment, and pit equipment.
- I. Neatly touch up damaged factory-painted surfaces with original paint color. Protect machine-finish surfaces against corrosion.

1.04 MANUFACTURER'S NAMEPLATES

- A. Manufacturer's name plates and other identifying markings shall not be affixed on surfaces exposed to public view. This requirement does not apply to Underwriter's Laboratories and code required labels.
- B. Each major component of mechanical and electrical equipment shall have identification plate with the Manufacturer's name, address, model number rating, and any other information required by governing codes.

1.05 COLORS OF FACTORY-FINISHED EQUIPMENT

- A. All colors will be selected from the Manufacturer's standard range unless custom colors are specified herein.
- B. Submit samples of all standard colors available and/or specified custom colors for review and approval. See Section 01300, Submittals.
- C. Submit samples of all specified architectural metals specified for review and approval. See Section 01300, Submittals.

1.06 MATERIALS AND FINISHES

A. Steel:

- 1. Sheet Steel (Furniture Steel for Exposed Work): Stretcher-leveled, cold-rolled, commercial quality carbon steel, complying with ASTM A366, matte finish.
- 2. Sheet Steel (for Unexposed Work): Hot-rolled, commercial quality carbon steel, pickled and oiled, complying with ASTM A568/A568M-03.
- 3. Structural Steel Shapes and Plates: ASTM A36.
- B. Stainless Steel: Type 302 or 304 complying with ASTM A240, with standard tempers and hardness required for fabrication, strength and durability. Apply mechanical finish on fabricated work in the locations shown or specified, Federal Standard and NAAMM nomenclature, with texture and reflectivity required to match Architect's sample. Protect with adhesive paper covering.

- 1. No. 4 Satin: Directional polish finish. Graining directions as shown or, if not shown, in longest dimension.
- C. Aluminum: Extrusions per ASTM B221; sheet and plate per ASTM B209.
- D. Plastic Laminate: ASTM E84 Class A and NEMA LD3.1, Fire-Rated Grade (GP-50), Type 7, 0.050" ±.005" thick, color and texture as follows:
 - 1. Exposed Surfaces: Color and texture selected by Architect.
 - 2. Concealed Surfaces: Contractor's standard color and finish.
- E. Fire-Retardant Treated Particle Board Panels: Minimum 3/4" thick backup for natural finished wood and plastic laminate veneered panels, edged and faced as shown, provided with suitable anti-warp backing; meet ASTM E84 Class "I" rating with a flame-spread rating of 25 or less, registered with Local Authorities for elevator finish materials.
- F. Natural Finish Wood Veneer: Standard thickness, 1/40" thoroughly dried conforming to ASME/HPMA HP-1983, Premium Grade. Place veneer, tapeless spliced with grain running in direction shown, belt and polish sanded, book-matched. Species and finish designated and approved by Architect.
- G. Paint: Clean exposed metal parts and assemblies of oil, grease, scale, and other foreign matter and factory paint one shop coat of standard rust-resistant primer. After erection, provide one finish coat of industrial enamel paint. Galvanized metal need not be painted.
- H. Prime Finish: Clean all metal surfaces receiving a baked enamel paint finish of oil, grease, and scale. Apply one coat of rust-resistant primer followed by a filler coat over uneven surfaces. Sand smooth and apply final coat of primer.
- I. Baked Enamel Finish: Prime finish per above. Unless specified "prime finish" only, apply and bake three (3) additional coats of enamel in the selected solid color.
- J. Entrance Field Paint: Clean all surfaces to remove dirt and grease, sand and paint.

FINAL CONTRACT COMPLIANCE REVIEW

PART 1GENERAL

1.01 FINAL CLEANING

- A. See Section 00800, Supplemental Conditions, for contractual requirements governing site cleaning. As a minimum:
 - 1. Elevator hoistways and all equipment therein shall be cleaned and left free of rust, filings, welding slag, rubbish, loose plaster, mortar drippings, extraneous construction materials, dirt, and dust. Include walls, building beams, sill ledges, and hoistway divider beams.
 - 2. Care shall be taken by workpersons not to mark, soil, or otherwise deface existing or new surfaces. Clean and restore such surfaces to their original condition.
 - 3. Clean down surfaces and areas which require final painting and finishing work. Cleaning includes removal of rubbish, broom cleaning of floors, removal of any loose plaster or mortar, dust and other extraneous materials from finish surfaces, and surfaces which will remain visible after the work is complete.

1.02 CONSULTANT'S FINAL OBSERVATION AND REVIEW REQUIREMENTS

- A. Review procedure shall apply for individual elevators, portions of groups of elevators and completed groups of elevators accepted on an interim basis, or elevators and groups of elevators completed, accepted, and placed in operation.
- B. Contractor shall perform review and evaluation of all aspects of its work prior to requesting Consultant's final review. Work shall be considered ready for Consultant's final contract compliance review when all Contractor's tests are complete and all elements of work or a designated portion thereof are in place and elevator or group of elevators are deemed ready for service as intended.
- C. Furnish labor, materials, and equipment necessary for Consultant's review. Notify Consultant five (5) working days in advance when ready for final review of elevator or group of elevators.
- D. Consultant's written list of observed deficiencies of materials, equipment and operating systems will be submitted to Contractor for corrective action. Consultant's review shall include as a minimum:
 - 1. Workmanship and equipment compliance with Contract Documents.

- 2. Contract speed, capacity, floor-to-floor, and door performance comply with Contract Documents.
- 3. Performance of following is satisfactory:
 - a. Starting, accelerating, running
 - b. Decelerating, stopping accuracy
 - c. Door operation and closing force
 - d. Equipment noise levels
 - e. Signal fixture utility
 - f. Overall ride quality
 - g. Performance of door control devices
 - h. Operations of emergency two-way communication device
 - i. Operations of firefighters' service
 - j. Operations of special security features and floor lock-off provisions
 - k. Operations of emergency brake device
- 4. Test Results:
 - a. In all test conditions, obtain specified contract speed, performance times, stopping accuracy without re-leveling, and ride quality to satisfaction of Purchaser and Consultant. Tests shall be conducted under both no load and full load condition.
 - b. Temperature rise in motor windings limited to 50° Celsius above ambient. A full-capacity one (1) hour running test, stopping at each floor for ten (10) seconds in up and down directions, may be required.
- E. Performance Guarantee: Should Consultant's review identify defects, poor workmanship, variance or noncompliance with requirements of specified codes and/or ordinances, or variance or noncompliance with the requirements of Contract Documents, Contractor shall complete corrective work in an expedient manner to satisfaction of Purchaser and Consultant at no cost as follows:

- 1. Replace equipment which does not meet code or Contract Document requirements.
- 2. Perform work and furnish labor, materials, and equipment necessary to meet specified operation and performance.
- 3. Perform retesting required by governing code authority, Purchaser and Consultant.
- F. A follow-up final contract compliance review shall be performed by Consultant after notification by Contractor that all deficiencies have been corrected. Provide Consultant with copies of the initial deficiency report marked to indicate items which Contractor considers complete.

1.03 PURCHASER'S INFORMATION

- A. Provide three sets of neatly bound written information necessary for proper maintenance and adjustment of equipment within 30 days following final acceptance. Final retention will be withheld until data is received by Purchaser and reviewed by Consultant. Include the following as minimums:
 - Straight-line wiring diagrams of "as-installed" elevator circuits with index of
 location and function of components. Provide one set reproducible master.
 Mount one set wiring diagrams on panels, racked, or similarly protected, in
 elevator machine room. Provide remaining set rolled and in a protective drawing
 tube. Maintain all drawing sets with addition of all subsequent changes. These
 diagrams are Purchaser's property.
 - 2. Written Maintenance Control Program (MCP) specifically designed for the equipment included under this contract. Include any unique or product specific procedures or methods required to inspect or test the equipment. In addition, identify weekly, bi-weekly, monthly, quarterly, and annual maintenance procedures, including statutory and other required equipment tests.
 - 3. Provide any necessary interface cards required for equipment maintenance, code mandated testing, and troubleshooting.
 - 4. Lubrication instructions including recommended grade of lubricants.
 - 5. Parts catalogs for all replaceable parts including ordering forms and instructions.
 - 6. Four sets of keys for all switches and control features properly tagged and marked.

- 7. Neatly bound instructions explaining all operating features including all apparatus in the car and lobby control panels.
- 8. Neatly bound maintenance and adjustment instructions explaining areas to be addressed, methods and procedures to be used, and specified tolerances to be maintained for all equipment.
- 9. On Board Diagnostic equipment complete with access codes, adjusters' manuals and set-up manuals for adjustment, diagnosis and troubleshooting of elevator system, and performance of routine safety tests.
- B. Preventive Maintenance Contract: Furnish properly executed contract for continuing, preventive maintenance. Utilize contract form herein provided, Section 14325, Vertical Transportation Preventive Maintenance Contract.
- C. Acceptance of such records by Purchaser/Consultant shall not be a waiver of any Contractor deviation from Contract Documents or shop drawings or in any way relieve Contractor from his responsibility to perform work in accordance with Contract Documents.
- D. Contractor shall provide up to 4 hours per year of training per custodial staff for equipment orientation and training.

MAINTENANCE

PART 1 GENERAL

1.01 INTERIM MAINTENANCE

- A. Furnish preventive maintenance service on elevators described herein for a period from notice to proceed, verbal or written, until each unit is removed from building service for modernization. In addition, furnish interim preventive maintenance on completed units until the modernization of each group of elevators is complete and one-year warranty maintenance, defined in Item 1.02 below, is commenced. If applicable to the project, the cost of interim maintenance shall be included as part of modernization bid. Indicate costs on a per-unit basis for interim maintenance as requested on bid form, Section 00310. Costs for interim maintenance shall be paid by Purchaser separately and monthly based upon the number of units in service. Perform interim maintenance based upon terms and conditions of Section 14325.
- B. Use competent personnel, acceptable to Purchaser, employed and supervised by the Contractor.

1.02 WARRANTY MAINTENANCE

- A. Provide preventive maintenance and 24-hour emergency callback service for one year commencing on date of final acceptance by Purchaser. Systematically examine, adjust, clean, and lubricate all equipment. Repair or replace defective parts using parts produced by the Contractor of installed equipment. Maintain elevator machine room, hoistway, and pit in clean condition.
- B. Use competent personnel, acceptable to the Purchaser, supervised and employed by Contractor.
- C. The warranty maintenance period specified in Item 1.02, A. above shall be extended one (1) month for each three (3) month period in which equipment related failures average more than .25 per unit per month.
- D. Purchaser retains the option to delete cost of warranty maintenance from new equipment contract and remit twelve (12) equal installments directly to Contractor during period in which maintenance is being performed.

1.03 CONTRACT PREVENTIVE MAINTENANCE

A. Quote monthly cost for five-year Preventive Maintenance Agreement commencing upon completion of the warranty period specified in Item 1.02, A. above. Submit quote based

upon terms and conditions of the Preventive Maintenance Agreement, Section 14325. Base bid on present labor and material cost. Price adjustment will be made at Agreement commencement date and thereafter as provided in Agreement.

B. Use competent personnel, acceptable to the Purchaser, employed and supervised by Contractor.

RELATED WORK

PART 1 GENERAL

1.01 RELATED WORK BY ELEVATOR CONTRACTOR

A. Hoistway and Pit:

- 1. Wall blockouts and fire rated closure for control and signal fixture boxes which penetrate walls.
- 2. Cutting and patching walls and floors as required for new equipment.
- 3. Lockable, self-closing, fire-rated machine room door.
- 4. Pit access stationary, or retractable ladder for each elevator. Retractable ladder if provided shall include an electrical contact conforming to ASME A17.1, Rule 2.2.2.4.2.7.

5. Waterproof pit.

- a. Provide indirect waste drain or sump with flush grate and pump. Sump pump/drain capacity minimum 3000 gallons per hour, per elevator.
- 6. Protect open hoistways and entrances during construction per OSHA Regulations.
- 7. Protect car enclosure, hoistway entrance assemblies, and special metal finishes from damage.
- 8. All modifications required to accommodate newly installed equipment.

B. Machine Room and Machinery Spaces:

- 1. Alter the existing enclosure and access to provide a safer code compliant means to access the elevator equipment. Provide ships ladder or stair with guard railing from lower mechanical space to the elevator equipment room.
- 2. Provided a rated wall with a self-closing and locking access door in elevator equipment room.
- 3. Ventilation and heating. Maintain minimum temperature of 55° F, maximum 90° F. Maintain maximum 80% relative humidity, non-condensing.
- 4. Paint machine room walls, ceiling, and floor.

- 5. Class "ABC" fire extinguisher in each elevator machine room.
- 6. Seal fireproofing to prevent flaking.
- 7. Heat detectors within 24" of all fire sprinklers.
- 8. Add handrail at the top of the stairs entering onto the roof.
- 9. Satellite wiring and duct run to be removed and relocated from the elevator equipment room.
- 10. Engineer to confirm block wall is structurally sound. Existing block wall showings signs of cracks in mortar joints.
- 11. Remove all foreign equipment and disconnects not pertaining to the elevator equipment.
- 12. Patch existing holes in the walls and ceiling.
- 13. Enclose the existing roof drains boiler vents and other foreign equipment.
- 14. Wilbur Wright Construction of new elevator equipment room in the area as provided by the Purchaser. Size of the room being constructed to be minimum size requirements, per manufacturers equipment. Equipment space to meet code minimums for fire rating and ancillary components.

C. Electrical Service, Conductors, and Devices:

- 1. Lighting and GFCI convenience outlets in pit, machine room, and overhead machinery spaces. Provide one additional non-GFCI convenience outlet in pit for sump pump.
- 2. Furnish and install wall pack light with a photo cell above the elevator equipment room door.
- 3. Three-phase mainline copper power feeder to terminals of each elevator controller in the machine room with protected lockable "open" disconnecting means.
- 4. Single-phase copper power feeder to each elevator controller for car lighting and exhaust blower with individual protected lockable "open" disconnecting means located in machine room.
- 5. Emergency telephone line to designated elevator control panel in elevator machine room.

- 6. Fire alarm initiating devices in each elevator lobby, for each group of elevators or single elevator and each machine room to initiate firefighters' return feature. Device at top of hoistway if sprinklered. Provide alarm initiating signal wiring from hoistway or machine room connection point to elevator controller terminals. Device in machine room and at top of hoistway to provide signal for general alarm and discrete signal for Phase II firefighters' operation.
- 7. Temporary power and illumination to install, test, and adjust elevator equipment.
- 8. Means to automatically disconnect power to affected elevator drive unit and controller prior to activation of machine room fire sprinkler system and/or hoistway fire sprinkler system. Manual shut-off means shall be located outside bounds of machine room.
- 9. Single-phase power feeder to elevator intercom amplifier in the elevator machine room.
- 10. Single-phase power feeder to each elevator controller in machine room with protected lockable "open" disconnecting means for car heating and air conditioning unit.
- 11. Single-phase power feeders to machine room elevator monitoring panel/display unit with single-phase, protected lockable "open" disconnecting means.

ELECTRIC TRACTION ELEVATOR MODERNIZATION

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Two (2) simplex traction elevators at Cleveland South High School as follows:
 - 1. Two (2) Geared Passenger Elevators, Car 1 and 2
- B. All engineering, equipment, labor, and permits required to satisfactorily complete elevator modernization required by Contract Documents.
- C. Applicable conditions of General, Special, and Supplemental Conditions, Division 1, and all sections listed in Contract Documents "Table of Contents."
- D. Preventive maintenance as described in Section 01800 and Section 14325 herein.
- E. Cartage and Hoisting: All required staging, hoisting, and movement to, on, and from the site including new equipment, reused equipment, or dismantling and removal of existing equipment.
- F. Unless specifically identified as "Reuse," "Retain," or "Refurbish," provide new equipment.
- G. Protective barriers between cars in normal operation and adjacent cars in the modernization process. Full depth and height of hoistway.
- H. Hoistway, pit, and machine room barricades as required.

1.02 RELATED WORK PROVIDED UNDER OTHER SECTIONS

A. See Section 01900, Related Work Provided Under Other Sections.

1.03 DEFINITIONS

- A. Terms used are defined in the latest edition of the Safety Code for Elevators and Escalators, ASME A17.1.
- B. Reference to a device or a part of the equipment applies to the number of devices or parts required to complete the installation.
- C. Provisions of this specification are applicable to all elevators unless identified otherwise.

1.04 QUALITY ASSURANCE

- A. Qualified Contractors: Alternate Contractors must receive approval of Architect, Purchaser, and/or Consultant at least 14 days prior to bid date.
- B. Approved Contractors: Alternate Contractors must receive approval of Purchaser and/or Consultant at least 14 calendar days prior to bid date.
 - 1. Geared Elevators: KONE, Otis, Schindler, ThyssenKrupp, Fujitec, Mitsubishi.
 - 2. Car Enclosure: Eklund's Inc., Gunderlin, Ltd., KONE, Otis, Schindler, ThyssenKrupp, Tyler.
- C. Compliance with Regulatory Agencies: See Section 01040, Project Procedures.

D. Warranty:

- Material and workmanship of installation shall comply in every respect with Contract Documents. Correct defective material or workmanship which develops within one (1) year from date of final acceptance of all work to satisfaction of Architect, Purchaser and Consultant at no additional cost, unless due to ordinary wear and tear or improper use or care by Purchaser. Perform maintenance in accordance with terms and conditions indicated in the Preventive Maintenance Agreement.
- 2. Defective is defined to include, but not be limited to: Operation or control system failures, car performance below required minimum, excessive wear, unusual deterioration, or aging of materials or finishes, unsafe conditions, the need for excessive maintenance, abnormal noise, or vibration, and similar unsatisfactory conditions.
- 3. Retained Equipment: All retained components, parts, and materials shall be cleaned, checked, modified, repaired, or replaced so each component and its parts are in like new operating condition. Retained equipment must be compatible for integration with new systems. All retained equipment shall be covered under the warranty provisions, of Article 1.04, D., 1. & 2. above. No prorations of equipment or parts shall be allowed on preventive maintenance contract, Section 14325, between the Contractor and Purchaser.
- 4. Make modifications, requirements, adjustments, and improvements to meet performance requirements of Sections 01700 and 14220.

1.05 DOCUMENT and site VERIFICATION

A. In order to discover and resolve conflicts or lack of definition which might create problems, Contractor must review Contract Documents and site conditions for compatibility with its product prior to submittal of bid. Review existing structural, electrical, and mechanical provisions for compatibility with Contractor's products. Purchaser will not pay for change to structural, mechanical, electrical, or other systems required to accommodate Contractor's equipment.

1.06 SUBMITTALS

A. See Section 01300, Submittals, and Section 01700, Final Contract Compliance Review, Article 1.03.

1.07 PERMIT, TEST AND INSPECTION

- A. Obtain and pay for permit, license, and inspection fee necessary to complete installation.
- B. Perform test required by Governing Authority in accordance with procedure described in ASME A17.2 Guide for Inspection of Elevators, Escalators, and Moving Walks in the presence of Authorized Representative.
- C. Supply personnel and equipment for test and final review by Consultant as required in Section 01700.

1.08 MAINTENANCE

- A. Interim: See Section 01800, Maintenance, Article 1.01, A.
- B. Warranty Maintenance: See Section 01800, Maintenance, Article 1.02, A.
- C. Preventive Maintenance: See Section 01800, Maintenance, Article 1.03, A.

PART 2 PRODUCTS

2.01 SUMMARY

- A. Two (2) Passenger Elevators
- B. Unless specifically identified as "retain existing," provide new equipment.

	Existing Equipment	Disposition	
Number:	Cars 1 and 2	Retain Existing	—
Capacity:	2,500 lbs	Retain Existing	

	Existing Equipment	Disposition
Class Loading:	Passenger Class A	Retain Existing
Contract Speed:	200 F.P.M.	200 F.P.M.
Roping:	1:1	Retain Existing
Machine:	Geared	Retain Existing
Machine Location:	Overhead	Retain Existing
	Offset at Basement	
Operational Control:	Selective Collective	New - Selective Collective
		Microprocessor-Based System
Motor Control:	Two Speed AC	New - AC Variable Voltage
		Variable Frequency
		Microprocessor Based with Digital Closed-Loop Feedback
Power	480 Volts, 3 Phase, 60 Hertz	Retain Existing
Characteristics:	Field Verify	
Stops:	Car 1 – 2 Front; 2 Rear	Retain Existing
	Car 2 – 2 Front	
Openings:	Car 1 - 2 Front; 2 Rear	Retain Existing
	Car 2 – 2 Front	

	Existing Equipment	Disposition
Floors Served:	Car 1 – B, 1, 2, 3	Retain Existing
	Car 2 - 1, 2	
Travel:	Car 1 − 33'± Field Verify	Retain Existing
	Car 2 - 12'± Field Verify	
Minimum Clear Inside Car:	53" Wide X 70" Deep	Retain Existing
	Field Verify	
Entrance Size:	42" Wide X 84" High	Retain Existing
	Field Verify	
Entrance Type:	Single Speed Center Opening Power	Retain Existing
Door Operation:	Medium Speed, Heavy-Duty, Door Operator, Minimum Opening Speed 1-1/2 F.P.S.	New - High Speed, Heavy-Duty, Door Operator, Minimum Opening Speed 2-1/2 F.P.S.
Door Protection:	Mechanical Safety Edge	New - Infrared, Full Screen Device with Differential Timing, Nudging and Interrupted Beam Time
Safety:	Flexible Guide Clamp – Type B, Car	Retain Existing
Guide Rails:	Planed Steel Tees	Retain Existing

Existing Equipment Disposition Spring **Buffers:** Refurbish Existing Car Enclosure: As Specified Car Interior Finishes Provided **Under This Section** Pad Buttons and Vinyl Covered **Pads** Battery Powered Emergency Car Lighting. Provide Separate Constant Pressure Test Button In Car Service Compartment. Illuminate Portion of Normal Car Lighting LED Illumination Contractor's Signal Fixtures: Vandal Resistant Assembly Single Hall Pushbutton Riser Hall and Car Pushbutton Single Car Operating Panels **Stations:** Vandal Resistant Car and Hall **Pushbuttons Car Position** Single Digital with Car Direction

Arrows

Indicators:

	Existing Equipment	Disposition
In Car Lanterns:		All Car Entrance Columns with Volume Adjustable Electronic Chime or Tone. Sound Twice for Down Direction Vandal Resistant Assembly
Hall Car Position Indicator:		Digital with Car Direction Arrows at all floors in Hall Station
Communication System:		Self-Dialing, Vandal Resistant, Push to Call, Two-Way Communication System with Recall, Tracking and Voiceless Communication
Fixture Submittal:		Submit Brochure Depicting Contractor's Proposed Designs with Bid
Addit	ional Features:	
		Retain Existing Roller Guide Assemblies and Refurbish
		Car Top Inspection Station
		Firefighters' Service, Phase I and II, including Alternate Floor Return

Stationary Car Return Panelss Arranged for Surface Applied Car Operating Panels

Hoistway Access Switches, Top And Bottom Floors

Hoistway Door Unlocking Device, All Floors

Load-Weighing Device

Independent Service Feature

Card Reader Provisions

CCTV Provisions

Machine, Power Conversion Unit, and Controller Sound Isolation

Tamper Resistant Fasteners for All Fastenings Exposed to the Public

One Year Warranty
Maintenance with 24-Hour CallBack Service

No Visible Company Name or Logo

Existing Equipment

Disposition

Wiring Diagrams, Operating Instructions, and Parts Ordering Information

Onboard System Diagnostic Means and Instructions

Non-Proprietary Control System and Diagnostics Provisions

Alternates: See Section 01030 New – Offset Geared Machine

New – Battery Standby Power Transfer

2.02 MATERIALS

A. See Section 01600, Materials.

2.03 CAR PERFORMANCE

- A. Car Speed: \pm 3% of contract speed under any loading condition.
- B. Car Capacity: Safely lower, stop and hold 125% of rated load.
- C. Car Stopping Zone: $\pm 1/4$ " under any loading condition.
- D. Door Opening Time: Seconds from start of opening to fully open:
 - 1. Both Cars: 1.5-1.9 seconds.
- E. Door Closing Time: Seconds from start of closing to fully closed:
 - 1. Both Cars: 2.2-2.6 seconds.
- F. Car Floor-to-Floor Performance Time: Seconds from start of doors closing until doors are 3/4 open (1/2 open for side opening doors) and car level and stopped at next successive floor under any loading condition or travel direction (12' typical floor height):
 - 1. Both Cars: 11.5-12.5 seconds.

2.04 OPERATION

A. New - Selective Collective Microprocessor-Based:

- 1. Operate car without attendant from pushbuttons in car and located at each floor. When car is available, automatically start car and dispatch it to floor corresponding to registered car or hall call. Once car starts, respond to registered calls in direction of travel and in the order the floors are reached.
- 2. Do not reverse car direction until all car calls have been answered, or until all hall calls ahead of car and corresponding to the direction of car travel have been answered.
- 3. Slow car and stop automatically at floors corresponding to registered calls, in the order in which they are approached in either direction of travel. As slowdown is initiated for a hall call, automatically cancel hall call. Cancel car calls in the same manner. Hold car at arrival floor an adjustable time interval to allow passenger transfer.
- 4. Answer calls corresponding to direction in which car is traveling unless call in the opposite direction is highest (or lowest) call registered.
- 5. Illuminate appropriate pushbutton to indicate call registration. Extinguish light when call is answered.

B. Other Items:

- Load Weighing: Provide means for weighing car passenger load. Control system
 to provide dispatching at main floor in advance of normal intervals when car fills
 to capacity. Provide hall call by-pass when the car is filled to preset percentage of
 rated capacity and traveling in down direction. Field adjustment range: 10% to
 100%.
- 2. Independent Service: Provide controls for operation of each car from its pushbuttons only. Close doors by constant pressure on desired destination floor button or door close button. Open doors automatically upon arrival at selected floor.
- C. Firefighters' Service: Provide equipment and operation in accordance with Code requirements.
- D. Automatic Car Stopping Zone: Stop car within 1/4" above or below the landing sill. Maintain stopping zone regardless of load in car, direction of travel, distance between landings, hoist rope slippage, or stretch.

- E. Remote Monitoring and Diagnostics: Equip each with standard ports, interface boards, and drivers to accept maintenance, data logging, fault finding diagnostic and monitoring computers, keyboards, modems, and programming tools. The system shall be capable of driving remote color CRT monitor that continually scan and display the status of each car and call.
- F. Motion Control: Microprocessor based AC, variable-voltage, variable frequency with digitally encoded closed-loop velocity feedback suitable for operation specified and capable of providing smooth, comfortable car acceleration, retardation, and dynamic braking. Limit the difference in car speed between full load and no load to not more than ±3% of the contract speed.
- G. Door Operation: Automatically open doors when car arrives at main floor. At expiration of normal dwell time, close doors.
- H. Standby Lighting and Alarm: Car mounted battery unit with solid-state charger to operate alarm bell and car emergency lighting. Battery to be rechargeable with minimum 5-year life expectancy. Include required transformer. Provide constant pressure test button in service compartment of car operating panel. Provide lighting integral with portion of normal car lighting system.
- I. ALTERNATE Battery Standby Power Transfer: Upon loss of normal power, provide controls to automatically lower the car to the nearest lower landing. Upon arrival at the nearest landing, the elevator doors shall open automatically and remain open until regular door time has expired. The elevator shall then become deactivated. The standby power source shall be provided via battery units installed in machine room, including solid-state charger and testing means mounted in a common metal container. Battery to be rechargeable lead acid or nickel cadmium with a 10-year life expectancy.
 - 1. Upon restoration of normal power, the elevator shall automatically resume normal operation.

2.05 MACHINE ROOM EQUIPMENT

- A. Arrange equipment in existing machine room spaces.
- B. Geared Traction Hoist Machine: Retain existing.
 - 1. Restore, clean and paint to function and appear in like new condition.
 - 2. Drain, flush and provide new gear lubricant.
 - 3. Replace worn gears and bearings.
 - 4. Provide supplemental rope and sheave guards as required.

- 5. Retrofit new direct drive, digital, closed-loop velocity encoder on hoist machine.
- 6. Provide drip pans to collect lubricant seepage.
- 7. Other work deemed required to provide specified "like new" operation.
- 8. Retrofit new AC V3F induction drive motor to existing gear case.
- 9. Completely disassemble, clean, and inspect all brake components. Replace all worn or damaged parts. Reassemble and test for proper operation. Replace brake linings

C. Solid State Power Conversion and Regulation Unit:

- 1. Provide solid state, alternating current, variable voltage, variable frequency (ACV3F), I.G.B.T. converter/inverter drives.
- 2. Design unit to limit current, suppress noise, and prevent transient voltage feedback into building power supply. Provide internal heat sink cooling fans for the power drive portion of the converter panels. Conform to IEEE standards 519-1992 for line harmonics and switching noise.
- 3. Isolate unit to minimize noise and vibration transmission. Provide isolation transformers, filter networks, and choke inductors.
- 4. Suppress solid-state converter noises, radio frequency interference, and eliminate regenerative transients induced into the mainline feeders or the building standby power generator.
- 5. Supplemental direct-current power for the operation of hoist machine brake, door operator, dispatch processor, signal fixtures, etc., from separate static power supply.
- D. Encoder: Direct drive, solid-state, digital type. Update car position at each floor and automatically restore after power loss.

E. Controller: UL/CSA labeled.

- 1. Compartment: Securely mount all assemblies, power supplies, chassis switches, relays, etc., on a substantial, self-supporting steel frame. Completely enclose equipment with covers. Provide means to prevent overheating.
- 2. Relay Design: Magnet operated with contacts of design and material to insure maximum conductivity, long life, and reliable operation without overheating or excessive wear. Provide wiping action and means to prevent sticking due to

fusion. Contacts carrying high inductive currents shall be provided with arc deflectors or suppressors.

3. Microprocessor-Related Hardware:

- a. Provide built-in noise suppression devices which provide a high level of noise immunity on all solid-state hardware and devices.
- b. Provide power supplies with noise suppression devices.
- c. Isolate inputs from external devices (such as pushbuttons) with opto-isolation modules.
- d. Design control circuits with one leg of power supply grounded.
- e. Safety circuits shall not be affected by accidental grounding of any part of the system.
- f. System shall automatically restart when power is restored.
- g. System memory shall be retained in the event of power failure or disturbance.
- h. Equipment shall be provided with Electro Magnetic Interference (EMI) shielding within FCC guidelines.
- 4. Wiring: CSA labeled copper for factory wiring. Neatly route all wiring interconnections and securely attach wiring connections to study or terminals.
- 5. Permanently mark components (relays, fuses, PC boards, etc.) with symbols shown on wiring diagrams.
- 6. Monitoring System Interface: Provide controller with serial data link through RJ45 Ethernet connection and install all devices necessary to monitor items outlined in Section 2.13.
- 7. Provide controller or machine mounted auxiliary, lockable "open," disconnect if mainline disconnect is not in sight of controller and/or machine.
- F. Machine and Equipment Support Beams: Retain existing in place. Provide all required supplemental supports and attachments.
- G. New Governor: Centrifugal-type, car driven with pull-through jaws and bi-directional shutdown switches. Provide required bracketing and supports for attachment to building structure.

H. Emergency Brake:

- 1. Provide means to prevent ascending car over-speed and unintended car movement per Code.
- 2. Acceptable emergency brake devices:
 - a. Hollister-Whitney Rope Gripper
- 3. Mount the auxiliary brake on suitable structural steel supports. Provide a drawing showing the supports, stamped by Professional Engineer verifying the adequacy of the support provided.
- 4. Provide control circuits to enable the device to function as required by Code.

2.06 HOISTWAY EQUIPMENT

- A. Guide Rails: Retain main and counterweight guide rails in place.
 - 1. Clean rails and brackets. Remove rust.
 - 2. Check all rail and bracket fastenings and tighten.
 - 3. Realign rails as required to provide smooth car ride.
 - 4. Provide supplemental rail brackets and/or backing as required by Code or to enhance car ride quality.
- B. Buffers, Car, and Counterweight: Retain existing.
 - 1. Rebuild as required and paint.
- C. Sheaves: Retain existing.
 - 1. Regroove or replace if required.
 - 2. Check all fastenings and tighten.
 - 3. Replace worn bearings.
- D. Counterweight: Retain existing. Replace existing guide assembly shoes, or inserts.
- E. Counterweight Guard: Metal guard in pit. Retain existing, clean and paint.
- F. New Governor Rope: Mount sheaves and support frame on pit floor or guide rail. Provide frame with guides or pivot point to enable free vertical movement and proper tension of rope.
- G. New Hoist and Governor Ropes:

- 1. 8 x 19 or 8 x 25 Seale construction, traction steel type. Fasten with staggered length, adjustable, spring isolated wedge type shackles.
- 2. Governor rope to suit Contractor's specification.
- H. Terminal Stopping: Provide normal and final devices.
- I. Electrical Wiring and Wiring Connections:
 - Conductors and Connections: Copper throughout with individual wires coded and
 connections on identified studs or terminal blocks. Use no splices or similar
 connections in wiring except at terminal blocks, control compartments, or
 junction boxes. Provide 10% spare conductors throughout. Run spare wires from
 car connection points to individual elevator controllers in the machine room.
 Provide four (4) pair of spare shielded communication wires in addition to those
 required to connect specified items. Tag spares in machine room.
 - 2. Conduit: Painted or galvanized steel conduit, EMT, or duct. Conduit size, 1/2" minimum. Flexible heavy-duty service cord may be used between fixed car wiring and car door switches for door protective devices.
 - 3. Traveling Cables: Flame and moisture-resistant outer cover. Prevent traveling cable from rubbing or chafing against hoistway or equipment within hoistway. Provide five (5) pair of shielded wires and two (2) RG-6/U type coaxial cables for card reader. Provide two (2) RG-6/U coaxial CCTV cables within traveling cable from car controller to car top, plus 3'-0" excess loop at both ends. Provide two (2) pair 14 gauge wire for CCTV power.
 - 4. Auxiliary Wiring: Connect fire alarm initiating devices, emergency two-way communication system, firefighters' phone, and card reader, and in each car controller in machine room.

J. New - Entrance Equipment:

- 1. Door Hangers: Two-point hanger roller with neoprene roller surface and suspension with eccentric upthrust roller adjustment.
- 2. Door Tracks: Bar or formed, cold-drawn removable steel tracks with smooth roller contact surface.
- 3. Door Interlocks: Operable without retiring cam. Paint interlock box flat black.
- 4. Door Closers: Spring, spirator, or jamb/strut mounted counterweight type. Design and adjust to insure smooth, quiet mechanical close of doors.

- K. New Hoistway Door Unlocking Device: Provide unlocking device with escutcheon in door panel at all floors, with finish to match adjacent surface.
- L. New Hoistway Access Switches: Mount in hall station at top and bottom floors.
- M. Floor Numbers: Stencil paint 4" high floor designations in contrasting color on inside face of hoistway doors or hoistway fascia in location visible from within car.

2.07 HOISTWAY ENTRANCES

- A. Frames: Retain existing. Provide new Arabic floor designation/Braille plates, centered at 60" above finished floor, on both side jambs of all entrances. Braille indications shall be below Arabic floor designation. Provide cast floor designation/Braille plates as manufactured by SCS Elevator Products, Inc. or Vision Mark.
- B. New Hoistway Door Panels:16 gauge steel, sandwich construction without binder angles. Provide leading edges of center-opening doors with rubber astragals. Provide a minimum of two (2) gibs per panel, one at leading and one at trailing edge with gibs in the sill groove entire length of door travel. Construct door panels with interlocking, stiffening ribs.
- C. New Sight Guards: 14 gauge, same material and finish as hoistway entrance door panels. Construct without sharp edges.
- D. Sills: Retain existing. Clean and polish. Check and tighten all fastenings.
- E. Sill Supports: Retain existing. Check and tighten all fastenings.
- F. Fascia, Toe Guards, and Hanger Covers: Retain existing. Provide as required where damaged or missing. Check and tighten all fastenings.
- G. Struts and Headers: Retain existing. Check and tighten all fastenings.

2.08 CAR EQUIPMENT

- A. Frame: Retain Existing. Check and tighten all fastenings.
- B. Safety Device: Retain existing. Check and tighten all fastenings. Disassemble, clean, and inspect components. Replace all worn or damaged parts. Reassemble and test for proper operation.
- C. Platform: Retain existing. Reinforce if required. Check and tighten all fastenings.
- D. New Platform Apron: Provide new extended platform apron to meet Code. Minimum 14 gauge steel, reinforced and braced to car platform front and rear with Contractor's standard finish.

- E. Guide Shoes: Retain existing. Replace any damage or flat rollers, and properly adjust.
- F. Finish Floor Covering: Provided by the Elevator Contractor. Floor finish to be Carpet Tiles and Vinyl Composition Tile. Color and type to be approved by the Purchaser.
- G. New Sills: Aluminum one-piece extrusion with extruded extension between car entrance columns to face of car front return. Extruded extension to match finish of sill.
- H. New Doors: Provide as specified for hoistway entrance doors.
- I. New Door Hangers: Two-point hanger roller with neoprene roller surface and suspension with eccentric upthrust roller adjustment.
- New Door Track: Bar or formed, cold-drawn removable steel track with smooth roller contact surface.
- K. New Door Header: Construct of minimum 12 gauge steel, shape to provide stiffening flanges.
- L. New Door Electrical Contact: Prohibit car operation unless car door is closed.
- M. New Door Clutch: Heavy-duty clutch, linkage arms, drive blocks and pickup rollers or cams to provide positive, smooth, quiet door operation. Design clutch so car doors can be closed, while hoistway doors remain open.
- N. Restricted Opening Device: Restrict opening of car doors outside unlocking zone. Plunger type restrictors not acceptable.
- O. New Door Operator: High speed, heavy-duty door operator capable of opening doors at no less than 2-1/2 f.p.s. Accomplish reversal in no more than 2-1/2" of door movement. Provide solid-state door control with closed loop circuitry to constantly monitor and automatically adjust door operation based upon velocity, position, and motor current. Maintain consistent, smooth, and quiet door operation at all floors, regardless of door weight or varying air pressure. Acceptable closed-loop door operators:
 - 1. KONE AMD 2.0
 - 2. Otis AT400 or Glide P
 - 3. Schindler QKS 15 Heavy Duty
 - 4. ThyssenKrupp HD
 - 5. G.A.L. MOVFR or MOVFE
- P. Door Control Device:

- 1. Infrared Reopening Device: Black fully enclosed device with full screen infrared matrix or multiple beams extending vertically along leading edge of each door panel to minimum height of 7'-0" above finished floor. Device shall prevent doors from closing and reverse doors at normal opening speed if beams are obstructed while doors are closing, except during nudging operation. In event of device failure, provide for automatic shutdown of car at floor level with doors open
 - a. Acceptable Infrared Reopening Device:
 - 1) Cegard/MAX-154 by CEDES
 - 2) Gatekeeper by Adams
 - 3) Lambda II by Otis
 - 4) Microscan E by T.L. Jones
 - 5) Pana40 Plus by Janus
- 2. Nudging Operation: After beams of door control device are obstructed for a predetermined time interval (minimum 20.0 25.0 seconds), warning signal shall sound and doors shall attempt to close with a maximum of 2.5 foot pounds kinetic energy. Activation of the door open button shall override nudging operation and reopen doors.
- 3. Interrupted Beam Time: When beams are interrupted during initial door opening, hold door open a minimum of 3.0 seconds. When beams are interrupted after the initial 3.0 second hold open time, reduce time doors remain open to an adjustable time of approximately 1.0 1.5 seconds after beams are reestablished.
- 4. Differential Door Time: Provide separately adjustable timers to vary time that doors remain open after stopping in response to calls.
 - a. Car Call: Hold open time adjustable between 3.0 and 5.0 seconds.
 - b. Hall Call: Hold open time adjustable between 5.0 and 8.0 seconds. Use hall call time when car responds to coincidental calls.

Q. Car Operating Panel:

1. One car operating panel with faceplate, consisting of a metal box containing vandal resistant operating fixtures, mounted behind the car stationary front return panel. Faceplate shall be hinged and constructed of stainless steel, satin finish.

- 2. Suitably identify floor buttons, alarm button, door open button, door close button and emergency push-to-call button with SCS Elevator Products, Inc. or Visionmark cast tactile symbols recessed flush, or rear mounted. Configure plates per local building code accessibility standards including Braille. Locate operating controls no higher than 48" above the car floor; no lower than 35" for emergency push-to-call button and alarm button.
- 3. Provide minimum 3/4" diameter raised floor pushbuttons which illuminate to indicate call registration.
- 4. Provide alarm button to ring bell located on car. Illuminate button when actuated.
- 5. Provide keyed stop switch at bottom of car operating panel in locked car service compartment.
- 6. Provide "door open" button to stop and reopen doors or hold doors in open position.
- 7. Provide "door close" button to activate door close cycle. Cycle shall not begin until normal door dwell time for a car or hall call has expired, except firefighters' operation.
- 8. Provide firefighters' locked box as required by code.
- 9. Provide firefighters' Phase II key switch with engraved instructions filled red. Include light jewel, buzzer, and call cancel button.
- 10. Provide lockable service compartment with recessed flush door. Door material and finish shall match car return panel or car operating panel faceplate. Inside surface of door shall contain an integral flush window for displaying the elevator operating
- 11. Include the following controls in lockable service cabinet with function and operating positions identified by permanent signage or engraved legend:
 - a. Service Panel Door: GEM EX513
 - b. Inspection switch. GEM EX 512
 - c. Light switch. GEM513
 - d. Three-position exhaust blower switch. GEM EX513
 - e. Independent service switch. GEM EX514

- f. Constant pressure test button for battery pack emergency lighting. GEM EX513, if providing a key switch
- g. 120-volt, AC, GFCI protected electrical convenience outlet.
- h. Card reader override switch. GEM EX514
- i. Stop switch. GEM EX512
- 12. Provide black paint filled (except as noted), engraved, or approved etched signage as follows with approved size and font:
 - a. Phase II firefighters' operating instructions on main operating panel above corresponding keyswitch filled red.
 - b. Car number on main car operating panel.
 - c. "No Smoking" on main car operating panel.
 - d. Car capacity in pounds on main car operating panel service compartment door.
- R. New Car Top Control Station: Mount to provide safe access and utilization while standing in an upright position on car top.
- S. New Work Light and Duplex Plug Receptacle: GFCI protected outlet at top and bottom of car. Include on/off switch and lamp guard. Provide additional GFCI protected outlet on car top for installation of car CCTV.
- T. Communication System:
 - 1. "Push to Call," two-way communication instrument in car with automatic dialing, tracking, and recall features with shielded wiring to car controller in machine room. Provide dialer with automatic rollover capability with minimum two numbers.
 - a. "Push to Call" button or adjacent light jewel shall illuminate and flash when call is acknowledged. Button shall match car operating panel pushbutton design. Provide uppercase "PUSH TO CALL" "HELP ON THE WAY" engraved signage adjacent to button.
 - b. Provide "Push to Call" button tactile symbol, engraved signage, and Braille adjacent to button mounted integral with car front return panel.
- U. Firefighters' telephone. Jack bezel shall match adjacent controls.

V. Provide two-way communication between car and machine room if required.

2.09 CAR ENCLOSURE

- A. New Car Enclosure Passenger Elevator: Provide complete as specified herein. Provide the following features.
 - 1. Shell: Reinforced 14 gauge furniture steel formed panels with baked enamel interior finish as selected. Apply sound-deadening mastic to exterior.
 - 2. Canopy: Reinforced 12 gauge furniture steel formed panels with lockable, hinged emergency exit. Interior finish white reflective baked enamel.
 - 3. Front and Rear Return Panels and Integral Entrance Columns: Reinforced 14 gauge stainless steel satin finish. Swing entire unit on substantial pivot points (minimum 3) for service access to car operating panels. Locate pivot points to provide full swing of front return panel without interference with side wall finish or handrail. Secure in closed position with concealed three-point latch. Provide service compartment with recessed flush cover and cutouts for operating switches, etc.
 - 4. Front and Rear Return Panels: Reinforced 14 gauge stainless steel satin finish with cutouts for car operating panel and other equipment.
 - 5. Entrance Columns: Reinforced 14 gauge stainless steel satin finish.
 - 6. Transom: Reinforced 14 gauge stainless steel satin finish full width of enclosure.
 - 7. Car Door Panels: Reinforced minimum16 gauge stainless steel satin finish. Same construction as hoistway door panels.
 - 8. Base: Stainless steel with concealed ventilation cutouts.
 - 9. Interior Wall Finish: Removable panels, faced and edged, with Rigidized 5wl textured stainless steel
 - 10. Ventilation: Two-speed OE mounted to car canopy on isolated rubber grommets. Exhaust blower shall meet requirements of Item 2.03, H. Ventilation shall shut off after adjustable period (60 180 seconds) of no elevator demand.
 - 11. Lighting: Provide LED fixtures with wiring and hookup. Coordinate with emergency lighting requirements. Lighting shall shut off after adjustable period (60 180 seconds) of no elevator demand. Provide emergency lighting integral with portion of normal car lighting system. Include required transformer. Install lighting directly in the canopy to eliminate the need for a drop ceiling.

- 12. Handrails: Minimum 1-1/4" diameter stainless steel tubular grab bar across side walls.
- 13. Flooring: Aluminum Diamond Plate flooring with a minimum of 1/4" thick
- 14. Pads and Buttons or Hooks, Both Cars: Three-piece removable pads. Two pads covering side walls and adjacent front returns and one covering rear wall. Provide cutouts to access main car operating panel.

2.10 HALL CONTROL STATIONS

A. Pushbuttons: Provide a single riser with flush mounted faceplates. Include pushbuttons for each direction of travel which illuminate to indicate call registration. Include approved engraved message and pictorial representation prohibiting use of elevator during fire or other emergency situation as part of faceplate. Pushbutton design shall match car operating panel pushbuttons. Provide vandal resistant pushbutton and light assemblies. Provide enlarged faceplate to cover existing wall blockout and facilitate handicapped access requirements. Provide any cutting and patching required. Position indicator shall be located in each hall station.

2.11 SIGNALS

- A. New Car Direction Lanterns,: Provide flush-mounted car lantern in all car entrance columns. Illuminate up or down LED lights and sound electronic tone once for up and twice for down direction travel as doors open. Sound tone once for up direction and twice for down direction. Sound level shall be adjustable from 0 80 dBA measured at 5'-0" in front of hall control station and 3'-0" off floor. Provide adjustable car door dwell time to comply with ADA requirements relative to hall call notification time. Car direction lenses shall be arrow shaped with faceplates. Lenses shall be minimum 2-1/2" in their smallest dimension. Provide vandal resistant lantern and light assemblies consisting of series of dots or lines for maximum visibility.
- B. New Car Position Indicator: Alpha-numeric digital indicator containing floor designations and direction arrows a minimum of 1/2" high to indicate floor served and direction of car travel. Locate fixture in car front return panel on the car operating panel. When a car leaves or passes a floor, illuminate indication representing position of car in hoistway. Illuminate proper direction arrow to indicate direction of travel.
- C. Hall Position Indicator, Both Cars: Alpha-numeric digital indicator containing floor designations and direction arrows a minimum of 1/2" high to indicate floor served and direction of car travel. Mount integral with hall stations at all floors.
- D. Faceplate Material and Finish: Stainless steel Satin finish all fixtures.

E. Floor Passing Tone: Provide an audible tone of no less than 20 decibels and frequency of no higher than 1500 Hz, to sound as the car passes or stops at a floor served.

PART 3 EXECUTION

3.01 SITE CONDITION INSPECTION

- A. Prior to beginning installation of equipment, examine hoistway and machine room areas. Verify no irregularities exist which affect execution of work specified.
- B. Do not proceed with installation until work in place conforms to project requirements.

3.02 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver material in Contractor's original, unopened protective packaging.
- B. Store material in original protective packaging. Prevent soiling, physical damage, or moisture damage.
- C. Protect equipment and exposed finishes from damage and stains during transportation, erection, and construction.

3.03 INSTALLATION

- A. Install all equipment in accordance with Contractor's instructions, referenced codes, specification, and approved submittals.
- B. Install machine room equipment with clearances in accordance with referenced codes, and specification.
- C. Install all equipment so it may be easily removed for maintenance and repair.
- D. Install all equipment for ease of maintenance.
- E. Install all equipment to afford maximum accessibility, safety, and continuity of operation.
- F. Remove oil, grease, scale, and other foreign matter from the following equipment and apply one coat of field-applied machinery enamel.
 - 1. All exposed equipment and metal work installed as part of this work which does not have architectural finish.
 - 2. Machine room equipment, and pit equipment.
 - 3. Neatly touch up damaged factory-painted surfaces with original paint color. Protect machine-finish surfaces against corrosion.

3.04 FIELD QUALITY CONTROL

- A. Work at jobsite will be checked during course of installation. Full cooperation with reviewing personnel is mandatory. Accomplish corrective work required prior to performing further installation.
- B. Have Code Authority acceptance inspection performed and complete corrective work.

3.05 ADJUSTMENTS

- A. Install rails plumb and align vertically with tolerance of 1/16" in 100'-0". Secure joints without gaps and file any irregularities to a smooth surface.
- B. Static balance car to equalize pressure of guide shoes on guide rails.
- C. Lubricate all equipment in accordance with Contractor's instructions.
- D. Adjust motors, power conversion units, brakes, controllers, leveling switches, limit switches, stopping switches, door operators, interlocks, and safety devices to achieve required performance levels.

3.06 CLEANUP

- A. Keep work areas orderly and free from debris during progress of project. Remove packaging materials on a daily basis.
- B. Remove all loose materials and filings resulting from work.
- C. Clean machine room equipment and floor.
- D. Clean hoistways, car, car enclosure, entrances, operating and signal fixtures.

3.07 ACCEPTANCE REVIEW AND TESTS

A. See Section 01700, Article 1.02, Consultant's Final Observation and Review Requirements.

3.08 PURCHASER'S INFORMATION

A. See Section 01700, Article 1.03, Final Contract Compliance Review.

END OF SECTION

SECTION 14325

VERTICAL TRANSPORTATION MAINTENANCE AGREEMENT

This A	greement, between hereinafter called "Purchaser" and		
herein	after called "Contractor" shall pertain to the vertical transportation equipment in the		
follow	ing property:		
	Cleveland Metropolitan School District		
	1111 Superior Avenue, E Suite 1800		
	Cleveland, Ohio 44114		
	EQUIPMENT DESCRIPTION:		
	Two (2) Traction Elevators – South High School		
	One (1) Hydraulic Elevator – Joseph Gallagher		
	One (1) Hydraulic Elevator – Wilbur Wright		
1.01	AGREEMENT INTENT		
A.	Provide pro-active preventive maintenance for the equipment covered by this Agreement to facilitate the following:		
	1. Consistent safe operation of equipment		
	2. Maximum operational performance of equipment		
	3. Maximum beneficial usage of equipment		
	4. Maximum life cycle of equipment		
В.	. Contractor expressly acknowledges that Purchaser is relying on Contractor's professiona expertise in performance of Services to achieve and maintain Agreement intent.		
C.	For clarification elevators, escalators, moving walks, etc. may be referred to as "units" or "equipment" in this Agreement.		
1.02	AGREEMENT TERM		
A.	Term of this Agreement shall be five (5) years from through, both dates inclusive and from month to month increments thereafter.		

1.03 CONTRACTOR SERVICES

- A. Services shall include all labor, transportation, supplies, materials, parts, tools, scaffolding, machinery, hoists, employee safety equipment, equipment, lubricants, supervision, applicable taxes, and all other work and materials expressly required under this Agreement or reasonably inferred whether or not expressly stated herein.
- B. Contractor shall submit a written Maintenance Control Program (MCP) specifically designed for this property defining its planned preventive maintenance procedures to facilitate Agreement intent and "Services" for all equipment included under this Agreement. Routine maintenance procedures shall include any unique or product specific procedures or methods required to inspect or test the equipment. MCP shall identify weekly, bi-weekly, monthly, quarterly, and annual maintenance procedures, including statutory and other required equipment tests. When accepted by Purchaser, Contractor's Maintenance Control Program (MCP) shall become Appendix A to this Agreement.
- C. Coordinate and follow the directives of Purchaser with respect to scheduling Services and any deliveries hereunder or at time or times further specified in other provisions of this Agreement.
- D. Services shall be performed as follows:
 - 1. In conformance with all provisions of this Agreement.
 - 2. In conformance with all legal statutes and code requirements.
 - 3. In conformance with all applicable original equipment manufacturer's specifications.
 - 4. In conformance with the written Maintenance Control Program (MCP).
 - In conformance with Purchaser's rules, policies, regulations, and requirements for work at the Property, as modified and supplemented during term of this Agreement.
 - 6. In conformance with Purchaser's requirements for cleanup using containers supplied by Contractor.
 - 7. To Purchaser's satisfaction.
 - 8. By qualified, careful, and efficient employees in conformity with best industry practices.

- 9. Diligently and in a first class, complete, and workmanlike manner, free of defect or deficiency.
- 10. In such manner as to minimize any annoyance, interference, or disruption to occupants of Property and their invitees.
- 11. Contractor shall provide up to 4 hours per year of training per custodial staff for equipment orientation and training.
- E. Materials: The term "materials" shall include all tangible property, whether designated as materials, goods, parts, or otherwise. All such materials shall be:
 - 1. New.
 - 2. Best quality and suitable for their intended uses.
 - 3. Obtained from or recommended by original manufacturers of equipment for replacement or repair, including parts redesigned by and recommended as replacement parts by the original equipment manufacturers. Equivalent parts may be used if approved by Purchaser in writing.
 - 4. Parts requiring repair shall be rebuilt to "like new" condition.
 - 5. All lubricants shall be suitable for purpose intended and shall meet or exceed minimum requirements specified by original manufacturer of equipment to which the lubricant is applied.
 - 6. All materials delivered and stored at the Property which are intended to become part of the completed Services shall pass to Purchaser upon installation.
 - 7. Provide metal cabinets of suitable size for storage of materials in each machine room. No open storage of materials shall be permitted. Contractor shall stock cabinets with adequate renewal parts and lubricants to maximize beneficial usage of equipment covered by this Agreement.
 - 8. Lubricants, cleaning fluids, and all combustible liquids shall be stored in a metal cabinet in machine room and shall be disposed of in accordance with Federal or local jurisdiction guidelines. A metal can with lid shall be provided in each machine room for temporary storage of oily rags.
 - 9. Proration of equipment or materials shall not be allowed.
 - 10. No consideration shall be given in regard to obsolescence of systems, materials, or parts.

- 11. Consideration shall be given in regard to obsolescence of systems, materials, or parts only when both the original equipment manufacturers and after-market elevator industry suppliers no longer manufacture or rebuild required parts or assemblies. Rebuilt parts and/or assemblies are acceptable when documentation is provided indicating parts and/or assembly meets all design requirements of the original part and/or assembly.
- F. No parts or equipment required by Services may be removed from the Property without written approval of Purchaser. This does not include renewal parts stocked on site by Contractor, which shall remain Contractor's sole property until installed on the equipment. Expeditiously replenish parts/materials as utilized.
- G. Initiate, maintain, and supervise all safety precautions and programs in connection with Services and comply with all applicable safety laws. Take all reasonable precautions for safety of Purchaser, Purchaser's tenants, Purchaser's employees, Contractor's employees, and other persons on or about Property.
- H. Repair, to satisfaction of Purchaser, any damage to the Property and adjacent areas caused by performance of Services.

1.04 CONTRACTOR'S EMPLOYEES

- A. This Agreement is not one of agency, partnership, master-servant, or joint employer, but one with Contractor engaged in the business of providing Services hereunder as an independent contractor. Contractor shall have sole responsibility for means, methods, techniques, procedures, and safety precautions in connection with performance of Services.
- B. Contractor shall be responsible for the supervision and execution of Services by its employees. Contractor shall inform Purchaser of the name of its Supervisor responsible for execution of Services and Supervisor shall have the authority to act as Contractor's agent. Supervisor shall notify Purchaser of site inspection and provide Purchaser with written summary of findings within ten (10) working days after completion of site review.
- C. Contractor shall employ a sufficient number of trained and capable employees to properly, adequately, safely, and promptly provide Services. All matters pertaining to employment, training, supervision, compensation, promotion, and discharge of Contractor's employees are the responsibility of the Contractor, who is in all respects the employer and Purchaser shall have no liability with respect thereto.
- D. Contractor agrees each of its employees is properly qualified and will use reasonable care in the performance of Services. If Purchaser, in Purchaser's sole opinion, determines for

any reason that the qualifications, actions, or conduct of any particular Contractor employee has violated this Agreement by performing unsatisfactory Services, interfering with operation of Property, bothering or annoying any occupants, other contractors or subcontractors then at Property, or that such actions or conduct are otherwise detrimental to Purchaser, then upon receipt of Purchaser's written notice, Contractor shall immediately provide qualified replacement person(s).

E. Contractor shall not engage any subcontractors or other parties to perform Services unless first approved in writing by Purchaser. Purchaser's acceptance of subcontractors or other parties shall not relieve, release, or affect in any manner any of Contractor's duties, liabilities, or obligations hereunder, and Contractor shall at all times be and remain fully liable hereunder.

1.05 CONTRACTORS HOURS AND MANNER OF WORK

- A. Services, except as otherwise noted under this Agreement, including unlimited emergency callback service, shall be performed during regular hours of regular working days of the Elevator Trade. Provide overtime callback service at no additional cost under the following conditions:
 - 1. Passenger entrapments.
 - 2. Elevator group control system malfunctions.
 - 3. Two (2) or more elevators out of service in any elevator group.

B. Response time for callback service:

- 1. During the hours identified in Item 1.05, A., Contractor shall arrive at Property within ninety (90) minutes from time of notification of equipment problem or failure by Purchaser.
- 2. During the hours identified in Item 1.05, A., Contractor shall arrive at Property in response to passenger entrapment calls within thirty (30) minutes from time of notification by Purchaser.
- 3. After hours, Contractor shall respond to callback service within one hundred twenty (120) minutes from the time of notification by Purchaser.
- 4. After hours, Contractor shall arrive at Property in response to passenger entrapment calls within thirty (30) minutes from the time of notification.
- C. Callback is defined as any request for service or assistance by Purchaser or Purchaser's representative when any unit is not available for beneficial usage due to equipment shutdown or malfunction.

- D. If a unit is shut down due to equipment failure for more than seventy-two (72) continuous hours, maintenance billing for that unit shall be suspended until unit is restored to beneficial usage, excluding scheduled equipment repairs.
- E. Removal of units from beneficial usage to facilitate Services shall be coordinated with and approved by the Purchaser and identified in the MCP, unless removal is necessitated for emergency repair or adjustment. Purchaser agrees to permit Contractor to remove units from service for a reasonable time during hours identified in Item 1.05, A., to perform Services.

1.06 CONTRACTOR'S EXECUTION OF SERVICES

- A. Regularly and systematically examine, clean, lubricate, adjust, and as conditions warrant, repair or replace all vertical transportation equipment covered under this Agreement. Consistently maintain machine room, hoistway, pit, car tops, and equipment in or on these areas in a clean condition.
- B. Check and adjust individual and/or elevator group operational system(s) at planned intervals in accordance with the MCP to ensure all control circuits and time settings are properly adjusted to minimize system response time to registered car and hall calls and maximize car and/or group operational performance.
- C. Lubricate equipment at intervals recommended by original equipment manufacturer or in accordance with the MCP as dictated by equipment use or adverse environmental conditions.
- D. Paint equipment at intervals to maintain a consistent professional appearance, prevent rusting, and preserve the equipment. Floors in machine room, machinery space, and pit shall be painted "deck gray." All paint shall be suitable for the purpose intended, of high quality, and shall not emit noxious odors while curing. Schedule all painting procedures with Purchaser.
- E. Provide replacement lamps to maintain adequate lighting in elevator machine room and pit.
- F. Repair damage to car and hoistway door finish when caused by improper adjustment or maintenance of associated door equipment.
- G. When, as a result of examination or testing of the equipment, Contractor identifies corrective action is required, Contractor shall proceed expeditiously to make required repairs, replacements, and adjustments. If Contractor believes such work is not Contractor's responsibility, a written report signed by Contractor shall be delivered to Purchaser for further action with exception of a safety or potential safety situation, in which case, Contractor shall expeditiously correct the problem.

- H. Services shall be all inclusive with following exclusions only:
- I. Installation of new attachments or performance of newly mandated tests recommended or directed by inspecting entities, insurance companies, and federal, state, or municipal governmental authorities subsequent to the date of this Agreement. In the event of new or retroactive requirements, required by such authorities, Contractor shall provide written notice and proposal to Purchaser within ten (10) working days of effective date.
- J. Callbacks, repairs, modifications, adjustments, or replacements required due to negligence, vandalism, accident, or misuse of the equipment by anyone other than the Contractor, its employees, subcontractors, servants or agents, or other causes beyond the Contractor's control except ordinary wear.
- K. Repair or replacement of Property items, such as hoistway or machine room walls, floors, car interior finishes, car finish floor material, hoistway entrance frames, car and hoistway door panels, car and hoistway door sills, signal fixture faceplates, and fire alarm initiating devices. Exception: see Item 1.06, F.
- L. Mainline and auxiliary disconnecting means, fuses, and electrical feeders to equipment control panels in machine rooms.
- M. Lamps for normal car illumination.
- N. Failure or fluctuations of property electric power, air conditioning, or humidity control.
- O. Ingress by water or other material into machine room, hoistway, car enclosure, or pit.
- P. Purchaser loading unit in excess of its rated car capacity or load classification.
- Q. Above exclusions shall apply except to the extent that they arise out of or are caused by the negligence, breach of contract, or breach of statutory duty of the Contractor, his employees, agents, subcontractors, or others for whom he is responsible.

1.07 CONTRACTOR COMPLIANCE WITH LAWS

- A. Contractor agrees to comply with all existing laws, codes, rules, and regulations set forth by appropriate authorities having jurisdiction in location where Services are performed. In the event of differing testing requirements between Agreement requirements and local codes or ordinances, the more stringent requirement shall prevail.
- B. Schedule, coordinate, and complete statutory and other equipment tests including, but not limited to:
 - 1. Annual no load slow speed test of car safeties, governors, and buffers.
 - 2. 5-year, full load, full speed test of car safeties, governors, and buffers.

- 3. Monthly firefighters' service operational tests.
- 4. Annual standby power operation tests on elevators.
- 5. Monthly operational tests: battery pack car emergency lighting and monthly car emergency communication device.
- C. Provide Purchaser with a minimum of five (5) working days' prior notification of tests so a Representative of the Purchaser may witness all tests. Submit written reports to Purchaser within ten (10) working days of completion of tests, confirming findings including corrective actions required and taken. Affix and maintain governmental jurisdiction number designations on all unit equipment in the machine room and pit including hoist machine, controller, car crosshead, electrical disconnect switches, buffer, etc.
- D. Affix metal tags to the tested devices and provide Purchaser with written documentation clearly indicating the type of test, date of test, Contractor performing test, and applicable code rule.
- E. Contractor's failure to execute statutory tests mandated by either national codes or local jurisdictions or regulations within 30 calendar days of required time constraint shall subject Contractor to a \$100.00 per calendar day penalty on each unit for each infraction beginning on the 30th day subsequent to the required date and continuing until Purchaser receives written notification from Contractor of completion of required test. Statutory tests include, but are not limited to, Items 1.07, B., 1-6. Contractor shall attempt to schedule said tests in the presence of local enforcing authority and/or persons designated by Purchaser. Scheduling difficulties shall not exempt Contractor from performing tests in compliance with applicable code or regulatory requirements.

1.08 SPECIAL CONDITIONS

- A. Upon arrival and departure from property, all Contractor employees shall report to designated property personnel (location) and manually sign a log book indicating name of person, time of arrival, purpose of visit, i.e. callback, preventive maintenance, scheduled repair, Supervisor's inspection, etc., a brief description of work accomplished, including car and/or group designation, and time of departure. Manual log provided by Purchaser.
- B. Conspicuously post written Maintenance Control Program (MCP) and work log in each machine room or instructions for locating the MCP in or on the car controller(s). Maintain preventive maintenance history and testing logs in accordance with the MCP either in the machine room, building management office, or electronically within unit computer control system. Data shall be accessible by Purchaser via manual log or web access and hard copy printout at all times. Log or electronic printout shall include all

entries for routine preventive maintenance, repairs, tests, callbacks, and Supervisor's inspection. Entries shall include date work is completed, Mechanic's or Supervisor's name, brief description of work completed, including unit number and number of units serviced, repaired or inspected, and the approximate time required for work excluding travel time to and from property. Purchaser shall be allowed to inspect and copy log or electronic printout and maintenance history and schedule at any time.

- C. Maintain Purchaser's complete set of straight line wiring diagrams in good condition. Drawings shall be consistently updated and properly noted with "as built" conditions with any changes or modifications to circuits resulting from control modifications, parts replacement, or equipment upgrades made by Contractor during Agreement term. Purchaser shall be allowed to reproduce these "as built" drawings and retain sole possession of these drawings in event Agreement is cancelled. If Agreement is cancelled, Purchaser will withhold final payment due Contractor until all as built/as modified set(s) of wiring diagrams are delivered to Purchaser.
- D. Equipment manufacturer's electronic diagnostic devices required to facilitate services, including fixed and hand held devices, shall be maintained and upgraded by Contractor during the term of this Agreement.
- E. Local or National inspection fees in regard to operation of equipment covered by this Agreement shall be paid by the Purchaser. Fees for reinspection due to Contractor's failure to expeditiously eliminate deficiencies covered by Services shall be paid by Contractor.
- F. Purchaser may provide information to enable Contractor to render Services hereunder, or Contractor may learn information about Property or develop such information from Purchaser. Contractor agrees:
 - 1. To treat and to obligate Contractor's employees, subcontractors, and suppliers to treat as confidential all such information whether or not identified by Purchaser as confidential.
 - 2. Not to disclose any such information or make available any reports, recommendations, and/or conclusions which Contractor may make on behalf of Purchaser to any person, firm, or corporation or use the same in any manner, whatsoever, without first obtaining Purchaser's written approval, except to the extent necessary in connection with performing Services or when required by law.
 - 3. Contractor shall not, in the course of performance of this Agreement or thereafter, use or permit the use of Purchaser's name or the name of any affiliate of Purchaser, or the name, address, or any picture or likeness of or reference to the

Property in any advertising, promotional, or other materials prepared by or on behalf of Contractor without the prior written approval of Purchaser.

1.09 EQUIPMENT PERFORMANCE REQUIREMENTS

- A. Equipment listing, type, and individual car performance requirements are covered under Appendix B of this Agreement. Equipment performance requirements indicated are the minimum standard and are not the sole criteria for judging Contractor's performance. Consistent failure to meet performance requirements shall be grounds for cancellation of this Agreement.
- B. Contractor shall maintain a quiet and comfortable car ride with smooth acceleration, deceleration, and accurate stop. Door operation shall be smooth and quiet.

1.10 EQUIPMENT USAGE CRITERIA

- A. Callback Frequency Penalty: Frequency is defined as average number of callbacks per unit per month. Callback frequency is calculated by dividing total number of callbacks experienced at Property, during a prior twelve (12) month period, by the number of property units, divided by twelve (12) months.
 - 1. No Contractor penalty shall apply for a callback frequency of .250 to .333.
 - 2. A penalty paid by Contractor to Purchaser in the amount of 5% of annual value of Agreement if a callback frequency of .354 to .396 for previous twelve (12) months is experienced.
 - 3. A penalty paid by Contractor in the amount of 10% of annual value of Agreement if a callback frequency of greater than .417 for previous twelve (12) months is experienced.
 - 4. The assessed penalty shall be paid by Contractor within thirty (30) days of completion of each twelve (12) month period. Alternately, Purchaser may elect to apply penalty due from Contractor against Contractor's monthly Agreement amount, over the subsequent twelve (12) month period.
- B. Penalty: Contractor's failure to meet MTBCB for specific group of elevators availability provision for two (2) consecutive three-month periods, shall trigger an automatic maintenance audit by Purchaser's Elevator Consultant on the non-qualifying elevator group. Contractor agrees to expeditiously take corrective action in regard to identified deficiencies. Further, Contractor acknowledges Purchaser's right to deduct cost of said audit from amount due Contractor.
- C. If this Agreement is renewed beyond its initial term, the penalty provisions shall continue as specified.

1.11 PURCHASER'S RIGHT TO audit SERVICES

- A. Purchaser reserves the right to make, or cause to be made, such audits and tests whenever necessary to ascertain that Services are being fulfilled. Deficiencies noted shall be submitted, in writing, to the Contractor. Contractor shall expeditiously correct deficiencies within thirty (30) working days at its expense.
- B. A qualified vertical transportation consultant acceptable to both parties may be retained by Purchaser to perform audit of Services and mediate disputes.

1.12 AGREEMENT AMOUNT AND ANNUAL LABOR/MATERIAL ADJUSTMENT

- A. During term of this Agreement, Purchaser shall pay Contractor on or before last day of each and every month the sum of \$______, including all applicable taxes, for faithful performance of Services completed for prior month subject to the following:
 - 1. Agreement amount shall be subject to review and adjustment on January 1st and at the end of each 12 month period thereafter. 80% of Agreement price shall be adjusted to reflect increase or decrease in labor cost based on the straight time rate of Elevator Mechanics in area wherein equipment covered by this Agreement is located. The remaining 20% shall be adjusted to reflect increase or decrease in material cost based on Producer Price Index for Metals and Metal Products as published by United States Department of Commerce, Bureau of Labor Statistics. Total price escalations shall be limited to a maximum of 5% in any one (1) year period. Contractor shall provide thirty (30) day advance notification to Purchaser of pending price adjustment for both labor and material. Initial Agreement base rates are as follows:

Mechanic Labor Rate Including		
Fringe Benefits Applicable:	\$	
U. S. Metal Products Index:		

- 2. The words "fringe benefits" mean employee benefits granted in addition to direct hourly labor rate, and include but are not limited to accruals for pensions, vacations, paid holidays, group life, and group health insurance. Fringe benefits shall not include any direct or indirect costs based on labor.
- 3. If straight time work is required, outside scope of Services, hourly rates below apply. If overtime work is required, within the scope of Services, Purchaser will

pay only difference between straight time and overtime labor at hourly rates indicated below. If overtime work is required outside scope of Services, straight time rate plus applicable overtime premium will be basis for hourly charges. Contractor may adjust rates in accordance with Item A. above, labor portion only.

Billing Rates	Mechanic	Helper	Crew
Straight Time	\$	\$	\$
Overtime Premium (1.5 Time)	\$	\$	\$
Overtime Premium (1.7 Time)	\$	\$	\$
Overtime Premium (Double Time)	\$	\$	\$

4. Payment for Services shall not be deemed acceptance of defective, deficient, or non-conforming Services.

1.13 INSURANCE

A. Prior to commencing work, Contractor shall secure required insurance, at its sole cost, and submit certificate of confirmation naming The District as additional insured. Said policies shall include an endorsement which states that such insurance will not be cancelled or materially changed unless Purchaser is given thirty (30) days' notice, in writing, of the intention of said insurer to cancel or change any such policy. In the event Property is owned by a joint venture or other multi-party entity, all joint venture partners or parties with an equity interest in the ownership shall be named as additional insureds. Contractor's insurance shall be primary to any applicable loss. Contractor may purchase an Owners & Contractors Protective Liability (OCPL) Policy on behalf of the District. In this case, the OCPL insurance shall be primary to any applicable loss to the District provided those losses are covered by that policy. Following are minimum insurance coverage requirements:

Type Of Insurance Coverage	Amount
Workers' Compensation And Occupational Disease	Statutory Limits
Employer's Liability (Including Occupational Disease Coverage)	\$1,000,000
Commercial General Liability, Including Operations, Contractual, And Completed Operations Coverages, Occurrence Basis	\$1,000,000 Combined Single Limit For Bodily Injury And Property Damage
Commercial Automobile Liability Covering Owned, Non-Owned And Hired Vehicles Used In The Performance Of The Services	\$1,000,000 Combined Single Limit For Bodily Injury And Property Damage

- B. Commercial General and Automobile Liability: Contractor shall maintain a policy of property damage and public liability insurance, including automobile coverage which shall protect the Purchaser against any liability imposed by law for damages, for injury to property or for bodily injuries, including death, suffered or claimed to have been suffered by reason of any direct or indirect negligent act or omission of any employee, servant or agent of the Contractor. The policy shall not have a "Products and Completed Operations" exclusion.
- C. Nothing in this Agreement shall be construed to mean that Contractor assumes any liability on account of accidents to persons, or property, except those directly, or indirectly, due to negligent acts or omissions of Contractor, its employees, subcontractors, servants or agents. Contractor shall not be held responsible or liable for any loss or damage due to any cause beyond its control, including, but not limited to, acts of government, strikes, lockouts, fire, explosion, theft, floods, riot, civil commotion, war, malicious mischief, or act of God, with the exception of explosion caused by action or inaction of Contractor, its employees, subcontractors, servants or agents which shall be the responsibility of the Contractor. Dates for performance or completion of any ongoing maintenance or corrective action required shall be extended by such length of time as may be reasonably necessary to compensate for unavoidable delay.
- D. "Force Majeure" under this Agreement shall mean in relation to either party any circumstances beyond the reasonable control of that party (including without limitation any strike, lockout, or other industrial action).

- 1. If either party is affected by Force Majeure it shall promptly notify the other of the nature and extent of the circumstances in question.
- 2. Notwithstanding any provision of this Agreement neither party shall be deemed to be in breach of this Agreement or otherwise be liable to the other for any delay in performance or the non-performance of any of its obligations under this Agreement, to the extent that the delay or non-performance is due to any Force Majeure of which it has notified the other party, and the time for performance of the obligation shall be amended accordingly.
- 3. If at any time the Contractor claims Force Majeure in respect of the obligations under this Agreement with regard to the supply of the Services, the Purchaser shall be entitled to obtain from any other person such Services as the Contractor is unable to provide.

1.14 INDEMNIFICATION

- A. The Contractor acknowledges that it has reviewed site and equipment conditions covered by this Agreement prior to the date of commencement of this Agreement. The Contractor shall indemnify the Purchaser against any claims during the Term of this Agreement for adjustment, repair, or replacement of all equipment for which the Contractor is responsible under this Agreement.
- B. Such indemnity and defense obligations shall not apply to the extent such Claims area caused by the negligence or willful misconduct of the party or parties seeking to be indemnified, whether determined by a court of competent jurisdiction with all appeals expired or exhausted, or pursuant to a written settlement and release agreement reasonably approved in writing by Contractor and Purchaser, and by their respective insurers, if applicable. For purposes of this clause "negligence" by an Indemnified Party shall not include its passive failure to supervise Contractor.
- C. The term "Indemnified Parties" herein shall mean Owner, Purchaser and their respective subsidiaries, beneficiaries, parents, shareholders, affiliates, directors, officers, partners, agents, servants and employees of all of the foregoing, and anyone else acting for or on their behalf.
- D. Contractor's obligations under this Provision shall survive expiration or earlier cancellation of this Agreement for one year.

1.15 AGREEMENT CANCELLATION

- A. Purchaser shall have the right to cancel this Agreement at the end of its initial term or at the end of any subsequent term upon ninety (90) calendar day's prior written notice to Contractor. Contractor shall advise the Purchaser of pending Agreement expiration a minimum of six (6) months in advance.
- B. If Contractor violates any provision or fails to properly provide Services required by this Agreement, Purchaser shall advise Contractor of deficiencies and shall allow Contractor a reasonable period, thirty (30) working days unless otherwise agreed, to correct deficiencies at Contractor's expense and to Purchaser's sole satisfaction. If Contractor fails to comply in allotted time, Purchaser shall have right to cancel Agreement upon thirty (30) calendar days written notice to Contractor, or Purchaser, after an additional ten (10) calendar days written notice to Contractor, may perform or cause to be performed all or any part of Services and Contractor agrees that it will reimburse Purchaser for any expense incurred. Purchaser shall deduct said expense from any sum owing Contractor. The waiver by Purchaser of a breach of any provision of this Agreement by Contractor shall not be construed as a waiver of any subsequent breach by Contractor.
- C. If Property is sold or a change of management occurs, this Agreement shall remain in force unless cancelled by Contractor, Owner, or Management Company upon thirty (30) calendar day's written notice to other party.
- D. Purchaser may choose to modernize all or a portion of vertical transportation units during term of this Agreement. Modernization is defined as replacement of elevator motion and supervisory control systems. If Contractor is considered in compliance with terms of this Agreement, Contractor shall be one of the Elevator Contractors requested to submit a modernization proposal. If Contractor is not the selected Modernization Contractor, this Agreement shall, upon written notice by Purchaser to Contractor, be immediately cancelled.
- E. If Agreement is cancelled, Contractor agrees to take action reasonably necessary to cause an orderly cessation and transition of Services to Purchaser or another Contractor designated by Purchaser without detriment to rights of Purchaser or to continued operation of Property including, but not limited to, refraining from any interference or disruption of occupants or other contractors. Without limiting generality of foregoing, Contractor shall immediately deliver to Purchaser all reports, records, as-built wiring diagrams, portable electronic diagnostic devices, access codes, and other materials and documentation related to and required to facilitate Services required by this Agreement. Purchaser shall withhold payments due Contractor until receipt of required information and devices.

1.16 NOTICES

- A. All notices which are required to be given hereunder shall be in writing and shall be sent to the address of the parties to Agreement or such other address as the parties may designate by notice given in accordance with the provisions of this clause. Any such notice may be delivered personally or by first-class pre-paid letter, email or facsimile transmission, and shall be deemed to have been served by hand when delivered, if by first class mail forty-eight (48) hours after posting, and if by email or facsimile transmission when dispatched, provided that a confirming copy is sent by first class pre-paid post to the other party at the address specified within twenty-four (24) hours after transmission.
- B. Each party will notify the other when they become aware of the death or injury to any person or damage to property arising from the use of the Equipment

1.17 PURCHASER'S RESPONSIBILITIES

- A. Provide clear, safe, and convenient access to Property and equipment rooms.
- B. Maintain car lighting, telephone lines to controller terminal(s), equipment room electrical switch gear, and electrical feeders to unit controllers.
- C. Maintain equipment room heating and air conditioning systems.
- D. Maintain fire alarm initiating devices in elevator lobbies, machine rooms, hoistways, etc.
- E. Prevent storage of Property or other Contractors' equipment or supplies in unit equipment rooms and obstruction of equipment room access corridors and doors.
- F. Maintain standby power generator systems and related switch gear and feeders.
- G. Maintain equipment rooms, hoistways, wellways, and pits in code compliant dry condition.
- H. Coordinate with Contractor in regard to equipment retrofits such as security systems, new car interior finishes, car interior TV systems, etc.
- I. During Property construction and/or modernization, make provisions to limit infiltration of dust and debris into equipment and equipment spaces.

1.18 PREVIOUS REPRESENTATIONS

A. All previous communications or agreements, written or verbal, are hereby abrogated and this writing constitutes the whole Agreement between the parties hereto.

1.19 EXTENT OF LAW

A. This Agreement shall be interpreted in accordance with the laws of the State of Ohio.

1 20	
1.20	TIME

A. Time shall be of the essence in the performance of the terms of this Agreement.

1.21 EXECUTION

A. IN WITNESS WHEREOF, the parties have executed this Agreement the date noted below.

	CONTRACTOR		PURCHASER
BY:		BY:	
TITLE:		TITLE:	
DATE:		DATE:	
	END (OF SECTION	

SECTION 14240 HYDRAULIC ELEVATORS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Hydraulic elevators as follows:
 - 1. One passenger elevator, Car 1
- B. All engineering, equipment, labor, and permits required to satisfactorily complete elevator modernization required by Contract Documents.
- C. Applicable conditions of General, Special, and Supplemental Conditions, Division 1, and all sections listed in Contract Documents "Table of Contents."
- D. Preventive maintenance as described in Section 01800 and Section 14325 herein.
- E. Cartage and Hoisting: All required staging, hoisting and movement to, on, and from the site including new equipment, reused equipment, or dismantling and removal of existing equipment.
- F. Unless specifically identified as "Reuse," "Retain," or "Refurbish," provide new equipment.
- G. Hoistway, pit, and machine room barricades as required.
- 1.2 RELATED WORK PROVIDED by elevator contractor UNDER OTHER SECTIONS
 - A. See Section 01900, Related Work Provided Under Other Sections.

1.3 DEFINITIONS

A. Terms used are defined in the latest edition of the Safety Code for Elevators and Escalators, ASME A17.1.

1.4 QUALITY ASSURANCE

- A. Qualified Contractors: Alternate Contractors must receive approval of Architect, Purchaser, and/or Consultant at least 14 days prior to bid date. See Section 00020.
- B. Approved Contractors: Alternate Contractors must receive approval of Purchaser and/or Consultant at least 14 calendar days prior to bid date.
 - 1. Hydraulic Elevator: CEMCOlift Elevator Systems, KONE, Minnesota Elevator Inc., Otis, Schindler, ThyssenKrupp.
 - 2. Car Enclosure: Eklund's Inc., Gunderlin, Ltd., Hauenstein & Burmeister, KONE, Otis, Schindler, ThyssenKrupp, Tyler, Fujitec, Mitsubishi.

- 3. Hoistway Entrance: Hauenstein & Burmeister, KONE, Otis, Schindler, ThyssenKrupp, Tyler, Fujitec, Mitsubishi.
- C. Compliance with Regulatory Agencies: See Section 01040, Project Procedures.

D. Warranty:

- Material and workmanship of installation shall comply in every respect with Contract Documents. Correct defective material or workmanship which develops within one (1) year from date of final acceptance of all work to satisfaction of Architect, Purchaser and Consultant at no additional cost, unless due to ordinary wear and tear, or improper use or care by Purchaser. Perform maintenance in accordance with terms and conditions indicated in the Preventive Maintenance Agreement.
- 2. Defective is defined to include, but not be limited to: operation or control system failures, car performance below required minimum, excessive wear, unusual deterioration, or aging of materials or finishes, unsafe conditions, the need for excessive maintenance, abnormal noise, or vibration, and similar unsatisfactory conditions.
- 3. Retained Equipment: All retained components, parts, and materials shall be cleaned, checked, modified, repaired or replaced, so each component and its parts are in like new operating condition. Retained equipment must be compatible for integration with new systems. All retained equipment shall be covered under the warranty provisions, of Article 1.04, D., 1. & 2. above. No prorations of equipment or parts shall be allowed on preventive maintenance contract, Section 14325, between the Contractor and Purchaser.
- 4. Make modifications, requirements, adjustments, and improvements to meet performance requirements of Sections 01700 and 14240.

1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver material in Contractor's original unopened protective packaging.
- B. Store material in original protective packaging. Prevent soiling, physical damage, or moisture damage.
- C. Protect equipment and exposed finishes from damage and stains during transportation and construction.

1.6 WARRANTY

1. Manufacturer's Warranty: Manufacturer agrees to repair, restore, or replace elevator work that fails in materials or workmanship within specified warranty period.

- 2. Failures include, but are not limited to: operation or control system failure, including excessive malfunctions; performances below specified ratings; excessive wear; unusual deterioration or aging of materials or finishes; unsafe conditions; need for excessive maintenance; abnormal noise or vibration; and similar unusual, unexpected, and unsatisfactory conditions.
- 3. Warranty Period: One year from date of Substantial Completion.

1.7 MAINTENANCE

- A. Interim: See Section 01800, Maintenance, Article 1.01, A.
- B. Warranty Maintenance: See Section 01800, Maintenance, Article 1.02, A.
- C. Preventive Maintenance: See Section 01800, Maintenance, Article 1.03, A

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. KONE Inc.
 - 2. Minnesota Elevator, Inc.
 - 3. Otis Elevator Company
 - 4. Schindler Elevator Corporation
 - 5. ThyssenKrupp Elevator

2.2 ELEVATORS

- A. Elevator System, General: Unless otherwise indicated, manufacturer's standard components shall be used, as included in standard elevator systems and as required for complete system. Contractor to install new holeless hydraulic elevator in the existing hoistway. The new platform and inside car dimensions shall be sized to maximize existing hoistway dimensions.
- B. Passenger Elevator Description:
 - 1. Elevator Identification: Car 1
 - 2. Capacity: 2,000 or 2,100 lbs.
 - 3. Class of Loading: Class A
 - 4. Contract Speed: 125 fpm

- 5. Machine: Hydraulic pump
- 6. Machine Location: Remote at Bottom Landing
- 7. Operational Control: Single automatic
- 8. Motor Control: Single speed AC with eletrconic soft start
- 9. Power Characteristics: 208 Volts, 3 Phase, 60 Hertz (Field Verify)
- 10. Stops and Openings: 3 front; 1 rear
- 11. Floors Served: Front: 1,2,3; Rear: B
- 12. Travel: $33' \pm (Field Verify)$
- 13. Platform Size: Maximum width and depth based on Hoistway Dimensions
- 14. Minimum Clear Inside Car: 5' 8" x 4' 3-1/2"
- 15. Entrance Size: 3'-0" wide X 7'-0" high
- 16. Entrance Type: Single-speed, side-opening
- 17. Door Operation: Medium-speed, heavy-duty door operator. Minimum Opening Speed: 1½ fps
- 18. Door Protection: Infrared, full screen device, with differential timing, nudging, and interrupted beam time
- 19. Hydraulic Type: Dual jack holeless
- 20. Guide Rails: Planed Steel Tees
- 21. Buffers: Spring
- 22. Car Enclosure:
 - a. As specified, stationary returns.
 - b. Clear height under canopy: 8'
 - c. Pad buttons or hooks and vinyl-covered pads
- 23. Signal Fixtures: LED illumination. Contractor's standard design, vandal-resistant assembly.
 - a. Hall and Car Pushbutton Stations:
 - 1) Single hall pushbutton riser
 - 2) Single car operating panel

- 3) Vandal resistant car and hall pushbuttons
- b. Car Position Indicators:
 - 1) Digital in car station with car direction arrows
- c. Car Direction Lanterns: All car entrance columns with volume adjustable electronic chime or tone, vandal-resistant assembly.
- d. Hall Car Position Indicator: Locate in Hall Stations

24. Communication System:

- a. Intercom with Distress Signal
- b. Self-Dialing, Vandal Resistant, Push to Call, Two-Way Communication Telephone System with Recall, Tracking, and Voiceless Communication

25. Additional Features:

26. Additional Features:

- a. Hoistway access switches, top and bottom floors
- b. Hoistway door unlocking device, all floors
- c. Security provisions
- d. CCTV provisions
- e. Provide pit access ladder
- f. Onboard System diagnostic means and instructions
- g. Platform Isolation, Jack to Platen Connections
- h. Hydraulic Pump Unit and Controller Sound Isolation

2.3 MATERIALS

A. Steel:

- 1. Sheet Steel (Furniture Steel for Exposed Work): Stretcher-leveled, cold-rolled, commercial quality carbon steel, complying with ASTM A366, matte finish.
- 2. Sheet Steel (for Unexposed Work): Hot-rolled, commercial quality carbon steel, pickled and oiled, complying with ASTM A568/A568M-03.
- 3. Structural Steel Shapes and Plates: ASTM A36.
- B. Stainless Steel: Type 302 or 304 complying with ASTM A240, with standard tempers and hardness required for fabrication, strength, and durability. Apply mechanical finish

on fabricated work in the locations shown or specified, Federal Standard and NAAMM nomenclature, with texture and reflectivity required to match Architect's sample. Protect with adhesive paper covering.

- 1. No. 4 Satin: Directional polish finish. Graining directions as shown or, if not shown, in longest dimension.
- C. Aluminum: Extrusions per ASTM B221; sheet and plate per ASTM B209.
- D. Plastic Laminate: ASTM E84 Class A and NEMA LD3.1, Fire-Rated Grade (GP-50), Type 7, 0.050" ±.005" thick, color and texture as follows:
 - 1. Exposed Surfaces: Color and texture selected by Architect.
 - 2. Concealed Surfaces: Contractor's standard color and finish.
- E. Fire-Retardant Treated Particle Board Panels: Minimum 3/4" thick backup for natural finished wood and plastic laminate veneered panels, edged and faced as shown, provided with suitable anti-warp backing; meet ASTM E84 Class "I" rating with a flame-spread rating of 25 or less, registered with Local Authorities for elevator finish materials.
- F. Natural Finish Wood Veneer: Standard thickness, 1/40" thoroughly dried conforming to ASME/HPMA HP-1983, Premium Grade. Place veneer, tapeless spliced with grain running in direction shown, belt, and polish sanded, book-matched. Species and finish designated and approved by Architect.
- G. Paint: Clean exposed metal parts and assemblies of oil, grease, scale, and other foreign matter and factory paint one shop coat of standard rust-resistant primer. After erection, provide one finish coat of industrial enamel paint. Galvanized metal need not be painted.
- H. Prime Finish: Clean all metal surfaces receiving a baked enamel paint finish of oil, grease, and scale. Apply one coat of rust-resistant primer followed by a filler coat over uneven surfaces. Sand smooth and apply final coat of primer.
- I. Baked Enamel Finish: Prime finish per above. Unless specified "prime finish" only, apply and bake three additional coats of enamel in the selected solid color.
- J. Carpet or Vinyl tile: Flooring to be provided by Elevator Contractor.

2.4 CAR PERFORMANCE

- A. Car Speed: \pm 10% of contract speed under any loading condition. This speed range will require constant speed lowering feature which is never provided. Good to have if down car speed is critical. For standard hydraulic applications, +10%.
- B. Car Capacity: Safely lower, stop and hold 125% of rated load.
- C. Car Stopping Zone: $\pm 1/4$ " under any loading condition.

- D. Door Times: Seconds from start to fully open or fully closed:
 - 1. Car 1: Door open: 2.5 seconds. Door close: 3.4 seconds.
- E. Car Floor-to-Floor Performance Time: Seconds from start of doors closing until doors are 3/4 open (1/2 open for side opening doors) and car level and stopped at next successive floor under any loading condition or travel direction (14' typical floor height):
 - 1. Car 1: 15.5 seconds.
- F. Pressure: Fluid system components shall be designed and factory tested for 500 p.s.i. Maximum operating pressure shall be 400 p.s.i.

G. Car Ride Quality:

- 1. Acceleration and Deceleration: Smooth constant and not less than 1.5 feet/second² with an initial ramp between 0.5 and 0.75 second. Sustained Jerk: Not more than 6 feet/second³.
- 2. Measurement Standards: Measure and evaluate ride quality consistent with ISO 18738, using low pass cutoff frequency of 10 Hz average calculations.

2.5 OPERATION

- A. Automatic Pushbutton Microprocessor-Based:
 - 1. Operate car without attendant from pushbuttons in car and at each landing. When car is idle, automatically start car and dispatch it to appropriate floor when call is registered by pressing car or hall pushbutton.
 - 2. Illuminate, "in use" lights in each hall pushbutton station when car is responding to registered car or hall call. Prevent registration of another call until trip is complete including time for passenger transfer and registration of car call if car is responding to a hall call. Extinguish "in use" light to indicate system is available to respond to next hall call.

B. Other Items:

- 1. Low Oil Control: In the event oil level is insufficient for travel to the top floor, provide controls to return elevator to the main level and park until oil is added.
- 2. Load Weighing: Provide means for weighing car passenger load. Control system to provide dispatching at main floor in advance of normal intervals when car fills to capacity. Provide hall call by-pass when the car is filled to preset percentage of rated capacity and traveling in down direction. Field adjustment range: 10% to 100%.

- 3. Anti-Nuisance Feature: If car loading relative to weight in car is not commensurate with number of registered car calls, or activation of door protection device is not commensurate with number of registered car calls, cancel car calls.
- 4. Independent Service: Provide controls for operation of each car from its pushbuttons only. Close doors by constant pressure on desired destination floor button or door close button. Open doors automatically upon arrival at selected floor.
- C. Firefighters' Service: Provide equipment and operation in accordance with code requirements.
- D. Automatic Car Stopping Zone: Stop car within 1/4" above or below the landing sill. Maintain stopping zone regardless of load in car, direction of travel, distance between landings.
- E. Motion Control: Microprocessor-based AC type with unit valve suitable for operation specified and capable of providing smooth, comfortable car acceleration and retardation. Limit the difference in car speed between full load and no load to not more than $\pm 10\%$ of the contract speed.
- F. Door Operation: Automatically open doors when car arrives at main floor. At expiration of normal dwell time, close doors.
- G. Standby Lighting and Alarm: Car mounted battery unit with solid-state charger to operate alarm bell and car emergency lighting. Battery to be rechargeable with minimum five-year life expectancy. Include required transformer. Provide constant pressure test button in service compartment of car operating panel. Provide lighting integral with portion of normal car lighting system.
- H. Battery Lowering Feature: Upon loss of normal power, provide controls to automatically lower the car to the nearest lower landing. Upon arrival at the lowest landing, the elevator doors shall open automatically and remain open until regular door time has expired. The elevator shall then become deactivated. The standby power source shall be provided via 12-volt D.C. battery units installed in machine room, including solid-state charger and testing means mounted in a common metal container. Battery to be rechargeable lead acid or nickel cadmium with a ten-year life expectancy. Upon restoration of normal power, the elevator shall automatically resume normal operation.

2.6 MACHINE ROOM EQUIPMENT

- A. Arrange equipment in spaces shown on drawings.
- B. Pump Unit: Assembled unit consisting of positive displacement pump, induction motor, master-type control valves combining safety features, holding, direction, bypass, stopping, manual lowering functions, shut off valve, oil reservoir with protected vent opening, oil level gauge, outlet strainer, drip pan, muffler, all mounted on isolating pads.

Provide oil thermal unit and oil temperature thermostat to maintain oil at operating temperature. Design unit for 80 up starts/hour.

- C. Landing System: Solid-state, magnetic, or optical type.
- D. Controller: UL/CSA labeled.
 - 1. Compartment: Securely mount all assemblies, power supplies, chassis switches, relays, etc., on a substantial, self-supporting steel frame. Completely enclose equipment with covers. Provide means to prevent overheating.
 - 2. Relay Design: Magnet operated with contacts of design and material to insure maximum conductivity, long life, and reliable operation without overheating or excessive wear. Provide wiping action and means to prevent sticking due to fusion. Contacts carrying high inductive currents shall be provided with arc deflectors or suppressors.
 - 3. Microprocessor-Related Hardware:
 - a. Provide built-in noise suppression devices which provide a high level of noise immunity on all solid-state hardware and devices.
 - b. Provide power supplies with noise suppression devices.
 - c. Isolate inputs from external devices (such as pushbuttons) with opto-isolation modules.
 - d. Design control circuits with one leg of power supply grounded.
 - e. Safety circuits shall not be affected by accidental grounding of any part of the system.
 - f. System shall automatically restart when power is restored.
 - g. System memory shall be retained in the event of power failure or disturbance.
 - h. Equipment shall be provided with Electro Magnetic Interference (EMI) shielding within FCC guidelines.
 - 4. Wiring: CSA labeled copper for factory wiring. Neatly route all wiring interconnections and securely attach wiring connections to study or terminals.
 - 5. Permanently mark components (relays, fuses, PC boards, etc.) with symbols shown on wiring diagrams.
 - 6. Provide controller or machine mounted auxiliary lockable "open" disconnect if mainline disconnect is not in sight of controller and/or machine.
- E. Muffler: Provide in discharge oil line near pump unit. Design shall dampen and absorb pulsation and noise in the flow of hydraulic fluid.

- F. Piping and Oil: Provide piping, connections and oil for the system. Buried piping shall be secondarily contained with watertight Schedule 40 PVC sleeves between elevator machine room and pit. A minimum of two sound isolation couplings shall be provided between the pump unit and oil line and the oil line and jack unit. Provide isolated pipe stands or hangers as required.
- G. Shut-Off Valve: manual valve on line adjacent to pump unit. Provide second valve in pit adjacent to jack unit.

2.7 HOISTWAY EQUIPMENT

- A. Guide Rails: Planed steel T-sections for car of suitable size and weight for the application, including brackets for attachment to building structure. Provide rail backing to meet code requirements. No additional structural points of rail attachment, other than those shown on the Contract Documents, will be provided.
- B. Buffers: Spring type with blocking and support channels.
- C. Hydraulic Jack Assembly:
 - 1. Cylinders: Seamless steel pipe. Design head to receive unit-type packing and provide means to collect oil at cylinder head and return automatically to oil reservoir. Provide cylinder stabilizer bracketing between guide rails as required.
 - 2. Plungers: Polished seamless steel tubing or pipe. If plunger length exceeds 24'-0", provide two or more sections not exceeding 16'-0" in length, or coordinate installation of longer unit at the jobsite. Join sections by internal threaded couplings. Multiple section jack units shall be factory polished while assembled and marked for proper future reassembly. Isolate plunger from car frames.
 - 3. Provide dual jack holeless application.
- D. Sheaves: Machined grooves and sealed bearings. Provide mounting means to top of plungers.
- E. Jack Support and Fluid Shut-Off Valves: Provide steel pit channels to support jack assembly and transmit loads to building structure. Provide intermediate stabilizers as required. Provide manual on/off valves in oil lines adjacent to pump unit and jack units in pit.
- F. Terminal Stopping: Provide normal and final devices.
- G. Electrical Wiring and Wiring Connections:
 - 1. Conductors and Connections: Copper throughout with individual wires coded and connections on identified studs or terminal blocks. Use no splices or similar connections in wiring except at terminal blocks, control compartments, or

- junction boxes. Provide 10% spare conductors throughout. Run spare wires from car connection points to individual elevator controllers in the machine room.
- 2. Conduit: Galvanized steel conduit, EMT, or duct. Flexible conduit length not to exceed 3'-0". Flexible heavy-duty service cord may be used between fixed car wiring and car door switches for door protective devices.
- 3. Traveling Cables: Flame and moisture-resistant outer cover. Prevent traveling cable from rubbing or chafing against hoistway or equipment within hoistway.
 - a. Provide five pair of shielded wires of minimum 18 gauge for card reader.
 - b. Provide one RG-6/U coaxial CCTV cable and two pair of shielded 18 gauge wire within traveling cable from car controller to car top junction box, plus 3'-0" excess loop at both ends.
 - c. Provide two pair of 18 gauge wire for CCTV power.
 - d. Provide four pair of spare shielded communication wires in addition to those required to connect specified items.
 - e. Tag spares in machine room. Provide cables from controller to car top.
- 4. Auxiliary Wiring: Provide conduit, wiring and connections for fire alarm initiating devices, emergency two-way communication system, firefighters' phone, paging speaker, security system and card reader interface terminals and relays, intercom, and announcement speaker and/or background music from the machine room junction box to each car controller in machine room.

H. Entrance Equipment:

- 1. Door Hangers: Two-point hanger roller with neoprene roller surface and suspension with eccentric upthrust roller adjustment.
- 2. Door Tracks: Bar or formed, cold-drawn removable steel tracks with smooth roller contact surface.
- 3. Door Interlocks: Operable without retiring cam. Paint interlock box flat black.
- 4. Door Closers: Spring, spirator, or jamb/strut mounted counterweight type. Design and adjust to insure smooth, quiet mechanical close of doors.
- 5. Hoistway Door Unlocking Device: Provide unlocking device with escutcheon in door panel at all floors, with finish to match adjacent surface.
- 6. Hoistway Access Switches: Mount in hall station at top and bottom floors.
- I. Floor Numbers: Stencil paint 4" high floor designations in contrasting color on inside face of hoistway doors or hoistway fascia in location visible from within car.

2.8 HOISTWAY ENTRANCES

- A. Complete entrances bearing fire labels from a nationally recognized testing laboratory approved within the governing jurisdiction.
- B. Frames: 14 gauge hollow metal at all floors. Bolted and lapped head to jamb assembly at all floors. Provide Arabic floor designation/Braille plates, centered at 60" above finished floor, on both side jambs of all entrances. Provide plates at main egress landing with "Star" designation. For designated emergency car, provide "Star of Life" designation plates at height of 78"-84" above finished floor on both side jambs at all floors. Braille indications shall be below Arabic floor designation. Provide cast floor designation/Braille plates as manufactured by SCS Elevator Products, Inc. or Vision Mark.
- C. Door Panels: 16 gauge steel, sandwich construction without binder angles. Provide a minimum of two gibs per panel, one at leading and one at trailing edge with gibs in the sill groove entire length of door travel. Construct door panels with interlocking, stiffening ribs.
- D. Sight Guards: 14 gauge, same material and finish as hoistway entrance door panels. Construct without sharp edges.
- E. Sills: Extended extruded aluminum.
- F. Sill Supports: Structural or formed steel designed to support door sill based upon car loading classification. Mount to eliminate need for grout under the sill.
- G. Fascia, Toe Guards and Hanger Covers: 14 gauge furniture steel with Contractor's standard finish. Provide full height fascia, toe guards, and hanger covers where rear entrances are not provided. Provide hoistway width fascia, toe guards, and hanger covers for Car 1.
- H. Struts and Headers: Provide for vertical support of entrances and related material. Provide door open bumpers on entrances equipped with vertical struts.
- I. Finish of Frames and Doors: Satin finish stainless steel
- J. Hoistway Access:
 - 1. Hoistway Door Unlocking Device: Provide unlocking device with locking escutcheon in door panel at all floors, with finish to match adjacent surface.
 - 2. Hoistway Access Switches: Mount in hall stations at top and bottom floors.

2.9 CAR EQUIPMENT

A. Frame: Welded or bolted, rolled or formed steel channel construction to meet load classification specified.

- B. Platform: Isolated type, constructed of steel, or steel and wood which is fireproofed on underside. Design and construct to accommodate load classification requirements. Provide Class "A" construction for passenger elevator.
- C. Platform Apron: Minimum 14 gauge steel, reinforced and braced to car platform with Contractor's standard finish.
- D. Guide Shoes: Roller type with three or more spring dampened, sound-deadening rollers per shoe. Maximum roller rotation speed, 350 rpm. Solid type.
- E. Finish Floor Covering: Provided by elevator contractor. Carpet or Vinyl Composition Tile.
- F. Sills: Aluminum one piece extrusion with extruded extension between car entrance columns to face of car front return. Extruded extension to match finish of sill.
- G. Door Panels: 16 gauge steel, sandwich construction without binder angles. Provide leading edges of center-opening doors with rubber astragals. Provide a minimum of two gibs per panel, one at leading and one at trailing edge with gibs in the sill groove entire length of door travel. Construct door panels with interlocking, stiffening ribs.
- H. Door Hangers: Two-point hanger roller with neoprene roller surface and suspension with eccentric upthrust roller adjustment.
- I. Door Track: Bar or formed, cold-drawn removable steel track with smooth roller contact surface.
- J. Door Header: Construct of minimum 12 gauge steel, shape to provide stiffening flanges.
- K. Door Electrical Contact: Prohibit car operation unless car door is closed.
- L. Door Clutch: Heavy-duty clutch, linkage arms, drive blocks and pickup rollers or cams to provide positive, smooth, quiet door operation. Design clutch so car doors can be closed, while hoistway doors remain open.
- M. Restricted Opening Device: Provide car-door interlock to prevent opening of car doors outside unlocking zone.
- N. Door Operator: Medium-speed, heavy-duty door operator capable of opening doors at no less than 1½ fps. Accomplish reversal in no more than 2½" of door movement. Provide solid-state door control with closed loop circuitry to constantly monitor and automatically adjust door operation based upon velocity, position, and motor current. Provide a minimum of four controller-activated motion profiles, per floor, per door, to maintain consistent, smooth, and quiet door operation at all floors, regardless of door weight or varying air pressure. Acceptable closed-loop door operators:

1. KONE: AMD

2. Otis: AT 400 or Glide P

3. Schindler: QKS

4. ThyssenKrupp: HD

5. G.A.L.: MOVFR or MOVFE

6. Wittur: AMD

- 7. Nudging Operation: After beams of door control device are obstructed for a predetermined time interval (minimum 20.0-25.0 seconds), warning signal shall sound and doors shall attempt to close with a maximum of 2.5 foot pounds kinetic energy. Activation of the door open button shall override nudging operation and reopen doors.
- 8. Interrupted Beam Time: When beams are interrupted during initial door opening, hold door open a minimum of 3.0 seconds. When beams are interrupted after the initial 3.0 second hold open time, reduce time doors remain open to an adjustable time of approximately 1.0-1.5 seconds after beams are reestablished.
- 9. Differential Door Time: Provide separately adjustable timers to vary time that doors remain open after stopping in response to calls.
 - a. Car Call: Hold open time adjustable between 3.0 and 5.0 seconds.
 - b. Hall Call: Hold open time adjustable between 5.0 and 8.0 seconds. Use hall call time when car responds to coincidental calls.

O. Car Operating Panel:

- 1. Passenger: One car operating panel with faceplate consisting of a metal box containing the vandal resistant operating fixtures, mounted behind the car stationary front return panel.
 - a. Provide manually operated stop switch within Firefighters' Phase II compartment
 - b. Provide "door open" button to stop and reopen doors or hold doors in open position.
 - c. Provide "door close" button to activate door close cycle. Cycle shall not begin until normal door dwell time for a car or hall call has expired, except firefighters' operation.
 - d. Locked panel including Phase II fire access switch and hidden floor buttons, call cancel button, door open, door close, switch, stop switch, light jewel, for fire officer use and use of car on independent service only.
- 2. Suitably identify floor buttons, alarm button, door open button, door close button, and emergency push-to-call button with SCS Elevator Products, Inc. or equal cast

tactile symbols surface mounted fastenings. Manufacturers standard tactile markings acceptable for service and freight cars. Configure plates per local building code accessibility standards including Braille. Locate top floor button at maximum height allowed above the car floor; no lower than 35" for emergency push-to-call button and alarm button.

- 3. Provide minimum 3/4" diameter raised floor pushbuttons that illuminate to indicate call registration.
- 4. Provide alarm button to ring bell located on car. Illuminate button when actuated.
- 5. Provide Firefighters' devices and operation.
- 6. Provide lockable service compartment with recessed flush door. Door material and finish shall match car return panel or car operating panel faceplate. Include the following controls in lockable service cabinet with function and operating positions identified by permanent signage or engraved legend:
 - a. Service Panel Door: GEM EX513
 - b. Inspection switch. GEM EX 512
 - c. Light switch. GEM513
 - d. Three-position exhaust blower switch. GEM EX513
 - e. Independent service switch. GEM EX514
 - f. Constant pressure test button for battery pack emergency lighting. GEM EX513, if providing a key switch
 - g. 120-volt, AC, GFCI protected electrical convenience outlet.
 - h. Card reader override switch. GEM EX514
 - i. Stop switch. GEM EX512
- 7. Provide black paint filled (except as noted), engraved, or approved etched signage as follows with approved size and font:
 - a. Phase II firefighters' operating instructions on inside face of firefighters' compartment door. Engrave filled red firefighters' operation on outside face of compartment door.
 - b. Building identification car number on main car operating panel.
 - c. "No Smoking" on main car operating panel.
 - d. Car capacity in pounds on main car operating panel.

- e. Loading classification and description on service compartment door.
- P. Car Top Control Station: Mount to provide safe access and utilization while standing in an upright position on car top.
- Q. Work Light and Duplex Plug Receptacle: GFCI protected outlet at top of car. Include on/off switch and lamp guard. Provide additional GFCI protected outlet on car top for installation of car CCTV.

R. Communication System:

- 1. Two-way communication instrument in car with automatic dialing, tracking, and recall features, with shielded wiring to car controller in machine room. Provide dialer with automatic rollover capability with minimum two numbers.
 - a. Actuate two-way communication via "Help" button.
 - b. Button or adjacent light jewel shall illuminate and flash when call is acknowledged.
 - c. Button shall match car operating panel pushbutton design.
 - d. Provide "Help" button tactile symbol, engraved signage, and Braille adjacent to button mounted integral with car front return panel.
- 2. Firefighters' communication.
- 3. Provide two-way communication between car and machine room if required.

2.10 CAR ENCLOSURE

- A. Passenger Elevator: Provide complete as specified herein.
 - Shell: Reinforced 14 gauge furniture steel formed panels with baked enamel interior finish as selected. Apply sound-deadening mastic to exterior. Provide concealed ventilation cutouts.
 - 2. Canopy: Reinforced 12 gauge furniture steel formed panels with lockable, contacted, hinged emergency exit. Interior finish white color reflective baked enamel.
 - 3. Front Return Panels and Integral Entrance Columns: Reinforced 14 gauge furniture steel clad with minimum 16 gauge satin finish stainless steel. Swing entire unit on substantial pivot points (minimum three) for service access to car operating panel. Locate pivot points to provide full swing of front return panel without interference with side wall finish or handrail. Secure in closed position with concealed three-point latch. Provide firefighters' and service compartments with recessed flush cover and cutouts for operating switches, etc.

- 4. Front Return Panels: furniture steel clad with minimum 16 gauge satin finish stainless steel with cutouts for applied car operating panel and other equipment.
- 5. Transom: Reinforced 14 gauge furniture steel clad with minimum 16 gauge satin finish stainless steel full width of enclosure.
- 6. Car Door Panels: Reinforced minimum 16 gauge furniture steel clad with minimum 18 gauge satin finish stainless steel. Same construction as hoistway door panels.
- 7. Base: Satin finish stainless steel.
- 8. Interior Wall Finish: Removable panels, faced and edged, with Rigidized 5wl, or equivalent.
- 9. Ventilation: Morrison Products, Inc. two-speed model SOE No. 06-01055 exhaust blower mounted to car canopy on isolated rubber grommets. Exhaust blower shall meet noise and vibration criteria.
- 10. Lighting: Provide LED fixtures with wiring and hookup. Coordinate with emergency lighting requirements
- 11. Suspended Ceiling: Six-section satin finish stainless steel panels with lighting cutouts in each panel..
- 12. Handrails: Minimum 1¼" diameter stainless steel tubular grab bar with backing plates and captive nuts across rear and side walls. Bolt rails through car walls from back and mount on 1½" deep solid round stainless steel standoff spacers no more than 18" O.C. Return handrail/guardrail ends to car walls.
- 13. Flooring: Aluminum Diamond Plate flooring with a minimum of 1/4" thick
- 14. Pads and Buttons or Hooks: Three-piece removable pads. Two pads covering side walls and adjacent front returns and one covering rear wall. Provide cutouts to access main car operating panel.

2.11 HALL CONTROL STATIONS

- A. Pushbuttons: Provide one riser with flush mounted faceplates. Include pushbuttons for each direction of travel that illuminate to indicate call registration. Include approved engraved message and pictorial representation prohibiting use of elevator during fire or other emergency as part of faceplate. Pushbutton design shall match car operating panel pushbuttons. Provide vandal resistant pushbutton and light assemblies. Provide LED illumination.
- B. Phase I Fire Service fixture, including keyswitch, engraved operating instructions and illuminating jewel.

2.12 SIGNALS

A. Car Direction Lantern:

- 1. Provide at each entrance to indicate travel direction of arriving car.
- 2. Illuminate up or down LED lights and sound tone once for up and twice for down direction as doors open.
- 3. Sound level shall be adjustable from 20-80 dBA measured at 5'-0" in front of hall control station and 3'-0" off floor.
- 4. Provide advanced hall lantern notification to comply with ADA hall call notification time.
- 5. Car direction lenses shall be arrow shaped with faceplates.
- 6. Lenses shall be minimum $2\frac{1}{2}$ " in their smallest dimension.
- 7. Provide vandal resistant lantern and light assemblies consisting of series of dots or lines for maximum visibility.
- B. Car Position Indicator: Alpha-numeric digital indicator containing floor designations and direction arrows a minimum of 1/2" high to indicate floor served and direction of car travel. When a car leaves or passes a floor, illuminate indication representing position of car in hoistway. Illuminate proper direction arrow to indicate direction of travel.
- C. Hall Position Indicator: Alpha-numeric digital indicator containing floor designations and direction arrows a minimum of 1" high to indicate floor served and direction of car travel. Mount integral with hall stations at all floors.
- D. Faceplate Material and Finish: Satin finish stainless steel, all fixtures. Tamper resistant fasteners for all fastenings exposed to the public.
- E. Floor Passing Tone: Provide an audible tone of no less than 20 decibels and frequency of no higher than 1500 Hz, to sound as the car passes or stops at a floor served.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Prior to beginning installation of equipment examine hoistway and machine room areas. Verify no irregularities exist which affect execution of work specified.
- B. Do not proceed with installation until work in place conforms to project requirements.

3.2 INSTALLATION

A. Install all equipment in accordance with Contractor's instructions, referenced codes, specification, and approved submittals.

- B. Install machine room equipment with clearances in accordance with referenced codes and specification.
- C. Install all equipment so it may be easily removed for maintenance and repair.
- D. Install all equipment for ease of maintenance.
- E. Install all equipment to afford maximum accessibility, safety, and continuity of operation.
- F. Remove oil, grease, scale, and other foreign matter from the following equipment and apply one coat of field-applied machinery enamel.
 - 1. All exposed equipment and metal work installed as part of this work which does not have architectural finish.
 - 2. Machine room equipment, hoistway equipment including guide rails, guide rail brackets, and pit equipment.
 - 3. Neatly touch up damaged factory-painted surfaces with original paint color. Protect machine-finish surfaces against corrosion.
- G. Clean all architectural finishes and replace or restore any surfaces damaged during construction to like new condition.

3.3 FIELD QUALITY CONTROL

- A. Acceptance Testing: On completion of elevator installation and before permitting elevator use (either temporary or permanent), perform acceptance tests as required and recommended by ASME A17.1/CSA B44 and by governing regulations and agencies.
- B. Operating Test: Load elevator to rated capacity and operate continuously for 30 minutes over full travel distance, stopping at each level and proceeding immediately to the next. Record temperature rise of elevator machine during 30-minute test period. Record failure to perform as required.
- C. Advise Owner, Architect, and authorities having jurisdiction in advance of dates and times that tests are to be performed on elevators.

3.4 ADJUSTING

- A. Install hydraulic jack assembly and guide rails plumb and align vertically with tolerance of 1/16" in 100'-0". Secure guide rail joints without gaps and file any irregularities to a smooth surface.
- B. Static balance car to equalize pressure of guide shoes on guide rails.
- C. Lubricate all equipment in accordance with Contractor's instructions.
- D. Adjust motors, valves, controllers, leveling switches, limit switches, stopping switches, door operators, interlocks, and safety devices to achieve required performance levels.

3.5 CLEANUP

- A. Keep work areas orderly and free from debris during progress of project. Remove packaging materials on a daily basis.
- B. Remove all loose materials and filings resulting from work.
- C. Clean machine room equipment and floor.
- D. Clean pit equipment and floor.
- E. Clean hoistways, car, car enclosure, entrances, operating, and signal fixtures.

3.6 Test Results:

- A. Under any load obtain specified contract speed, performance times, stopping accuracy without re-leveling, and ride quality to satisfaction of Consultant. Tests may be conducted under no load, balanced load, and full load conditions.
- B. Consultant may test temperature rise in motor windings limited to 50° Celsius above ambient. A full-capacity one hour running test, stopping at each floor for ten seconds in up and down directions, may be required.
- C. Engage a factory-authorized service representative to train Owner's maintenance personnel to operate elevators.
- D. Check operation of each elevator with Owner's personnel present before date of Substantial Completion and again not more than one month before end of warranty period. Determine that operation systems and devices are functioning properly.

END OF SECTION

SECTION 14250

HYDRAULIC ELEVATOR MODERNIZATION

PART 1 GENERAL

1.01 WORK INCLUDED

- A. One (1) hydraulic elevator as follows:
 - 1. Joseph Gallagher Passenger Elevator. Car 1
- B. All engineering, equipment, labor, and permits required to satisfactorily complete elevator modernization required by Contract Documents.
- C. Applicable conditions of General, Special, and Supplemental Conditions, Division 1, and all sections listed in Contract Documents "Table of Contents."
- D. Preventive maintenance as described in Section 01800 and Section 14325 herein.
- E. Cartage and Hoisting: All required staging, hoisting and movement to, on, and from the site including new equipment, reused equipment, or dismantling and removal of existing equipment.
- F. Unless specifically identified as "Reuse," "Retain," or "Refurbish," provide new equipment.
- G. Hoistway, pit, and machine room barricades as required.

1.02 RELATED WORK PROVIDED BY ELEVATOR CONTRACTOR UNDER OTHER SECTIONS

A. See Section 01900. Related Work Provided Under Other Sections.

1.03 DEFINITIONS

- A. Terms used are defined in the latest edition of the Safety Code for Elevators and Escalators, ASME A17.1.
- B. Reference to a device or a part of the equipment applies to the number of devices or parts required to complete the installation.
- C. Provisions of this specification are applicable to all elevators unless identified otherwise.

1.04 QUALITY ASSURANCE

A. Qualified Contractors: Alternate Contractors must receive approval of Architect, Purchaser, and/or Consultant at least 14 days prior to bid date. See Section 00020.

- B. Approved Contractors: Alternate Contractors must receive approval of Purchaser and/or Consultant at least 14 calendar days prior to bid date.
- C. Hydraulic Elevator: CEMCOlift Elevator Systems, KONE, Minnesota Elevator Inc., Otis, Schindler, ThyssenKrupp.
- D. Car Enclosure: Eklund's Inc., Gunderlin, Ltd., KONE, Otis, Schindler, ThyssenKrupp, Tyler.
- E. Hoistway Entrance: Hauenstein & Burmeister, KONE, Otis, Schindler, ThyssenKrupp, Tyler.
- F. Compliance with Regulatory Agencies: See Section 01040, Project Procedures.
- G. Warranty:
- H. Material and workmanship of installation shall comply in every respect with Contract Documents. Correct defective material or workmanship which develops within one (1) year from date of final acceptance of all work to satisfaction of Architect, Purchaser and Consultant at no additional cost, unless due to ordinary wear and tear, or improper use or care by Purchaser. Perform maintenance in accordance with terms and conditions indicated in the Preventive Maintenance Agreement.
- I. Defective is defined to include, but not be limited to: operation or control system failures, car performance below required minimum, excessive wear, unusual deterioration, or aging of materials or finishes, unsafe conditions, the need for excessive maintenance, abnormal noise, or vibration, and similar unsatisfactory conditions.
- J. Retained Equipment: All retained components, parts, and materials shall be cleaned, checked, modified, repaired or replaced, so each component and its parts are in like new operating condition. Retained equipment must be compatible for integration with new systems. All retained equipment shall be covered under the warranty provisions, of Article 1.04, D., 1. & 2. above. No prorations of equipment or parts shall be allowed on preventive maintenance contract, Section 14325, between the Contractor and Purchaser.
- K. Make modifications, requirements, adjustments, and improvements to meet performance requirements of Sections 01700 and 14250.

1.05 DOCUMENT AND SITE VERIFICATION

A. In order to discover and resolve conflicts or lack of definition which might create problems, Contractor must review Contract Documents and site conditions for compatibility with its product prior to submittal of bid. Review existing structural, electrical provisions, and mechanical provisions for compatibility with Contractor's products. Purchaser will not pay for change to structural, mechanical, electrical, or other systems required to accommodate Contractor's equipment.

1.06 SUBMITTALS

A. See Section 01300, Submittals, and Section 01700, Final Contract Compliance Review, Article 1.03.

1.07 PERMIT, TEST AND INSPECTION

- A. Obtain and pay for permit, license, and inspection fee necessary to complete installation.
- B. Perform test required by governing authority in accordance with procedure described in ASME A17.2 Guide for Inspection of Elevators, Escalators, and Moving Walks in the presence of Authorized Representative.
- C. Supply personnel and equipment for test and final review by Consultant, as required in Section 01700.

1.08 MAINTENANCE

- A. Interim: See Section 01800, Maintenance, Article 1.01, A.
- B. Warranty Maintenance: See Section 01800, Maintenance, Article 1.02, A.
- C. Preventive Maintenance: See Section 01800, Maintenance, Article 1.03, A.

PART 2 PRODUCTS

2.01 SUMMARY

- A. One (1) Passenger Elevator
- B. Unless specifically identified as "retain existing," provide new equipment.

	Existing Equipment	Disposition
Number:	Car 1	Car 1
		Retain Existing
Capacity:	2,000 lbs	2,000 lbs
Class Loading:	Passenger Class A	Retain Existing
Contract Speed:	125 F.P.M.	125 F.P.M.
Machine:	Hydraulic Pump	New – Submersible Pump Unit
Machine Location:		Retain Existing

	Existing Equipment	Disposition
Operational Control:	Selective Collective	Microprocessor-Based System
Motor Control:	Single Speed AC with Wye Delta Start	Single Speed AC with Electronic Soft Start
Power Characteristics:	480 Volts, 3 Phase, 60 Hertz	Retain Existing
	Field Verify	
Stops:	3 Front	Retain Existing
Openings:	3 Front	Retain Existing
Floors Served:	1, 2, 3	Retain Existing
Travel:	21'± Field Verify	Retain Existing
Minimum Clear Inside Car:	73" Wide X 44" Deep	Retain Existing
	Field Verify	
Entrance Size:	36" Wide X 84" High	Retain Existing
	Field Verify	
Entrance Type:	Single Speed Side Opening	Retain Existing
Door Operation:	Medium Speed, Heavy-Duty, Door Operator, Minimum Opening Speed 1-1/2 F.P.S.	High Speed, Heavy-Duty, Door Operator, Minimum Opening Speed 2-1/2.

	Existing Equipment	Disposition
Door Protection:	Mechanical Safety Edge	New - Infrared, Full Screen Device, with Differential Timing Nudging and Interrupted Beam Time
Hydraulic Type:	Direct Plunger	Retain Existing Direct Plunger
Guide Rails:	Planed Steel Tees	Retain Existing
Buffers:	Spring	Retain and Refurbish Existing
Car Enclosure:		As Specified
		Car Interior Finishes Provided Under This Section
		Pad Buttons and Vinyl- Covered Pads
		Battery Powered Emergency Car Lighting. Provide Separate
		Constant Pressure Test Button in Car Service Compartment.
		Illuminate Portion of Normal Car Lighting
Signal Fixtures:		LED Illumination Contractor's Vandal Resistant Assembly

	Existing Equipment	Disposition
Hall and Car		Single Hall Pushbutton Riser
Pushbutton Stations:		Single Dual Car Operating Panel. Contractor to remove and reinstall existing keyswitch in hall stations to place hall calls.
		Vandal Resistant Car and Hall Pushbuttons
Car Position Indicators:		Single Digital with Car Direction Arrows
In Car Lanterns:		All Car Entrance Columns with Volume Adjustable Electronic Chime or Tone. Sound Twice for Down Direction. Vandal Resistant Assembly
Hall Position Indicators:		Single Digital with Car Direction Arrows installed in Hall Stations
Communication System:		Self-Dialing, Vandal Resistant, Push to Call, Two-Way Communication System with Recall, Tracking and Voiceless Communication
Fixture Submittal:		Submit Brochure Depicting Contractor's Proposed Designs with Bid
Additional Features:		Retain solid guide assemblies and replace existing liners

Car Top Inspection Station

Firefighters' Service, Phase I and II, Including Alternate Floor Return

Battery Pack Standby Power Provision

Stationary Car Return Panel Arranged for Surface Applied Car Operating Panel

Hoistway Access Switches

Top and Bottom Floors

Hoistway Door Unlocking Device

All Floors

Platform Isolation

Jack to Platen Connections

Independent Service Feature

Hydraulic Pump Unit, and Controller Sound Isolation

Tamper Resistant Fasteners for All Fastenings Exposed to the Public

One Year Warranty
Maintenance with 24-Hour
Call-Back Service

No Visible Company Name or Logo

Wiring Diagrams, Operating Instructions, and Parts Ordering Information

Onboard System Diagnostic Means and Instructions

Non-Proprietary Control System and Diagnostics Provisions

2.02 MATERIALS

A. See Section 01600, Materials.

2.03 CAR PERFORMANCE

- A. Car Speed: $\pm 10\%$ of contract speed under any loading condition.
- B. Car Capacity: Safely lower, stop and hold 125% of rated load.
- C. Car Stopping Zone: $\pm 1/4$ " under any loading condition.
- D. Door Opening Time: Seconds from start of opening to fully open:
 - 1. Car 1: 2.6 2.8 seconds.
- E. Door Closing Time: Seconds from start of closing to fully closed:
 - 1. Car 1: 3.4 3.8 seconds.
- F. Car Floor-to-Floor Performance Time: Seconds from start of doors closing until doors are 3/4 open (1/2 open for side opening doors) and car level and stopped at next successive floor under any loading condition or travel direction (12' typical floor height):
 - 1. Car 1: 13.0 14.0 seconds.

G. Pressure: Fluid system components shall be designed and factory tested for 500 p.s.i. Maximum operating pressure shall be 400 p.s.i.

2.04 OPERATION

A. Selective Collective Microprocessor-Based:

- 1. Operate car without attendant from pushbuttons in car and located at each floor. When car is available, automatically start car and dispatch it to floor corresponding to registered car or hall call. Once car starts, respond to registered calls in direction of travel and in the order the floors are reached.
- 2. Do not reverse car direction until all car calls have been answered, or until all hall calls ahead of car and corresponding to the direction of car travel have been answered.
- 3. Slow car and stop automatically at floors corresponding to registered calls, in the order in which they are approached in either direction of travel. As slowdown is initiated for a hall call, automatically cancel hall call. Cancel car calls in the same manner. Hold car at arrival floor an adjustable time interval to allow passenger transfer.
- 4. Answer calls corresponding to direction in which car is traveling unless call in the opposite direction is highest (or lowest) call registered.
- 5. Illuminate appropriate pushbutton to indicate call registration. Extinguish light when call is answered.
- 6. Keyed hall call access at all hall stations

B. Other Items:

- 1. Low Oil Control: In the event oil level is insufficient for travel to the top floor, provide controls to return elevator to the main level and park until oil is added.
- 2. Independent Service: Provide controls for operation of each car from its pushbuttons only. Close doors by constant pressure on desired destination floor button or door close button. Open doors automatically upon arrival at selected floor.
- 3. Car-to-Lobby Feature: Provide the means for automatic return to the Lobby floor. Return car nonstop after answering pre-registered car calls, and park with doors open for an adjustable time period of 60 90 seconds. Upon expiration of time period, car shall automatically revert to normal operation and close its doors until assigned as next car or until the car is placed on manual control via in-car attendant or out-of-service switch.

- C. Firefighters' Service: Provide equipment and operation in accordance with code requirements.
- D. Automatic Car Stopping Zone: Stop car within 1/4" above or below the landing sill. Maintain stopping zone regardless of load in car, direction of travel, distance between landings.
- E. Remote Monitoring and Diagnostics: Equip each controller with standard ports, interface boards, and drivers to accept maintenance, data logging, fault finding diagnostic, and monitoring computers, keyboards, modems, and programming tools. The system shall be capable of driving remote color CRT monitors that continually scan and display the status of each car and call.
- F. Motion Control: AC type with unit valve suitable for operation specified and capable of providing smooth, comfortable car acceleration and retardation. Limit the difference in car speed between full load and no load to not more than $\pm 10\%$ of the contract speed.
- G. Door Operation: Automatically open doors when car arrives at main floor. At expiration of normal dwell time, close doors.
- H. Standby Lighting and Alarm: Car mounted battery unit with solid-state charger to operate alarm bell and car emergency lighting. Battery to be rechargeable with minimum 5-year life expectancy. Include required transformer. Provide constant pressure test button in service compartment of car operating panel. Provide lighting integral with portion of normal car lighting system.

I. Battery Standby Power Transfer:

- Upon loss of normal power, provide controls to automatically lower the car to the
 nearest lower landing. Upon arrival at the nearest landing, the elevator doors
 shall open automatically and remain open until regular door time has expired.
 The elevator shall then become deactivated. The standby power source shall be
 provided via 12-volt D.C. battery units installed in machine room, including solidstate charger and testing means mounted in a common metal container. Battery to
 be rechargeable lead acid or nickel cadmium with a 10-year life expectancy.
- 2. Upon restoration of normal power, the elevator shall automatically resume normal operation.

2.05 MACHINE ROOM EQUIPMENT

- A. Arrange equipment in existing machine room spaces.
- B. New Pump Unit: Assembled unit consisting of positive displacement pump, induction motor, master-type control valves combining safety features, holding, direction, bypass, stopping, manual lowering functions, shut off valve, oil reservoir with protected vent opening, oil level gauge, outlet strainer, drip pan, muffler, all mounted on isolating pads.

Provide oil thermal unit to maintain oil at operating temperature. Enclose entire unit with removable sheet steel panels lined with sound-absorbing material. Provide SCR soft start with closed transition. Design unit for 80 upstarts/hour.

- C. New Landing Systems: Solid-state, magnetic, or optical type.
- D. New Controller: UL/CSA labeled.
 - 1. Compartment: Securely mount all assemblies, power supplies, chassis switches, relays, etc., on a substantial, self-supporting steel frame. Completely enclose equipment with covers. Provide means to prevent overheating.
 - 2. Relay Design: Magnet operated with contacts of design and material to insure maximum conductivity, long life, and reliable operation without overheating or excessive wear. Provide wiping action and means to prevent sticking due to fusion. Contacts carrying high inductive currents shall be provided with arc deflectors or suppressors.
 - 3. Microprocessor-Related Hardware
 - a. Provide built-in noise suppression devices which provide a high level of noise immunity on all solid-state hardware and devices.
 - b. Provide power supplies with noise suppression devices.
 - c. Isolate inputs from external devices, such as pushbuttons, with opto-isolation modules.
 - d. Design control circuits with one leg of power supply grounded.
 - e. Safety circuits shall not be affected by accidental grounding of any part of the system.
 - f. System shall automatically restart when power is restored.
 - g. System memory shall be retained in the event of power failure or disturbance.
 - h. Equipment shall be provided with Electro Magnetic Interference (EMI) shielding within FCC guidelines.
 - 4. Wiring: CSA labeled copper for factory wiring. Neatly route all wiring interconnections and securely attach wiring connections to study or terminals.
 - 5. Permanently mark components, relays, fuses, PC boards, etc., with symbols shown on wiring diagrams.
- E. New Muffler: Provide in discharge oil line near pump unit. Design shall dampen and absorb pulsation and noise in the flow of hydraulic fluid.
- F. Piping and Oil: Retain existing piping and provide new oil for the system.

G. New - Shutoff Valve: Manual valve in line adjacent to pump unit. Provide second valve in pit adjacent to jack unit.

2.06 HOISTWAY EQUIPMENT

- A. Guide Rails: Retain main guide rails in place.
 - 1. Clean rails and brackets. Remove rust.
 - 2. Check all rail and bracket fastenings and tighten.
 - 3. Realign rails as required to provide smooth car ride.
 - 4. Provide supplemental rail brackets and/or backing as required by code or to enhance car ride quality.
- B. Buffers: Retain existing.
 - 1. Rebuild as required, clean free of any rust/corrosion, and paint.
- C. Hydraulic Jack Assembly: Retain existing.
 - 1. Cylinder: Retain existing. Provide means to collect oil at cylinder head and return automatically to oil reservoir.
 - 2. Plunger: Retain existing. Isolate plunger from car frame.
- D. Jack Support: Retain existing steel pit channels to support jack assembly and transmit loads to building structure. Clean free of any corrosion, or rust, and paint pit equipment.
- E. New Fluid Shut-Off Valve: Provide manual on/off valve in oil line adjacent to pump unit and jack unit in pit adjacent to jack unit.
- F. New Terminal Stopping: Provide normal and final devices.
- G. New Electrical Wiring and Wiring Connections:
 - Conductors and Connections: Copper throughout with individual wires coded and
 connections on identified studs or terminal blocks. Use no splices or similar
 connections in wiring except at terminal blocks, control compartments, or
 junction boxes. Provide 10% spare conductors throughout. Run spare wires from
 car connection points to individual elevator controllers in the machine room.
 Provide four (4) pair of spare shielded communication wires in addition to those
 required to connect specified items. Tag spares in machine room.
 - 2. Conduit: Painted or galvanized steel conduit, EMT, or duct. Conduit size, 1/2". Flexible heavy-duty service cord may be used between fixed car wiring and car door switches for door protective devices.

- 3. Traveling Cables: Flame and moisture-resistant outer cover. Prevent traveling cable from rubbing or chafing against hoistway or equipment within hoistway. Provide five (5) pair of shielded wires and two (2) RG-6/U type coaxial cables for card reader. Provide two (2) RG-6/U coaxial CCTV cables within traveling cable from car controller to car top, plus 3'-0" excess loop at both ends.
- 4. Auxiliary Wiring: Connect fire alarm initiating devices, emergency two-way communication system, firefighters' phone, and card reader provisions.

H. New - Entrance Equipment:

- 1. Door Hangers: Two-point hanger roller with neoprene roller surface and suspension with eccentric upthrust roller adjustment.
- 2. Door Tracks: Bar or formed, cold-drawn removable steel tracks with smooth roller contact surface.
- 3. Door Interlocks: Operable without retiring cam. Paint interlock box flat black.
- 4. Door Closers: Spring, spirator, or jamb/strut mounted counterweight type. Design and adjust to insure smooth, quiet mechanical close of doors.
- I. Door Closers: Refurbish and/or replace as required
- J. New Hoistway Door Unlocking Device: Provide unlocking device with escutcheon in door panel at all floors, with finish to match adjacent surface.
- K. New Hoistway Access Switches: Mount in hall station at top and bottom floors.
- L. Floor Numbers: Stencil paint 4" high floor designations in contrasting color on inside face of hoistway doors or hoistway fascia in location visible from within car.

2.07 HOISTWAY ENTRANCES

- A. Frames: Retain existing. Paint existing hoistway entrance frames. Frames: Retain existing. Paint existing hoistway entrance frames Provide Arabic floor designation/Braille plates, centered at 60" above finished floor, on both side jambs of all entrances. Provide plates at main egress landing with "Star" designation. Braille indications shall be below Arabic floor designation. Provide cast floor designation/Braille plates as manufactured by SCS Elevator Products, Inc. or Vision Mark.
- B. Door Panels: Retain existing. Provide new door gibs with fire tabs at all floors.

 Minimum two gibs per panel, one at leading edge, and one at trailing edge of each panel
- C. New Hoistway Door Panels:16 gauge steel, sandwich construction without binder angles. Provide leading edges of center-opening doors with rubber astragals. Provide a minimum of two (2) gibs per panel, one at leading and one at trailing edge with gibs in

- the sill groove entire length of door travel. Construct door panels with interlocking, stiffening ribs.
- D. New Sight Guards: 14 gauge, same material and finish as hoistway entrance door panels. Construct without sharp edges.
- E. Sills: Retain existing. Clean and polish. Check and tighten all fastenings.
- F. Sill Supports: Retain existing. Check and tighten all fastenings.
- G. Fascia, Toe Guards, and Hanger Covers: Retain existing. Provide as required where damaged or missing. Check and tighten all fastenings.
- H. Struts and Headers: Retain existing. Check and tighten all fastenings.
- I. Finish of Frames and Doors: Contractor to paint existing door frames, and doors.

2.08 CAR EQUIPMENT

- A. Frame: Retain Existing. Check and tighten all fastenings.
- B. Platform: Retain existing. Reinforce if required. Check and tighten all fastenings.
- C. New Platform Apron: Provide new extended platform apron per code. Minimum 14 gauge steel, reinforced and braced to car platform with Contractor's standard finish.
- D. Guide Shoes: Retain existing and provide new nylon liners and properly adjust.
- E. New Sill: Aluminum one piece extrusion with extruded extension between car entrance columns to face of car front return. Extruded extension to match finish of sill.
- F. New Doors: Provide as specified for hoistway entrance doors.
- G. New Door Hangers: Two-point hanger roller with neoprene roller surface and suspension with eccentric upthrust roller adjustment.
- H. New Door Track: Bar or formed, cold-drawn removable steel track with smooth roller contact surface.
- I. Door Header: Retain existing. Check and tighten all fastenings.
- J. New Door Electrical Contact: Prohibit car operation unless car door is closed.
- K. New Door Clutch: Heavy-duty clutch, linkage arms, drive blocks and pickup rollers or cams to provide positive, smooth, quiet door operation. Design clutch so car doors can be closed, while hoistway doors remain open.
- L. Restricted Opening Device: Provide car-door interlock per code to prevent opening of car door outside unlocking zone. Plunger type restrictors not acceptable.

M. New - Door Operator: High speed, heavy-duty door operator capable of opening doors at no less than 2-1/2 Accomplish reversal in no more than 2-1/2" of door movement. Provide solid-state door control with closed loop circuitry to constantly monitor and automatically adjust door operation based upon velocity, position, and motor current. Provide a minimum of four (4) controller-activated motion profiles, per floor, per door, to maintain consistent, smooth, and quiet door operation at all floors, regardless of door weight or varying air pressure. Contractor to receive approval from Consultant prior to installation.

N. New - Door Control Device:

- 1. Infrared Reopening Device: Black, fully enclosed device with full screen infrared matrix or multiple beams extending vertically along leading edge of each door panel to minimum height of 7'-0" above finished floor. Device shall prevent doors from closing and reverse doors at normal opening speed if beams are obstructed while doors are closing, except during nudging operation. In event of device failure, provide for automatic shutdown of car at floor level with doors open.
- 2. Nudging Operation: After beams of door control device are obstructed for a predetermined time interval (minimum 20.0 25.0 seconds), warning signal shall sound and doors shall attempt to close with a maximum of 2.5 foot pounds kinetic energy. Activation of the door open button shall override nudging operation and reopen doors.
- 3. Interrupted Beam Time: When beams are interrupted during initial door opening, hold door open a minimum of 3.0 seconds. When beams are interrupted after the initial 3.0 second hold open time, reduce time doors remain open to an adjustable time of approximately 1.0 1.5 seconds after beams are reestablished.
- 4. Differential Door Time: Provide separately adjustable timers to vary time that doors remain open after stopping in response to calls.
 - a. Car Call: Hold open time adjustable between 3.0 and 5.0 seconds.
 - b. Hall Call: Hold open time adjustable between 5.0 and 8.0 seconds. Use hall call time when car responds to coincidental calls.

O. New - Car Operating Panel:

- 1. One car operating panel with faceplate, consisting of a metal box containing vandal resistant operating fixtures, mounted behind the car stationary front return panel. Faceplate shall be hinged and constructed of stainless steel, satin finish.
- 2. Suitably identify floor buttons, alarm button, door open button, door close button, and emergency push-to-call button with SCS Elevator Products, Inc. or Visionmark cast tactile symbols surface, or rear mounted. Configure plates per local building code accessibility standards including Braille. Locate operating

- controls no higher than 48" above the car floor; no lower than 35" for emergency push-to-call button and alarm button.
- 3. Provide minimum 3/4" diameter raised, or flush floor pushbuttons which illuminate to indicate call registration. Include 5/8" high floor designation on face of pushbutton.
- 4. Provide alarm button to ring bell located on car. Illuminate button when actuated.
- 5. Provide keyed stop switch at bottom of car operating panel in locked car service compartment. Mark device to indicate "run" and "stop" positions.
- 6. Provide "door open" button to stop and reopen doors or hold doors in open position.
- 7. Provide "door close" button to activate door close cycle. Cycle shall not begin until normal door dwell time for a car or hall call has expired, except firefighters' operation.
- 8. Provide firefighters' Phase II key switch with engraved instructions filled red. Include light jewel, audible signal, and call cancel button.
- 9. Install firefighters' telephone with approved mounting bezel matching adjacent controls.
- 10. Provide lockable service compartment with recessed flush door. Door material and finish shall match car return panel or car operating panel faceplate. Inside surface of door shall contain an integral flush window for displaying the elevator operating
- 11. Include the following controls in lockable service cabinet with function and operating positions identified by permanent signage or engraved legend:
 - a. Service Panel Door: GEM EX513
 - b. Inspection switch. GEM EX 512
 - c. Light switch. GEM513
 - d. Three-position exhaust blower switch. GEM EX513
 - e. Independent service switch. GEM EX514
 - f. Constant pressure test button for battery pack emergency lighting. GEM EX513, if providing a key switch
 - g. 120-volt, AC, GFCI protected electrical convenience outlet.
 - h. Card reader override switch. GEM EX514

- i. Stop switch. GEM EX512
- 12. Provide black paint filled (except as noted), engraved, or approved etched signage as follows with approved size and font:
 - a. Phase II firefighters' operating instructions on main operating panel above corresponding keyswitch filled red.
 - b. Car number on main car operating panel.
 - c. "No Smoking" on main car operating panel.
 - d. Car capacity in pounds on main car operating panel service compartment door.
- P. New Car Top Control Station: Mount to provide safe access and utilization while standing in an upright position on car top.
- Q. New Work Light and Duplex Plug Receptacle: GFCI protected outlet at top and bottom of car. Include on/off switch and lamp guard.
- R. New Communication System:
 - "Push to Call," two-way communication instrument in car with automatic dialing, tracking, and recall features with shielded wiring to car controller in machine room. Provide dialer with automatic rollover capability with minimum two numbers.
 - a. "Push to Call" button or adjacent light jewel shall illuminate and flash when call is acknowledged. Button shall match car operating panel pushbutton design. Provide uppercase "PUSH TO CALL," "HELP ON THE WAY" engraved signage adjacent to button.
 - b. Provide "Push to Call" button tactile symbol, engraved signage, and Braille adjacent to button mounted integral with car front return panel.
 - 2. Firefighters' telephone. Jack bezel shall match adjacent controls.
 - 3. Provide two-way communication between car and machine room if required.

2.09 CAR ENCLOSURE

- A. New Car Enclosure Passenger Elevator: Provide complete as specified herein. Provide the following features.
 - 1. Shell: Reinforced 14 gauge furniture steel formed panels with baked enamel interior finish as selected. Apply sound-deadening mastic to exterior.
 - 2. Canopy: Reinforced 12 gauge furniture steel formed panels with lockable, hinged emergency exit. Interior finish white reflective baked enamel.

- 3. Front Return Panels and Integral Entrance Columns: Reinforced 14 gauge stainless steel satin finish. Swing entire unit on substantial pivot points (minimum 3) for service access to car operating panel. Locate pivot points to provide full swing of front return panel without interference with side wall finish or handrail. Secure in closed position with concealed three-point latch. Provide service compartment with recessed flush cover and cutouts for operating switches, etc.
- 4. Front Return Panels: Reinforced 14 gauge stainless steel satin finish with cutouts for car operating panel and other equipment.
- 5. Entrance Columns: Reinforced 14 gauge stainless steel satin finish.
- 6. Transom: Reinforced 14 gauge stainless steel satin finish full width of enclosure with cutout for car position indicator.
- 7. Car Door Panels: Reinforced minimum16 gauge stainless steel satin finish. Same construction as hoistway door panels.
- 8. Base: Stainless steel with concealed ventilation cutouts.
- 9. Interior Wall Finish: Removable panels, faced and edged, with plastic laminate.
- 10. Ventilation: Morrison Products, Inc. two-speed, SOE No. 06-01055 mounted to car canopy on isolated rubber grommets. Exhaust blower shall meet requirements of Item 2.03, I. Ventilation shall shut off after adjustable period (60 180 seconds) of no elevator demand.
- 11. Lighting: Provide LED fixtures with wiring and hookup. Coordinate with emergency lighting requirements. Lighting shall shut off after adjustable period (60 180 seconds) of no elevator demand. Provide emergency lighting integral with portion of normal car lighting system.
- 12. Suspended Ceiling: Six panel stainless steel satin downlight ceiling.
- 13. Handrails: Minimum 1-1/4" diameter stainless steel tubular grab bar across rear and side walls.
- 14. Flooring: Flooring to match existing elevator lobby corridor and be approved by the Purhaser.
- 15. Pads and Buttons or Hooks: Three-piece removable pads. Two pads covering side walls and adjacent front returns and one covering rear wall. Provide cutouts to access main car operating panel.

2.10 HALL CONTROL STATIONS

B. Pushbuttons: Provide a single riser with flush mounted faceplates. Include pushbuttons for each direction of travel which illuminate to indicate call

registration. Include approved engraved message and pictorial representation prohibiting use of elevator during fire or other emergency situation as part of faceplate. Pushbutton design shall match car operating panel pushbuttons. Provide vandal resistant pushbutton and light assemblies. Provide enlarged faceplate to cover existing wall blockout and facilitate handicapped access requirements. Provide any cutting and patching required. Position indicator shall be located in each hall station.

2.11 SIGNALS

- A. New Car Direction Lantern: Provide flush-mounted car lantern in all car entrance columns. Illuminate up or down LED lights and sound electronic tone once for up and twice for down direction travel as doors open. Sound tone once for up direction and twice for down direction. Sound level shall be adjustable from 0 80 dBA measured at 5'-0" in front of hall control station and 3'-0" off floor. Provide adjustable car door dwell time to comply with ADA requirements relative to hall call notification time. Car direction lenses shall be arrow shaped with faceplates. Lenses shall be minimum 2-1/2" in their smallest dimension.
- B. New Car Position Indicator: Alpha-numeric digital indicator containing floor designations and direction arrows a minimum of 1/2" high to indicate floor served and direction of car travel. Locate fixture in car front return panel above the car operating panel. When a car leaves or passes a floor, illuminate indication representing position of car in hoistway. Illuminate proper direction arrow to indicate direction of travel.
- C. Faceplate Material and Finish: Stainless steel Satin finish all fixtures.
- D. Floor Passing Tone: Provide an audible tone of no less than 20 decibels and frequency of no higher than 1500 Hz, to sound as the car passes or stops at a floor served.

PART 3 EXECUTION

3.01 SITE CONDITION INSPECTION

- A. Prior to beginning installation of equipment, examine hoistway and machine room areas. Verify no irregularities exist which affect execution of work specified.
- B. Do not proceed with installation until work in place conforms to project requirements.

3.02 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver material in Contractor's original, unopened protective packaging.
- B. Store material in original protective packaging. Prevent soiling, physical damage, or moisture damage.
- C. Protect equipment and exposed finishes from damage and stains during transportation, erection, and construction.

3.03 INSTALLATION

- A. Install all equipment in accordance with Contractor's instructions, referenced codes, specification, and approved submittals.
- B. Install machine room equipment with clearances in accordance with referenced codes and specification.
- C. Install all equipment so it may be easily removed for maintenance and repair.
- D. Install all equipment for ease of maintenance.
- E. Install all equipment to afford maximum accessibility, safety, and continuity of operation.
- F. Remove oil, grease, scale, and other foreign matter from the following equipment and apply one coat of field-applied machinery enamel.
 - 1. All exposed equipment and metal work installed as part of this work which does not have architectural finish.
 - 2. Neatly touch up damaged factory-painted surfaces with original paint color. Protect machine-finish surfaces against corrosion.

3.04 FIELD QUALITY CONTROL

- A. Work at jobsite will be checked during course of installation. Full cooperation with reviewing personnel is mandatory. Accomplish corrective work required prior to performing further installation.
- B. Have Code Authority acceptance inspection performed and complete corrective work.

3.05 ADJUSTMENTS

- A. Install hydraulic jack assembly and guide rails plumb and align vertically with tolerance of 1/16" in 100'-0". Secure guide rail joints without gaps and file any irregularities to a smooth surface.
- B. Static balance car to equalize pressure of guide shoes on guide rails.
- C. Lubricate all equipment in accordance with Contractor's instructions.
- D. Adjust motors, valves, controllers, leveling switches, limit switches, stopping switches, door operators, interlocks, and safety devices to achieve required performance levels.

3.06 CLEANUP

- A. Keep work areas orderly and free from debris during progress of project. Remove packaging materials on a daily basis.
- B. Remove all loose materials and filings resulting from work.

- C. Clean machine room equipment and floor.
- D. Clean hoistways, car, car enclosure, entrances, operating and signal fixtures.

3.07 ACCEPTANCE REVIEW AND TESTS

A. See Section 01700, Article 1.02, Consultant's Final Observation and Review Requirements.

3.08 PURCHASER'S INFORMATION

A. See Section 01700, Article 1.03, Final Contract Compliance Review.

END OF SECTION