

INVITATION TO BID

#21354

For

Benjamin Franklin Elementary Parapet Rebuild and Renovations

FOR THE CLEVELAND MUNICIPAL SCHOOL DISTRICT
DBA: CLEVELAND METROPOLITAN SCHOOL DISTRICT
BOARD OF EDUCATION, 1111 SUPERIOR AVENUE E, SUITE 1800
CLEVELAND, OHIO 44114

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

Table of Contents

Part I: INVITATION TO BID #21354	3
Section I: Instructions to Bidders	4
Part II: DISTRICT RELATED FORMS	9
Required Purchasing Division Documents and Instructions	9
Section I: Addendum Acknowledgement Form for ITB #21354	
Section II: Acknowledgement	
Section III: Vendor Request Form	12
Section IV: Taxpayer ID Form	13
Section V: Certificate of Debarment	14
Section V: Certificate of Debarment Pg. 2	15
Section VI: Conflict of Interest Form	16
Section VII: Bidder Qualifications Form	18
Section VIII: Sample Certificate of Liability Insurance	22
Section IX: Non-Collusion Affidavit	23
Section X: Diversity Business Enterprise Program and Participation Forms	24
DBE Form A	
DBE Form B	29
DBE Form C	30
DBE Form D	31
DBE Form E	32
DBE Form F	33
DBE Form G	34
DBE Form H	36
Section XI: EOA Contractual Declaration Forms	37
CMSD Affirmative Action Program	37
Form 1: Vendor Contract Compliance Form	40
Form 2: Compliance Declaration	41
Form 3: Employment Data Form	44
Section XII: References	45
Part III. SPECIFICATIONS SCOPE OF WORK AND COST FORM	47

Part I: INVITATION TO BID #21354

Separate Sealed proposals for the requirement set forth below will be received in the Cashier's Office of the Cleveland Metropolitan School District located at 1111 Superior Avenue E, Cleveland, Ohio 44114, until 1:00 pm current local time on August 2, 2022. Mailing of ITB responses are encouraged. However, hand deliveries will only be accepted from 12:00 PM to 1:00 PM on August 2, 2022. PPE IS REQUIRED TO BE WORN FOR ENTRANCE TO AND WHILE IN THE BUILDING. This ITB will be opened following the Bid cut-off time at 1111 Superior Ave E., Cleveland OH 44114.

Benjamin Franklin Elementary Parapet Rebuild and Renovations

Copies of Instructions to Proposers, Specifications, and Drawings may be obtained directly from the District's Webpage. Go to <u>clevelandmetroschools.org/purchasing</u> and click on the RFP number. If you require assistance, please email <u>seletha.thompson@clevelandmetroschools.org</u>.

There will be a Pre-Bid Meeting on July 20, 2022 at 10:00 AM. The Pre-Bid Meeting will be at Benjamin Franklin Elementary School, 1905 Spring Road, Cleveland, Ohio 44109. Attendance at the Pre-Bid Meeting is encouraged but not mandatory.

All questions and correspondence related to this ITB must be submitted in writing ONLY by **12:00 pm on July 21, 2022** at the email address given above. All answers to corresponding questions and concerns will be sent directly to those submitting the question. A comprehensive question and answer list will also be posted at clevelandmetroschools.org/purchasing. Any errors and/or omissions reported will be addressed via Addenda.

No bid may be withdrawn for at least ninety (90) days after the deadline for submittal.

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

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.

The new Uniform Grant Guidance, 2 CFR200 (UGG) went into effect for Cleveland Metropolitan School District (CMSD) on July 1, 2018 and will apply to awards or funding increments issued on or after this date. Purchases funded by federal grant funds must adhere to regulations found in Uniform Guidance "Super Circular", 2 CFR 200 (UGG), as a condition of receiving funds and to meet annual audit compliance. In an effort to keep policy for all grants consistent, the CMSD will implement the new federal guidelines regarding procurement utilized with federal grants immediately.

Proposers 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, Strategy, Sourcing, & Supports

Section I: Instructions to Bidders

- 1. All responses shall be made upon the Bid Form(s) furnished. All information requested in the RFP must be filled in legibly and complete with blue ink signatures, or the Proposal may be considered non-responsive. No oral, telephonic, or telegraphic proposals or modifications will be considered. The ITB Name and Number must be stated on the exterior of the submission envelope(s), including shipping labels.
- 2. Separate sealed responses for the requirement set forth below will be received in the Cashier's Office of the Cleveland Metropolitan School District, 1111 Superior Avenue E, Cleveland, Ohio 44114, until 1:00 pm. current local time on August 2, 2022. Mailing of ITB responses are encouraged. However, hand deliveries will only be accepted from 12:00 PM to 1:00 PM on August 2, 2022. This ITB will be opened following the Bid cut-off time at 1111 Superior Ave E., Cleveland OH 44114.
- 3. All submissions must include one (1) original, with blue ink signatures, two (2) paper copies of the proposal, and one (1) electronic copy on a USB drive. Vendors who do not comply with this requirement will be notified that they have twenty-four (24) hours in which to comply with this requirement or their Proposal will be disqualified. This applies to copies only.
- 4. No Response may be withdrawn for at least ninety (90) days after the deadline for submittal.
- 5. Written questions may be directed to the Purchasing Division via email to: Seletha Thompson, email: seletha.thompson@clevelandmetroschools.org and received by July 21st at 12:00 Noon. The District will not accept ny telephone call regarding any of the submittals and/or short lists. Under no circumstances should any firm interested in providing the services identified in the Bid, their designees, or anyone 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. No oral, telephonic, telegraphic, or electronic modifications will be considered.
- 6. Answers to any questions shall be in writing and shall be sent to all firms who are on record with the District as having received a copy of this RFP. It is therefore imperative that firms provide full and accurate contact information to the District. The name of the party submitting the question will not be identified in the answers. Firms considering responding to this RFP are strictly prohibited from communicating with any member of District's staff or representatives of the Owner except as set forth in this section.
- 7. 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 proposals.
- 8. Bidder understands and agrees that subsequent to submission of the proposal, any District resolution authorizing the award of a contract or agreement does not vest any contractual rights in the proposer.

- 9. Bidder understands and agrees that any such District resolution operates only to encumber funds necessary for the projects and does not create a binding contract.
- 10. Bidder further acknowledges and agrees that any such District resolution may be revoked, at any time prior to execution of a formal, written contract.
- 11. Bidder acknowledges and agrees that it has no vested contractual right until such time as a purchase order and contract have been issued.
- 12. 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.
- 13. 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.
- 14. Each and every page must have the bidder's company name in the header or footer.
- 15. No binding of any kind should be used; use only binder clips. No staples, No paper clips, No binders. Failure to comply with submission formation may result in the submittal being disqualified.
- 16. Any and all changes must be initialed by the bidder.
- 17. 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.
- 18. This Bid should be submitted before 1:00 PM current local time, on August 2, 2022 to the Cleveland Metropolitan School District, Cashiers Office, 1111 Superior Avenue E, Suite 1800, Cleveland, OH 44114, the submission to include One (1) original, with blue ink signatures, two (2) copies, and one (1) electronic format bid on a USB drive of the following:
 - a. Transmittal Cover Letter
 - b. Completed Bid Form with Addendum Acknowledgement including evidence of State certification to perform the work required.
 - Please Note: Failing to acknowledge a published Addendum may cause your response to be rejected.
 - c. Signed Acknowledgement for Instructions to Bidders
 - d. Vendor Request Form
 - e. W-9 Taxpayer Identification Form
 - f. Completed Certificate of Debarment Form

- g. Signed Conflict of Interest Form
- h. Signed and notarized Bidder Qualification Form
- i. Certificate of Liability Insurance
- j. Completed and notarized Non-Collusion Affidavit
- k. Completed and notarized Diversity Business Enterprise Participation Forms
- I. Completed and notarized EOA Compliance Declaration documents
- m. Properly executed Affidavit and/or Company Board of Directors Resolution authorizing certain person(s) to sign legal documents such as the Proposal Form, Proposer's Qualification Form, etc.
- 19. Bidder shall not include Ohio Sales tax in the price quoted. The Cleveland Metropolitan School District will provide a tax exempt certificate to the proposer upon request.
- 20. **SECURITY:** Vendor's workmen, foremen, other personnel, and subcontractors who will be working on District property will be required to meet Cleveland Metropolitan School District security requirements. Vendor must issue personnel I.D. badges. Any worker not complying with CMSD security requirements will immediately be ordered off the 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) or equivalent provisions under the laws of another state or the Federal Government.
- 21. **INSURANCE:** The successful company, their subcontractors and suppliers of labor and/or materials for this project on behalf of 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: Including limited contractual liability

\$2,000,000.00 Limit of Liability

(Per occurrence)

b. Automobile Liability: Including non-owned and hired

\$2,000,000.00 Limit of Liability

(per occurrence)

c. Workers Compensation: Workers compensation and

employer's insurance to the full extent as required by applicable Law

d. Professional Liability

By applicable law 1,000,000/3,000,000 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 will 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 School 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.
- 22. **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% for services, 20% for goods and supplies, and 30% for maintenance, construction, and 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.

Vendors shall refer to Section V of this RFP for further information and requirements on the District's diversity goals.

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

23. 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, 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.

The awarded Bidder shall perform all Work described in the contract documents, including without limitation, all terms and conditions of the specifications contained herein otherwise stated in th bid documents and reasonably inferred therefrom by the Bidder as necessary to produce the results intended thereby for specifications and scope of work requested herein by the District.

Bid will be evaluated, first as responsive or non-responsive to the Bid specifications. A preliminary review will be conducted of all bids submitted on time to ensure the bid adheres to the mandatory requirements specified in the Bid. Bids that do not meet the mandatory requirements will be deemed non-responsive and may be rejected. CMSD reserves the right to select the bid which most closely meets the requirements specified in the Bid. Second, the bids will be evaluated based on the information presented in the bid. The Bid will be awarded to th lowest responsive and responsible vendor.

CMSD reserves the right to reject all bids and deviate from this purchasing process to utilize other purchasing mechanisms available to the District under Ohio Law. Scope review and follow-up discussions with the apparent low bidder may be requested. CMSD reserves the right to interview or to seek additional information related to criteria already specified in the invitation to Bid after opening the bids prior to issuance of a certified Purchase Order or Supplier Contract.



ITB #21354

Part II: DISTRICT RELATED FORMS

Required Purchasing Division Documents and Instructions

Benjamin Franklin Elementary Parapet Rebuild and Renovations

FOR THE CLEVELAND METROPOLITAN SCHOOL DISTRICT

Section I: Addendum Acknowledgement Form for ITB #21354

Having read and examined the Request for Proposal Documents, including the specifications, prepared by the Cleveland Metropolitan School District for the above-referenced Project, and the following Addenda:

Addendum Number	Date of Receipt	
		
		
Proposer:		
The undersigned Vendor propose contract document for the propo	es to perform all work for the applicable contract, in accordancesed sums.	ce with the
Failing to acknowledge a p	oublished Addendum may cause your response to be rej	iected
Signatura	Dato	

Section II: Acknowledgement

(Name of Company)
Hereby acknowledges receipt of this Request for proposal and the reading of these Instructions to
Proposers. We further agree that if awarded the contract, we will submit the required Performance
Bond and 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 RFP Package, will need to be executed and
purchase order issued by the District before we have any vested contractual rights. Wherever, 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 and Title)
Date:

Section III: Vendor Request Form

VENDOR INFORMATION

VENDOR NUMBER (IF APPLICABL	.E) _			
VENDOR NAME					
ADDRESS LINE 1					
ADDRESS LINE 2					
CITY			STATE		ZIP
TELEPHONE NO.			FAX NO		
E-MAIL ADDRESS	Area Code	Number		Area Code	Number
PRIMARY CONTACT	PERSON				
	<u>re</u>	MIT TO (IF DIF	FERENT FROM A	BOVE)	
VENDOR NAME					
ADDRESS LINE 1					
ADDRESS LINE 2					
СІТҮ			STATE		ZIP
TELEPHONE NO.			FAX NO		
	(Area Code)	Number		(Area Code)	Number
PRIMARY SERVICE, PE			1UST BE AS FILED) WITH THE INT	FERNAL REVENUE
SERVICE.					
PLEASE INDICATE WH	ERE APPLICA	<u>NBLE</u>			
DIVERSITY BUSINESS	S ENTERPRIS	E:	YES	NO	
MINORITY BUSINESS	S ENTERPRIS	E:	YES	NO	
FEMALE BUSINESS E	NTERPRISE:		YES	NO	

Section IV: Taxpayer ID Form

W-9

Request for Taxpayer

Give Form to the

Depart	October 2018) ment of the Treasury Il Ravenue Service	,	Identifica Go to www.irs.go		r and Certif uctions and the lat			requester. Do not send to the IRS	
	1 Name (as shown	Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.							
page 3.	2 Business name/d	Isragarded enti	ty name, if different from	n above					
	following seven boxes.							Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):	
nost		individual/sole proprietor or C Corporation S Corporation Partnership Trust/estate						Exempt payee code (if any)	
50	Limited liability	company. Ent	er the tax classification	C=C corporation, S=6	corporation, P-Partn	orship) 🟲	0,000		-
Print or type. Specific Instructions on	Note: Check to LLC if the LLC another LLC to	he appropriate is classified as not is not disre	box in the line above to a single-member LLC parded from the owner is should check the appr	r the tax classification that is disregarded from for U.S. federal tax pur	of the single-member on the owner unless the poses. Otherwise, a sit	owner. Do not check owner of the LLC is ngle-member LLC that	Examption from FATCA reporting code (if any)		g
8	Other (see ins			2010		NO.	(Applier to ac	(Applier to accounts maintained outside the U.S.)	
	5 Address (humber	street, and ap	t. or suite no.) See instr	uctions.		Requester's name a	nd address	s (optional)	
See	6 City, state, and Z		ional)						_
Pal	Taxpay	er Identifi	cation Number	(TIN)					_
			The TIN provided m	1	given on line 1 to a	void Social sec	urity numi	ber	\neg
reside	ent alien, sole propies, it is your employ	letor, or disre	nis is generally your a garded entity, see th on number (EIN). If y	e instructions for P	art I, later. For other]-[<u> </u>	
7.7		more than o	ne name, see the ins	tructions for line 1	Also see What Name		identification number		
			delines on whose nu		EDO DOO WINGE PROPER	1			1
		200000000000000000000000000000000000000					1		
Par	Certific	ation				\$2.50			
Unde	r penalties of perju	y, I certify the	it						
2. I ar Ser	n not subject to ba	ckup withhole subject to be	my correct taxpayer i ding because: (a) I an ackup withholding as iding; and	n exempt from back	up withholding, or (b) I have not been n	otified by	the Internal Revenu	e am
3. I ar	n a U.S. citizen or o	ther U.S. per	son (defined below);	and					

- 4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have falled to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Signature of U.S. person Here

General Instructions

Section references are to the internal Revenue Code unless otherwise

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (TIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

. Form 1099-INT (Interest earned or paid)

- . Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- . Form 1099-S (proceeds from real estate transactions)
- . Form 1099-K (merchant card and third party network transactions)
- . Form 1098 (home mortgage Interest), 1098-E (student loan Interest), 1098-T (tuition)
- . Form 1099-C (canceled debt)
- . Form 1099-A (acquisition or abandonment of secured property) Use Form W-9 only if you are a U.S. person (including a resident allen), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding,

Form W-9 (Rev. 10-2018)

Cat. No. 10231X

Section V: Certificate of Debarment



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	ByName and Title of Authorized Representative
	Signature of Authorized Representative

SBA Form 1623 (10-88)



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

Section V: Certificate of Debarment Pg. 2

-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 VI: 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:
 opinion of the Ohio Ethics Commission. As such declaring any potential conflicts of interest in following two questions providing all requested Are any current Cleveland Metropolitan Sc Education members, or any of their immediates 	adheres to Ohio Ethics Law and strictly follows the n, each vendor is requested to submit this statement doing business with the District. Please answer the information. hool District (CMSD) employees, Cleveland Board of liate family members, also members of the vendor's with the vendor, or own any shares of any stock issued
If Yes , and if the CMSD employee, CMSD board i	No member, or immediately family member is a member ffice with the vendor, please state the person's name
Position:	
	%
Are any current CMSD employees, CMSD bo employees of the vendor?	ard members, or any immediate family members also
Yes	No
If Yes , please state the person's name and provi	de a description of their job duties for the provider:
Name:	

Job Duties:_____

If Yes , please describe the contact that the vendor	
board member in the course of providing services	to the district:
CERTIFI	CATION
I do hereby certify that the foregoing statements a attests to the authenticity of my identity as the p not a contract. In order for a binding Agreement to any legally binding commitment by the District.	erson actually signing this form. This document is
NOTARIZED	STATEMENT
	being duly sworn and deposes says
	of
(title)	
	, and answers to all the
(organization) foregoing questions and all statements therein cor	
(signature)	
Subscribed and sworn before	me thisday of, 20
Notary Public:	

My commission expires:

Section VII: Bidder Qualifications Form

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

PR	OPOSER	NAME:	
ΑC	DRESS:_		
CIT	ΓΥ; STAT	E:	ZIP:
CC	NTACT I	PERSON:	
TIT	ΓLE:		
TE	LEPHON	E: ()	TOLL FREE: ()
TΑ	XPAYER	IDENTIFICATION NUMBER:	
1.	What t	type of organization? (i.e. corporation, par	tnership, etc.)
2.	How m	nany years has your organization been in b	ousiness?
3.	How m	nany years has your organization been in b	ousiness under its current name?
4.	List an	y other aliases your organization has utiliz	ed in the last two years and the form of Business
5.	If you a	are currently a corporation, list the follow	ing:
	a.	State of incorporation	
	b.	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
6.	If you are currently in a partnership, list the following: a. Name and address of all general and limited partners.
	b. Original name and date of organization's inception
7.	If you are neither a corporation nor a partnership, please describe your organization and list principals.
8.	Are you legally qualified to do business in the State of Ohio?
9.	Are you legally qualified to do business in Cuyahoga County and licensed by the City of Cleveland?
10.	Has your organization ever been (i) declared by a customer to be in default under a contractor and/or (ii) sued by a customer for failure to completely a contract or properly perform services in a timely manner? If yes, please state where, when, and why.
	Has your organization ever been cited by a local, county, state, or federal authority for violation of a regulation or statute or failing to timely complete a contract in accordance with specifications? I yes, please state date, agency, 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 RFP.
	Has any federal, state or local government entity ever cited or taken any action against 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 agency, date and amount of taxes overdue and resolution of the issue.
19.	Is your organization and its' principals current in payment of personal property taxes?
	The prospective lower tier participant certifies, by submission of this RFP, 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 State and/or Federal Department or Agency.
	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 RFP.

Notarized Statement

	bei	ing duly sworn and deposes says
that he/she is the		of
	(title)	
		, and answers to all the
(organization)		
foregoing questions and all statements the	erein contained	d are true and correct.
(signatu	re)	
Subscribed and sworn before me this	day of	, 20
Notary Public:		
My commission expires:		

Section VIII: Sample Certificate of Liability Insurance

ACORD CER	TI	FIC/	ATE OF LIABII	LITY IN	ISUR	ANCE	DATE	(MM/DD/YYYY)
THIS CERTIFICATE IS ISSUED AS A CERTIFICATE DOES NOT AFFIRMA BELOW. THIS CERTIFICATE OF II REPRESENTATIVE OR PRODUCER,	SUF	RANCE	DOES NOT CONSTITUTE A					
IMPORTANT: If the certificate holder terms and conditions of the policy, certificate holder in lieu of such endo	is a	ADDIT	IONAL INSURED the policy/	ies) must be nent. A sta	endorsed. I ement on th	SUBROGATION IS WA	AIVED, s	subject to the rights to the
RODUCER			E-MAI	: E lo, Ext):		FAX (A/C, No)):	
			ADDR		SURER(S) AFFO	RDING COVERAGE	17,000	NAIC#
SURED			INSUF	ERA:				NAIC #
SURED				ERB:				
				ER C:	_			
			INSUR					<u> </u>
			INSUR					
OVERAGES CE	RTIF	ICATE I	UMBER:			REVISION NUMBER:		l
THIS IS TO CERTIFY THAT THE POLICIE INDICATED. NOTWITHSTANDING ANY F CERTIFICATE MAY BE ISSUED OR MAY EXCLUSIONS AND CONDITIONS OF SUCH THE TOP THE THE POLICIES OF THE POLICI	PEF	TAIN, THE	HE INSURANCE AFFORDED BY MITS SHOWN MAY HAVE BEEN	THE POLICII REDUCED BY	OR OTHER ES DESCRIBE PAID CLAIMS	DOCUMENT WITH RESI		
GENERAL LIABILITY	INSE	S WVD	POLICY NUMBER	(MM/DD/YYYY)	(MM/DD/YYYY)	The second secon	ITS	
COMMERCIAL GENERAL LIABILITY	-	7				DAMAGE TO RENTED PREMISES (Ea occurrence)	S	
CLAIMS-MADE OCCUR	L						\$	
						MED EXP (Any one person) PERSONAL & ADV INJURY	\$	
						GENERAL AGGREGATE	s	
GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMPJOP AGG	-	
POLICY PRO- JECT LOC				- 200			\$	
AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	s	
ANY AUTO ALL OWNED SCHEDULED AUTOS AUTOS						BODILY INJURY (Per person)	s	
NON-OWNED						BODILY INJURY (Per accident) \$	
HIRED AUTOS AUTOS						PROPERTY DAMAGE (Per accident)	\$	
UMBRELLA LIAB OCCUR	\vdash		-				S	
EXCESS LIAB CLAIMS-MADE	<u>L</u>	Ш				EACH OCCURRENCE	\$	
DED RETENTIONS						AGGREGATE	\$	
WORKERS COMPENSATION						WC STATU- TORY LIMITS ER	\$	
ANY PROPRIETOR/PARTNER/EXECUTIVE	N/A					TORY LIMITS ER E.L. EACH ACCIDENT	s	
OFFICE/MEMBER EXCLUDED? (Mandatory in NH)	IN) A					E.L. DISEASE - EA EMPLOYE	-	
If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT	s	***
	_	Ш						
CRIPTION OF OPERATIONS / LOCATIONS / VEHIC	LES (/	Attach ACC	PRD 101, Additional Remarks Schedule	if more space is	required)		-	
RTIFICATE HOLDER								
THE HOLDEN			SHO	EXPIRATION	DATE THE	ESCRIBED POLICIES BE REOF, NOTICE WILL PROVISIONS.	CANCELI BE DEI	ED BEFORI
			AUTHOR	IZED REPRESEN	TATIVE			

22

Section IX: Non-Collusion Affidavit

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

Affiant	
Sworn to and subscribed before me this day of	, 20
Notary Public in and for Cuyahoga County, Ohio	
My commission expires:	

Section X: Diversity Business Enterprise Program and Participation Forms

PROGRAM OVERVIEW

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, 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 proposal 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 percent and vary by the type of contract awarded:

- ➤ 15% Service Contracts
- ➤ 20% Goods and Supplies
- > 30% Maintenance/Construction Repair

A Diversity Business Enterprise encompasses Minority Business Enterprises (MBEs) and Female Business Enterprises (FBEs)

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

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

A company may be in compliance with the District's DBE program although the applicable numerical goal is not met if a 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.

TERMS AND CONDITIONS OF NOTICE AND REQUIREMENTS TO ENSURE DIVERSITY BUSINESS ENTERPRISE (DBE) OPPORTUNITY

Definition of DBE: A Diversity Business Enterprise (DBE)

"Small Diversity business concern" means a small business concern that is at least fifty-one (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 fifty-one (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

fifty-one (51) percent unconditionally owned by an economically diverse Indian tribe or Native Hawaiian Organization, or a publicly owned business that has at least fifty-one (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.

- 1. "Socially diverse individuals" means individuals who have been subjected to racial or ethnic prejudice or culture bias because of their identity as a member of a group without regard to their qualities as individuals.
- 2. "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 Latin Americans, Native Americans, Asian-Pacific Islander Americans, Subcontinent Asian Americans) are to be considered socially and economically diverse.

Definition of FBE: Female Business Enterprise (FBE)

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

- 1. Which is at least fifty-one (51) percent owned by one or more women; or, in the case of any publicly owned business, at least fifty-one (51) percent of the stock of which is owned by one or more women and;
- 2. Whose management and daily business operations are controlled by one or more woman.

TERMS

- 1. DBE participation will be counted toward meeting the goals outlined in the notice as follows:
 - a. The total dollar value of a correct contract or subcontractor indirect subcontract awarded toward 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 join vendor will be counted toward the applicable goal. (PLEASE RETURN DBE FORM E)
 - 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 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 proposer who fails or refuses to complete and return this Notice may be deemed a non-responsive proposer.
- 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 proposal 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-proposal 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-proposal, 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 RFP.

- 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 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. Proposers and contractors are bound by all requirements, terms and conditions of this Notice.
- 11. Nothing in this Notice shall be interpreted to diminish the present contract compliance review

DBE Form A

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: Dated:
Title:
DO NOT COMPLETE BELOW THIS LINE
CompliantCompliance PendingNon-Compliant
Compliance Date:
(signature, DBE Department) (date)

DBE Form B

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

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

The undersigned proposer 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.

Proposer:	 	 	
Date:	 	 	
Ву:	 	 	
Title:	 	 	

<u>Definition of DBE: A Diversity Business Enterprise (DBE)</u>

"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

SCHEDULE MBE/FBE PARTICIPATION

Project Name:
Name of Non-DBE Contractor:
Identification Number:
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 for a contract with the Cleveland Municipal School District
TO BE RETURNED WITH THE PROPOSAL
Signature of Non-DBE Prime Contractor
Date:

DBE Form D

DBE LETTER OF INTENT

10:	
Non-DBE Prime or General Proposer	
Project:	
(check one): an individual a corporation	k in connection with the above-referenced project as a partnership a joint venture
DBE status of the undersigned is confirmed in fide enterprises with a certification date of:	n the Cleveland Municipal School District's DBE file of bona
	e following described work in connection with the about work items or parts thereof to be performed:
completion of such work as follows: Items	ment date of such work, and the undersigned is projecting
Projected Commencement Date Projected Completion Date	
awarded to NON-DBE contractor (s) and/or No	c) of the dollar value of the subcontract will be sublet and/ON-FBE SUPPLIERS. The undersigned will enter into a form itioned upon your execution of a contract with the Clevelar
Date	Name of DBE Firm (where applicable)
Signature of DBE (where applicable)	Signature of MBE Firm
(TO BE RETURNEDWITH RFP)	
Name of FBE Firm	Signature of FBE Firm

DBE Form E

DBE Unavailability Certification

Name	,
Of	, certify that on
I contacted the following DBE to obtain a	Date Proposal for work items to be performed on:
Board Project:	
Minority Contractor:	
Work Items Sought:	
Form of Proposal Sought:	
Female Contractor:	
Work Items Sought:	
Form of Proposal Sought:	
the unavailability due to lack of agreeme proposal for the following reason (s):	said minority business enterprise was unavailable (exclusive of nt on price) for work on this project or unable to prepare a
Signature, Non-DBE prime Proposer	Date
	ed an opportunity to proposal on the above-referenced work or
Date	Non-DBE Prime Proposer
Signature, Non-DBE Prime Proposer	
The above statement is a true and accura	ate account of why I did not submit a Proposal on this project.
Signature Non-DRE prime Proposer	

DBE Form F

Non-Minority Prime Affidavit For DBE

AFFIDAVIT

STATE OF

COUNTY OF

} } SS.

Commission expires_____

information necessary intended participation to provide to the Clev regarding actual subco subcontract arrangementhe subcontract or tho the Cleveland Munici	swear that the foregoing statements are correct and include all material to identify and explain the items and operation of our subcontract and the by each party in the undertaking. Further, the undersigned covenant and agree reland Municipal School District current, complete, and accurate information ontract work and the payments thereof, and any proposed changes in any of the ents and to permit the audit and examination of the books, records and files of ose of each party relevant to the subcontract, by authorized representatives of ipal School District. Any material misrepresentation will be grounds for act which may be awarded and for initiating action under federal and state laws ments.
Name of Firm:	
Signature:	
Name and Title:	
Date:	
STATE OF } COUNTY OF } SS.	
On thisda	y of 20, before me appeared
	, to me personally known, who being duly sworn,
did execute the forego	oing 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	

DBE Form G

This form need not be completed if all join 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 this joint venture. (The DBE partner must complete DBE For A or have current DBE Certification)						
	a. Describe the roll of the DBE firm in the joint venture:						
	b. Describe 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. Profit and loss sharing:						
	b. Capital contributions, including equipment:						
	c. Other applicable ownership interest:						

ludii	ng, but r	not limited to, those prime responsibility form:				
a.	Financial decisions:					
b.	Manag	rement decisions, such as:				
	i.	Estimating:				
	ii.	Marketing and Sales:				
	iii.	Hiring and firing of management personnel:				
	iv.	Purchasing of major items or supplies:				
c.	- Superv	rision 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 decision making,

Note: If after complete 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 subcontractor if the joint vendor is a subcontractor.

DBE Form H

Non-Minority Prime Affidavit (Joint Venture)

STATE OF OHIO

CUYAHOGA COUNTY

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		
STATE OF	J	COUNTY OF	JSS.		
On this				, before me appeared ng duly sworn, did execute	
the foregoing	affidavit, an	d did state	that they were parafidavit and did so as the	roperly authorized by	
(Seal)		Notary Public			
		Commission e	xpires		

Section XI: EOA Contractual Declaration Forms

CMSD 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 propose to provide goods, services, supplies, and equipment through formal proposals, informal proposals, and contract term agreements are required to submit a Vendor Employment Practice Report with each Proposal. Approved status by the Vendor Employment Practice Report includes the following documents which <u>must be completed in their entirety and returned with the proposal.</u>

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. <u>SMSA/OR RECRUITMENT AREA</u>: 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.

- 1b. <u>DEFINITION:</u> 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; 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 practices.
- 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

- The Diversity Officer will evaluate data submitted by vendors who are recommended to receive District proposals 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 proposal to the vendor pending compliance. The Purchasing Director of Manager of Diversity will inform the vendor of reason(s) for non-compliance. 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.

C. AFFIRMATIVE ACTION PLAN

- Vendor 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 propose 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 proposers 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 toward 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 be made.

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

- 1. Vendor fails to submit completed and signed EEO documents with proposal 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 of 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 Form

Name of Firm:		
Address:		
City, State, Zip Code:		
Telephone Number:		
Standard Metropolitan Statist	ical Area:	
Recruitment Area:		
Type of Business (product or s	ervice):	
Name of EEO Officer:		
Signature of Owner, Partner, o	or Authorized Officer:	
Name (type or print):		
Date:	Title:	
	Do not complete below this line	
Status of Vendor:		
Compliance	Conditional Compliance	
Non-Compliance	Compliance Pending	
Comments:		
Date:	Signature:	

Form 2: Compliance Declaration

The following must be filled out completely:

It is the policy of	that equal employment
opportunity be afforded to origin, age, or handicap.	o all qualified persons without regard to race, religion, color, sex, national
In support of this policy,	will not discriminate against any
· · · · · · · · · · · · · · · · · · ·	employment because of race, religion, color, sex, national origin, age, or
	will take affirmative action to insure that applicants are
	yees are treated during employment without regard to race, color, sex, adicap. Such action will include, but not be limited to:
_	or solicitation for employment, hiring, placement, upgrading, transfer or ining including apprenticeship rates of pay or other forms of compensation,
	states that they are of current applicable requirement pertaining to Fair Discriminatory Practices of Federal, State, and Local Governments.
_	cknowledges that if the contract is awarded to the undersigned, that the ith all Fair Labor Standard Practice.
(Name of Company)	
	Date:
(Signature of Company Off	icial)
STATE OF (COUNTY OF ())SS.
BEFORE ME, a Notary Pub Company	lic in and for said County and State personally appeared the above-namedby
lt's	, who acknowledged that they knowingly signed the
aforesaid instrument, and and deed of said company	that the same is their free act and deed duly authorized and the free act
IN TESTIMONY WHEREOF,	I have hereto set my hand and affixed seal at
	, this
day of 20	

DESCRIPTION OF JOB CATEGORIES

OFFICIALS, MANAGERS, AND SUPERVISORS

Occupations requiring administrative personnel who set District policies, exercise overall responsibility of the places, 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, buyers, and kindred workers.

PROFESSIONALS

Occupations requiring either college graduation or experience of such kind and amount as to provide background. Includes: accountants and auditors, airplane pilots and editors, engineers, layers, 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 extension 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 factory-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, door keepers, stewards, janitors, police officers and detectives, porters, food services, 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 apprentice, regardless of whether the program is registered with a Federal or State agency.

Form 3: Employment Data Form

Please note this data may be obtained by visual survey or post-employment record. 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.

	All	I EMPLPOY	EES			MALES					FEMALES		
Job Categories	TOALS MALES & FEMALES	MALES	FEMALES	WHITE (NOT OF HISPANIC ORIGIN)	BLACK (NOT OF HISPANIC ORIGIN)	ASIAN AMERICAN OR PACIFIC ISLANDER	AMERICAN INDIAN OR ALSKAN NATIVE	HISPANIC	WHITE (NOT OF HISPANIC ORIGIN)	BLACK (NOT OF HISPANIC ORIGIN)	ASIAN AMERICAN OR PACIFIC ISLANDE	AMERICAN INDIAN OR ALSKAN NATIVE	HISPANIC
OFFICIALS, MGRS & SUPERVISORS													
PROFESSIONALS													
TECHNICIANS													
SALES WORKERS													
OFFICE/CLERICAL													
CRAFTWORKERS (SKILLED)													
OPERATIONS (SEMI-SKILLED)													
LABORERS (UNSKILLED)													
SERVICE WORKERS													
APPRENTICES													
TOTAL													

Additional information (optional):

Describe any other actions taken which show that all employees are recruited, hired, or trained or promoted without regard to their race, religion, color, sex, handicap, age or national origin. Use second sheet if additional space is needed:

The undersigned certifies that they are legally authorized by the proposer to make the statements and representations contained in this report, and that they have red all of the foregoing statements and representations which are true and correct to the best of their knowledge and belief.

FIRM OR CORPORATE NAME:	DATE:
SIGNATURE:	TITLE:

Section XII: References

Include below three references of equal or larger size to this current RFP project. Public sector experience is preferred, but not required. Please attach relevant supporting documentation, such as project plans, scope of work.

Reference #1:
Company/School Name:
Address:
Type of Business:
Contact Person:
Telephone and Fax#:
Dates of Service:
Description of Services Provided:
Reference #2:
Company/School Name:
Address:
Type of Business:
Contact Person:
Telephone and Fax #:
Dates of Service:
Description of Services Provided:

Reference #3:

Company/School Name:
Address:
Type of Business:
Contact Person:
Telephone and Fax#:
Dates of Service:
Description of Services Provided:



ITB #21354

Part III: SPECIFICATIONS, SCOPE OF WORK AND COST FORM

Benjamin Franklin Elementary Parapet Rebuild and Renovations

FOR THE CLEVELAND METROPOLITAN SCHOOL DISTRICT

SECTION 042000 - UNIT MASONRY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

- 1. Concrete masonry units.
- 2. Building (common) brick.
- 3. Hollow brick.
- 4. Stone trim units.
- 5. Mortar and grout.
- 6. Steel reinforcing bars.
- 7. Masonry-joint reinforcement.
- 8. Ties and anchors.
- 9. Embedded flashing.
- 10. Miscellaneous masonry accessories.
- 11. Masonry-cell fill.

1.3 ALLOWANCES

A. Face brick is part of the Face Brick Allowance.

1.4 DEFINITIONS

- A. CMU(s): Concrete masonry unit(s).
- B. Reinforced Masonry: Masonry containing reinforcing steel in grouted cells.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples for Initial Selection:
 - 1. Clay face Hollow brick, in the form of straps of five or more bricks.
 - 2. Stone trim.
 - 3. Colored mortar.
 - 4. Weep holes/cavity vents.

- C. Samples for Verification: For each type and color of the following:
 - 1. Clay face Hollow brick, in the form of straps of five or more bricks.
 - 2. Special brick shapes.
 - 3. Weep holes and cavity vents.
 - 4. Accessories embedded in masonry.

1.6 INFORMATIONAL SUBMITTALS

- A. List of Materials Used in Constructing Mockups: List generic product names together with manufacturers, manufacturers' product names, model numbers, lot numbers, batch numbers, source of supply, and other information as required to identify materials used. Include mix proportions for mortar and grout and source of aggregates.
 - 1. Submittal is for information only. Receipt of list does not constitute approval of deviations from the Contract Documents unless such deviations are specifically brought to the attention of Architect and approved in writing.
- B. Qualification Data: For testing agency.
- C. Material Certificates: For each type and size of the following:
 - 1. Masonry units.
 - a. Include material test reports substantiating compliance with requirements.
 - b. For brick, include size-variation data verifying that actual range of sizes falls within specified tolerances.
 - c. For exposed brick, include test report for efflorescence according to ASTM C 67.
 - d. For surface-coated brick, include test report for durability of surface appearance after 50 cycles of freezing and thawing according to ASTM C 67.
 - 2. Mortar admixtures.
 - 3. Preblended, dry mortar mixes. Include description of type and proportions of ingredients.
 - 4. Grout mixes. Include description of type and proportions of ingredients.
 - 5. Reinforcing bars.
 - 6. Joint reinforcement.
 - 7. Anchors, ties, and metal accessories.
- D. Mix Designs: For each type of mortar and grout. Include description of type and proportions of ingredients.
 - 1. Include test reports for mortar mixes required to comply with property specification. Test according to ASTM C 109/C 109M for compressive strength, ASTM C 1506 for water retention, and ASTM C 91/C 91M for air content.
 - 2. Include test reports, according to ASTM C 1019, for grout mixes required to comply with compressive strength requirement.
- E. Statement of Compressive Strength of Masonry: For each combination of masonry unit type and mortar type, provide statement of average net-area compressive strength of masonry units, mortar type, and resulting net-area compressive strength of masonry determined according to TMS 602/ACI 530.1/ASCE 6.

F. Cold-Weather and Hot-Weather Procedures: Detailed description of methods, materials, and equipment to be used to comply with requirements.

1.7 QUALITY ASSURANCE

- A. Testing Agency Qualifications: Qualified according to ASTM C 1093 for testing indicated.
- B. Sample Panels: Build sample panels to verify selections made under Sample submittals and to demonstrate aesthetic effects.
 - 1. Build sample panels for typical exterior wall in sizes approximately 36 inches (1200 mm) long by 36 inches (1200 mm) high by one wythe thick.
 - 2. Build sample panels facing south.
 - 3. Where masonry is to match existing, build panels adjacent and parallel to existing surface.
 - 4. Clean one-half of exposed faces of panels with masonry cleaner indicated.
 - 5. Protect approved sample panels from the elements with weather-resistant membrane.
 - 6. Approval of sample panels is for color, texture, and blending of masonry units; relationship of mortar and sealant colors to masonry unit colors; tooling of joints; aesthetic qualities of workmanship; and other material and construction qualities specifically approved by Architect in writing.
 - a. Approval of sample panels does not constitute approval of deviations from the Contract Documents contained in sample panels unless Architect specifically approves such deviations in writing.
- C. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.
 - 1. Build mockups for typical exterior wall in sizes approximately 36 inches (1200 mm) long by 36 inches (900 mm) high by full thickness, including face and backup wythes and accessories.
 - a. Include a sealant-filled joint at least 16 inches (400 mm) long in exterior wall mockup.
 - b. Include through-wall flashing installed for a 24-inch (600-mm) length in corner of exterior wall mockup approximately 16 inches (400 mm) down from top of mockup, with a 12-inch (300-mm) length of flashing left exposed to view (omit masonry above half of flashing).
 - 2. Where masonry is to match existing, erect mockups adjacent and parallel to existing surface.
 - 3. Clean one-half of exposed faces of mockups with masonry cleaner as indicated.
 - 4. Protect accepted mockups from the elements with weather-resistant membrane.
 - 5. Approval of mockups is for color, texture, and blending of masonry units; relationship of mortar and sealant colors to masonry unit colors; tooling of joints; and aesthetic qualities of workmanship.
 - a. Approval of mockups is also for other material and construction qualities specifically approved by Engineer in writing.

- b. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Engineer specifically approves such deviations in writing.
- 6. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Store masonry units on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied. If units become wet, do not install until they are dry.
- B. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.
- C. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.
- D. Deliver preblended, dry mortar mix in moisture-resistant containers. Store preblended, dry mortar mix in delivery containers on elevated platforms in a dry location or in covered weatherproof dispensing silos.
- E. Store masonry accessories, including metal items, to prevent corrosion and accumulation of dirt and oil.

1.9 FIELD CONDITIONS

- A. Protection of Masonry: During construction, cover tops of walls, projections, and sills with waterproof sheeting at end of each day's work. Cover partially completed masonry when construction is not in progress.
 - 1. Extend cover a minimum of 24 inches (600 mm) down both sides of walls, and hold cover securely in place.
 - 2. Where one wythe of multiwythe masonry walls is completed in advance of other wythes, secure cover a minimum of 24 inches (600 mm) down face next to unconstructed wythe, and hold cover in place.
- B. Do not apply uniform floor or roof loads for at least 12 hours and concentrated loads for at least three days after building masonry walls or columns.
- C. Stain Prevention: Prevent grout, mortar, and soil from staining the face of masonry to be left exposed or painted. Immediately remove grout, mortar, and soil that come in contact with such masonry.
 - 1. Protect base of walls from rain-splashed mud and from mortar splatter by spreading coverings on ground and over wall surface.
 - 2. Protect sills, ledges, and projections from mortar droppings.

- 3. Protect surfaces of window and door frames, as well as similar products with painted and integral finishes, from mortar droppings.
- 4. Turn scaffold boards near the wall on edge at the end of each day to prevent rain from splashing mortar and dirt onto completed masonry.
- D. Cold-Weather Requirements: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen substrates. Remove and replace unit masonry damaged by frost or by freezing conditions. Comply with cold-weather construction requirements contained in TMS 602/ACI 530.1/ASCE 6.
 - 1. Cold-Weather Cleaning: Use liquid cleaning methods only when air temperature is 40 deg F (4 deg C) and higher and will remain so until masonry has dried, but not less than seven days after completing cleaning.
- E. Hot-Weather Requirements: Comply with hot-weather construction requirements contained in TMS 602/ACI 530.1/ASCE 6.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations for Masonry Units: Obtain exposed masonry units of a uniform texture and color, or a uniform blend within the ranges accepted for these characteristics, from single source from single manufacturer for each product required.
- B. Source Limitations for Mortar Materials: Obtain mortar ingredients of a uniform quality, including color for exposed masonry, from single manufacturer for each cementitious component and from single source or producer for each aggregate.

2.2 UNIT MASONRY, GENERAL

- A. Masonry Standard: Comply with TMS 602/ACI 530.1/ASCE 6, except as modified by requirements in the Contract Documents.
- B. Defective Units: Referenced masonry unit standards may allow a certain percentage of units to contain chips, cracks, or other defects exceeding limits stated. Do not use units where such defects are exposed in the completed Work.
- C. Fire-Resistance Ratings: Comply with requirements for fire-resistance-rated assembly designs indicated.
 - 1. Where fire-resistance-rated construction is indicated, units shall be listed and labeled by a qualified testing agency acceptable to authorities having jurisdiction.

2.3 CONCRETE MASONRY UNITS

A. Shapes: Provide shapes indicated and as follows, with exposed surfaces matching exposed faces of adjacent units unless otherwise indicated.

- 1. Provide special shapes for corners, movement joints, headers, bonding, and other special conditions.
- 2. Provide square-edged units for outside corners unless otherwise indicated.

B. CMUs: ASTM C 90.

- 1. Unit Compressive Strength: Provide units with minimum average net-area compressive strength of 2150 psi (14.8 MPa).
- 2. Density Classification: Normal weight.
- 3. Size (Width): Manufactured to dimensions 3/8 inch (10 mm) less than nominal dimensions.

2.4 BRICK

- A. General: Provide shapes indicated and as follows, with exposed surfaces matching finish and color of exposed faces of adjacent units:
 - 1. For ends of sills and caps and for similar applications that would otherwise expose unfinished brick surfaces, provide units without cores or frogs and with exposed surfaces finished.
 - 2. Provide special shapes for applications where stretcher units cannot accommodate special conditions, including those at corners, movement joints, bond beams, sashes, and lintels.
 - 3. Provide special shapes for applications requiring brick of size, form, color, and texture on exposed surfaces that cannot be produced by sawing.
 - 4. Provide special shapes for applications where shapes produced by sawing would result in sawed surfaces being exposed to view.
- B. Building (Common) Brick: ASTM C 62, Grade SW.
 - 1. Unit Compressive Strength: Provide units with minimum average net-area compressive strength of 2100 psi (14.48 MPa).
 - 2. Size: Match size of face brick.
 - 3. Application: Use where brick is indicated for concealed locations. Face brick complying with requirements for grade, compressive strength, and size indicated for building brick may be substituted for building brick.

2.5 MORTAR AND GROUT MATERIALS

- A. Portland Cement: ASTM C 150/C 150M, Type I or II, except Type III may be used for cold-weather construction. Provide natural color or white cement as required to produce mortar color indicated.
 - 1. Alkali content shall not be more than 0.1 percent when tested according to ASTM C 114.
- B. Hydrated Lime: ASTM C 207, Type S.
- C. Portland Cement-Lime Mix: Packaged blend of portland cement and hydrated lime containing no other ingredients.

- D. Masonry Cement: ASTM C 91/C 91M.
- E. Mortar Pigments: Natural and synthetic iron oxides and chromium oxides, compounded for use in mortar mixes and complying with ASTM C 979/C 979M. Use only pigments with a record of satisfactory performance in masonry mortar.
- F. Aggregate for Mortar: ASTM C 144.
 - 1. For mortar that is exposed to view, use washed aggregate consisting of natural sand or crushed stone.
 - 2. For joints less than 1/4 inch (6 mm) thick, use aggregate graded with 100 percent passing the No. 16 (1.18-mm) sieve.
 - 3. White-Mortar Aggregates: Natural white sand or crushed white stone.
 - 4. Colored-Mortar Aggregates: Natural sand or crushed stone of color necessary to produce required mortar color.
- G. Aggregate for Grout: ASTM C 404.
- H. Epoxy Pointing Mortar: ASTM C 395, epoxy-resin-based material formulated for use as pointing mortar for glazed or pre-faced masonry units (and approved for such use by manufacturer of units); in color indicated or, if not otherwise indicated, as selected by Architect from manufacturer's colors.
- I. Refractory Mortar Mix: Ground fireclay or nonwater-soluble, calcium aluminate, medium-duty refractory mortar that passes ASTM C 199 test; or an equivalent product acceptable to authorities having jurisdiction.
- J. Cold-Weather Admixture: Nonchloride, noncorrosive, accelerating admixture complying with ASTM C 494/C 494M, Type C, and recommended by manufacturer for use in masonry mortar of composition indicated.
- K. Water-Repellent Admixture: Liquid water-repellent mortar admixture intended for use with CMUs containing integral water repellent from same manufacturer.
- L. Water: Potable.

2.6 REINFORCEMENT

- A. Masonry-Joint Reinforcement, General: ASTM A 951/A 951M.
 - 1. Exterior Walls: Hot-dip galvanized carbon steel.
 - 2. Wire Size for Side Rods: 0.187-inch (4.76-mm) diameter.
 - 3. Wire Size for Cross Rods: 0.187-inch (4.76-mm) diameter.
 - 4. Spacing of Cross Rods, Tabs, and Cross Ties: Not more than 16 inches (407 mm) o.c.
 - 5. Provide in lengths of not less than 10 feet (3 m), with prefabricated corner and tee units.
- B. Masonry-Joint Reinforcement for Multiwythe Masonry:
 - 1. Ladder type with one side rod at each face shell of hollow masonry units more than 4 inches (100 mm) wide, plus two side rods at each wythe of masonry 4 inches (100 mm) wide or less.

- 2. Tab type, either ladder or truss design, with one side rod at each face shell of backing wythe and with rectangular tabs sized to extend at least halfway through facing wythe, but with at least 5/8-inch (16-mm) cover on outside face.
- 3. Adjustable (two-piece) type, either ladder or truss design, with one side rod at each face shell of backing wythe and with separate adjustable ties with pintle-and-eye connections having a maximum horizontal play of 1/16 inch (1.5 mm) and maximum vertical adjustment of 1-1/4 inches (32 mm). Size ties to extend at least halfway through facing wythe but with at least 5/8-inch (16-mm) cover on outside face. Ties have hooks or clips to engage a continuous horizontal wire in the facing wythe.

2.7 TIES AND ANCHORS

- A. General: Ties and anchors shall extend at least 1-1/2 inches (38 mm) into veneer but with at least a 5/8-inch (16-mm) cover on outside face.
- B. Materials: Provide ties and anchors specified in this article that are made from materials that comply with the following unless otherwise indicated:
 - 1. Mill-Galvanized, Carbon-Steel Wire: ASTM A 82/A 82M, with ASTM A 641/A 641M, Class 1 coating.
 - 2. Hot-Dip Galvanized, Carbon-Steel Wire: ASTM A 82/A 82M, with ASTM A 153/A 153M, Class B-2 coating.
 - 3. Galvanized-Steel Sheet: ASTM A 653/A 653M, Commercial Steel, G60 (Z180) zinc coating.
 - 4. Steel Sheet, Galvanized after Fabrication: ASTM A 1008/A 1008M, Commercial Steel, with ASTM A 153/A 153M, Class B coating.
- C. Adjustable Anchors for Connecting to Concrete: Provide anchors that allow vertical or horizontal adjustment but resist tension and compression forces perpendicular to plane of wall.
 - 1. Tie Section: Triangular-shaped wire tie made from 0.187-inch- (4.76-mm-) diameter, hot-dip galvanized steel wire.
- D. Rigid Anchors: Fabricate from steel bars 1-1/2 inches (38 mm) wide by 1/4 inch (6.35 mm) thick by 24 inches (610 mm) long, with ends turned up 2 inches (51 mm) or with cross pins unless otherwise indicated.
 - 1. Corrosion Protection: Hot-dip galvanized to comply with ASTM A 153/A 153M.

2.8 EMBEDDED FLASHING MATERIALS

- A. Metal Flashing: Provide metal flashing complying with SMACNA's "Architectural Sheet Metal Manual" and as follows:
 - 1. Stainless Steel: ASTM A 240/A 240M or ASTM A 666, Type 304, 0.016 inch (0.40 mm)
 - 2. Copper: ASTM B 370, Temper H00, cold-rolled copper sheet, 16-oz./sq. ft. (4.9-kg/sq. m) weight or 0.0216 inch (0.55 mm) thick or ASTM B 370, Temper H01, high-yield copper sheet, 12-oz./sq. ft. (3.7-kg/sq. m) weight or 0.0162 inch (0.41 mm) thick.

- 3. Fabricate continuous flashings in sections 96 inches (2400 mm) long minimum, but not exceeding 12 feet (3.7 m). Provide splice plates at joints of formed, smooth metal flashing.
- 4. Fabricate through-wall metal flashing embedded in masonry from stainless steel, with ribs at 3-inch (76-mm) intervals along length of flashing to provide an integral mortar bond
- 5. Fabricate through-wall flashing with snaplock receiver on exterior face where indicated to receive counterflashing.
- 6. Fabricate through-wall flashing with drip edge unless otherwise indicated. Fabricate by extending flashing 1/2 inch (13 mm) out from wall, with outer edge bent down 30 degrees and hemmed.
- 7. Fabricate metal drip edges from stainless steel. Extend at least 3 inches (76 mm) into wall and 1/2 inch (13 mm) out from wall, with outer edge bent down 30 degrees and hemmed.
- 8. Fabricate metal sealant stops from stainless steel. Extend at least 3 inches (76 mm) into wall and out to exterior face of wall. At exterior face of wall, bend metal back on itself for 3/4 inch (19 mm) and down into joint 1/4 inch (6 mm) to form a stop for retaining sealant backer rod.
- 9. Fabricate metal expansion-joint strips from stainless steel to shapes indicated.
- 10. Solder metal items at corners.
- B. Flexible Flashing: Use the following unless otherwise indicated:
 - 1. Copper-Laminated Flashing: 5-oz./sq. ft. (1.5-kg/sq. m) copper sheet bonded between two layers of glass-fiber cloth. Use only where flashing is fully concealed in masonry.
- C. Application: Unless otherwise indicated, use the following:
 - 1. Where flashing is indicated to receive counterflashing, use metal flashing.
 - 2. Where flashing is indicated to be turned down at or beyond the wall face, use metal flashing.
 - 3. Where flashing is partly exposed and is indicated to terminate at the wall face, use metal flashing with a drip edge.
 - 4. Where flashing is fully concealed, use flexible flashing.
- D. Solder and Sealants for Sheet Metal Flashings:
 - 1. Solder for Stainless Steel: ASTM B 32, Grade Sn96, with acid flux of type recommended by stainless-steel sheet manufacturer.
 - 2. Solder for Copper: ASTM B 32, Grade Sn50 with maximum lead content of 0.2 percent.
 - 3. Elastomeric Sealant: ASTM C 920, chemically curing urethane sealant; of type, grade, class, and use classifications required to seal joints in sheet metal flashing and remain watertight.
- E. Adhesives, Primers, and Seam Tapes for Flashings: Flashing manufacturer's standard products or products recommended by flashing manufacturer for bonding flashing sheets to each other and to substrates.
- F. Termination Bars for Flexible Flashing: Stainless steel bars 1/8 inch by 1 inch (3 mm by 25 mm).

- G. Termination Bars for Flexible Flashing: Stainless-steel sheet 0.019 inch by 1-1/2 inches (0.48 mm by 38 mm) with a 3/8 inch (10-mm) sealant flange at top.
- H. Termination Bars for Flexible Flashing: Aluminum sheet 0.064 inch by 1-1/2 inches (1.63 mm by 38 mm) with a 3/8-inch (10-mm) sealant flange at top.

2.9 MISCELLANEOUS MASONRY ACCESSORIES

- A. Compressible Filler: Premolded filler strips complying with ASTM D 1056, Grade 2A1; compressible up to 35 percent; of width and thickness indicated; formulated from neoprene.
- B. Preformed Control-Joint Gaskets: Made from styrene-butadiene-rubber compound, complying with ASTM D 2000, Designation M2AA-805 and designed to fit standard sash block and to maintain lateral stability in masonry wall; size and configuration as indicated.
- C. Bond-Breaker Strips: Asphalt-saturated felt complying with ASTM D 226/D 226M, Type I (No. 15 asphalt felt).
- D. Weep/Cavity Vent Products: Use one of the following unless otherwise indicated:
 - 1. Wicking Material: Absorbent rope, made from cotton, 1/4 to 3/8 inch (6 to 10 mm) in diameter, in length required to produce 2-inch (50-mm) exposure on exterior and 18 inches (450 mm) in cavity. Use only for weeps.
 - 2. Round Plastic Weep/Vent Tubing: Medium-density polyethylene, 3/8-inch (9-mm) OD by 4 inches (100 mm) long.
 - 3. Cellular Plastic Weep/Vent: One-piece, flexible extrusion made from UV-resistant polypropylene copolymer, full height and width of head joint and depth 1/8 inch (3 mm) less than depth of outer wythe, in color selected from manufacturer's standard.
 - 4. Mesh Weep/Vent: Free-draining mesh; made from polyethylene strands, full height and width of head joint and depth 1/8 inch (3 mm) less than depth of outer wythe; in color selected from manufacturer's standard.

2.10 MASONRY CLEANERS

A. Proprietary Acidic Cleaner: Manufacturer's standard-strength cleaner designed for removing mortar/grout stains, efflorescence, and other new construction stains from new masonry without discoloring or damaging masonry surfaces. Use product expressly approved for intended use by cleaner manufacturer and manufacturer of masonry units being cleaned.

2.11 MORTAR AND GROUT MIXES

- A. General: Do not use admixtures, including pigments, air-entraining agents, accelerators, retarders, water-repellent agents, antifreeze compounds, or other admixtures unless otherwise indicated.
 - 1. Do not use calcium chloride in mortar or grout.
 - 2. Use portland cement-lime mortar unless otherwise indicated.
 - 3. For exterior masonry, use portland cement-lime mortar.

- 4. For reinforced masonry, use portland cement-lime mortar.
- 5. Add cold-weather admixture (if used) at same rate for all mortar that will be exposed to view, regardless of weather conditions, to ensure that mortar color is consistent.
- B. Preblended, Dry Mortar Mix: Furnish dry mortar ingredients in form of a preblended mix. Measure quantities by weight to ensure accurate proportions, and thoroughly blend ingredients before delivering to Project site.
- C. Mortar for Unit Masonry: Comply with ASTM C 270, Proportion Specification. Provide the following types of mortar for applications stated unless another type is indicated or needed to provide required compressive strength of masonry.
 - 1. For masonry below grade or in contact with earth, use Type M.
 - 2. For reinforced masonry, use Type S.
 - 3. For exterior, above-grade, load-bearing and nonload-bearing walls and parapet walls; for interior load-bearing walls; for interior nonload-bearing partitions; and for other applications where another type is not indicated, use Type N.
- D. Pigmented Mortar: Use colored cement product or select and proportion pigments with other ingredients to produce color required. Do not add pigments to colored cement products.
 - 1. Pigments shall not exceed 10 percent of portland cement by weight.
 - 2. Pigments shall not exceed 5 percent of masonry cement by weight.
 - 3. Mix to match Architect's sample.
 - 4. Application: Use pigmented mortar for exposed mortar joints with the following units:
 - a. Hollow brick.
 - b. Stone trim units.
 - c. Cast-stone trim units.
- E. Colored-Aggregate Mortar: Produce required mortar color by using colored aggregates and natural color or white cement as necessary to produce required mortar color.
 - 1. Mix to match Architect's sample.
 - 2. Application: Use colored-aggregate mortar for exposed mortar joints with the following units:
 - a. Clay face brick.
 - b. Hollow brick.
 - c. Stone trim units.
 - d. Cast-stone trim units.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
 - 1. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.

- 2. Verify that foundations are within tolerances specified.
- 3. Verify that reinforcing dowels are properly placed.
- 4. Verify that substrates are free of substances that impair mortar bond.
- B. Before installation, examine rough-in and built-in construction for piping systems to verify actual locations of piping connections.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION, GENERAL

- A. Thickness: Build cavity and composite walls and other masonry construction to full thickness shown. Build single-wythe walls to actual widths of masonry units, using units of widths indicated.
- B. Build chases and recesses to accommodate items specified in this and other Sections.
- C. Leave openings for equipment to be installed before completing masonry. After installing equipment, complete masonry to match construction immediately adjacent to opening.
- D. Use full-size units without cutting if possible. If cutting is required to provide a continuous pattern or to fit adjoining construction, cut units with motor-driven saws; provide clean, sharp, unchipped edges. Allow units to dry before laying unless wetting of units is specified. Install cut units with cut surfaces and, where possible, cut edges concealed.
- E. Select and arrange units for exposed unit masonry to produce a uniform blend of colors and textures. Mix units from several pallets or cubes as they are placed.
- F. Matching Existing Masonry: Match coursing, bonding, color, and texture of existing masonry.
- G. Wetting of Brick: Wet brick before laying if initial rate of absorption exceeds 30 g/30 sq. in. (30 g/194 sq. cm) per minute when tested according to ASTM C 67. Allow units to absorb water so they are damp but not wet at time of laying.

3.3 TOLERANCES

- A. Dimensions and Locations of Elements:
 - 1. For dimensions in cross section or elevation, do not vary by more than plus 1/2 inch (12 mm) or minus 1/4 inch (6 mm).
 - 2. For location of elements in plan, do not vary from that indicated by more than plus or minus 1/2 inch (12 mm).
 - 3. For location of elements in elevation, do not vary from that indicated by more than plus or minus 1/4 inch (6 mm) in a story height or 1/2 inch (12 mm) total.

B. Lines and Levels:

1. For conspicuous horizontal lines, such as lintels, sills, parapets, and reveals, do not vary from level by more than 1/8 inch in 10 feet (3 mm in 3 m), 1/4 inch in 20 feet (6 mm in 6 m), or 1/2-inch (12-mm) maximum.

- 2. For vertical lines and surfaces, do not vary from plumb by more than 1/4 inch in 10 feet (6 mm in 3 m), 3/8 inch in 20 feet (9 mm in 6 m), or 1/2-inch (12-mm) maximum.
- 3. For conspicuous vertical lines, such as external corners, door jambs, reveals, and expansion and control joints, do not vary from plumb by more than 1/8 inch in 10 feet (3 mm in 3 m), 1/4 inch in 20 feet (6 mm in 6 m), or 1/2-inch (12-mm) maximum.
- 4. For lines and surfaces, do not vary from straight by more than 1/4 inch in 10 feet (6 mm in 3 m), 3/8 inch in 20 feet (9 mm in 6 m), or 1/2-inch (12-mm) maximum.
- 5. For vertical alignment of exposed head joints, do not vary from plumb by more than 1/4 inch in 10 feet (6 mm in 3 m), or 1/2-inch (12-mm) maximum.
- 6. For faces of adjacent exposed masonry units, do not vary from flush alignment by more than 1/16 inch (1.5 mm) except due to warpage of masonry units within tolerances specified for warpage of units.

C. Joints:

- 1. For bed joints, do not vary from thickness indicated by more than plus or minus 1/8 inch (3 mm), with a maximum thickness limited to 1/2 inch (12 mm).
- 2. For exposed bed joints, do not vary from bed-joint thickness of adjacent courses by more than 1/8 inch (3 mm).
- 3. For head and collar joints, do not vary from thickness indicated by more than plus 3/8 inch (9 mm) or minus 1/4 inch (6 mm).
- 4. For exposed head joints, do not vary from thickness indicated by more than plus or minus 1/8 inch (3 mm). Do not vary from adjacent bed-joint and head-joint thicknesses by more than 1/8 inch (3 mm).
- 5. For exposed bed joints and head joints of stacked bond, do not vary from a straight line by more than 1/16 inch (1.5 mm) from one masonry unit to the next.

3.4 LAYING MASONRY WALLS

- A. Lay out walls in advance for accurate spacing of surface bond patterns with uniform joint thicknesses and for accurate location of openings, movement-type joints, returns, and offsets. Avoid using less-than-half-size units, particularly at corners, jambs, and, where possible, at other locations.
- B. Bond Pattern for Exposed Masonry: Unless otherwise indicated, lay exposed masonry to match existing bond pattern; do not use units with less-than-nominal 4-inch (100-mm) horizontal face dimensions at corners or jambs.
- C. Lay concealed masonry with all units in a wythe in running bond or bonded by lapping not less than 4 inches (100 mm). Bond and interlock each course of each wythe at corners. Do not use units with less-than-nominal 4-inch (100-mm) horizontal face dimensions at corners or jambs.
- D. Stopping and Resuming Work: Stop work by stepping back units in each course from those in course below; do not tooth. When resuming work, clean masonry surfaces that are to receive mortar, remove loose masonry units and mortar, and wet brick if required before laying fresh masonry.
- E. Built-in Work: As construction progresses, build in items specified in this and other Sections. Fill in solidly with masonry around built-in items.

F. Fill space between steel frames and masonry solidly with mortar unless otherwise indicated.

3.5 MORTAR BEDDING AND JOINTING

- A. Lay hollow brick as follows:
 - 1. Bed face shells in mortar and make head joints of depth equal to bed joints.
 - 2. Bed webs in mortar in all courses of piers, columns, and pilasters.
 - 3. Bed webs in mortar in grouted masonry, including starting course on footings.
 - 4. Fully bed entire units, including areas under cells, at starting course on footings where cells are not grouted.
 - 5. Fully bed units and fill cells with mortar at anchors and ties as needed to fully embed anchors and ties in mortar.
- B. Lay solid masonry units and hollow brick with completely filled bed and head joints; butter ends with sufficient mortar to fill head joints and shove into place. Do not deeply furrow bed joints or slush head joints.
- C. Set stone trim units in full bed of mortar with full vertical joints. Fill dowel, anchor, and similar holes
 - 1. Clean soiled surfaces with fiber brush and soap powder and rinse thoroughly with clear water.
 - 2. Allow cleaned surfaces to dry before setting.
 - 3. Wet joint surfaces thoroughly before applying mortar.
 - 4. Rake out mortar joints for pointing with sealant.
- D. Tool exposed joints slightly concave when thumbprint hard, using a jointer larger than joint thickness unless otherwise indicated.

3.6 COMPOSITE MASONRY

- A. Bond wythes of composite masonry together as follows:
 - 1. Header Bonding: Provide masonry unit headers extending not less than 3 inches (76 mm) into each wythe. Space headers not more than 8 inches (203 mm) clear horizontally and 16 inches (406 mm) clear vertically.
- B. Corners: Provide interlocking masonry unit bond in each wythe and course at corners unless otherwise indicated.

3.7 CONTROL AND EXPANSION JOINTS

- A. General: Install control- and expansion-joint materials in unit masonry as masonry progresses. Do not allow materials to span control and expansion joints without provision to allow for inplane wall or partition movement.
- B. Form expansion joints in brick as follows:

- 1. Build flanges of metal expansion strips into masonry. Lap each joint 4 inches (100 mm) in direction of water flow. Seal joints below grade and at junctures with horizontal expansion joints if any.
- 2. Build flanges of factory-fabricated, expansion-joint units into masonry.
- 3. Build in compressible joint fillers where indicated.
- 4. Form open joint full depth of brick wythe and of width indicated, but not less than 3/8 inch (10 mm) for installation of sealant and backer rod specified in Section 079200 "Joint Sealants."
- C. Provide horizontal, pressure-relieving joints by either leaving an airspace or inserting a compressible filler of width required for installing sealant and backer rod 3/8 inch (10 mm).
 - 1. Locate horizontal, pressure-relieving joints beneath shelf angles supporting masonry.

3.8 FLASHING. WEEP HOLES. AND CAVITY VENTS

- A. General: Install embedded flashing and weep holes in masonry at shelf angles, lintels, ledges, other obstructions to downward flow of water in wall, and where indicated.
- B. Install flashing as follows unless otherwise indicated:
 - 1. Prepare masonry surfaces so they are smooth and free from projections that could puncture flashing. Where flashing is within mortar joint, place through-wall flashing on sloping bed of mortar and cover with mortar. Before covering with mortar, seal penetrations in flashing with adhesive, sealant, or tape as recommended by flashing manufacturer.
 - 2. At multiwythe masonry walls, including cavity walls, extend flashing through outer wythe, turned up a minimum of 4 inches (100 mm), and through inner wythe to within 1/2 inch (13 mm) of the interior face of wall in exposed masonry. Where interior face of wall is to receive furring or framing, carry flashing completely through inner wythe and turn flashing up approximately 2 inches (50 mm) on interior face.
 - 3. At multiwythe masonry walls, including cavity walls, extend flashing through outer wythe, turned up a minimum of 4 inches (100 mm), and 1-1/2 inches (38 mm) into the inner wythe. Form 1/4-inch (6-mm) hook in edge of flashing embedded in inner wythe.
 - 4. At lintels and shelf angles, extend flashing a minimum of 6 inches (150 mm) into masonry at each end. At heads and sills, extend flashing 6 inches (150 mm) at ends and turn up not less than 2 inches (50 mm) to form end dams.
 - 5. Install metal drip edges beneath flexible flashing at exterior face of wall. Stop flexible flashing 1/2 inch (13 mm) back from outside face of wall, and adhere flexible flashing to top of metal drip edge.
 - 6. Install metal flashing termination beneath flexible flashing at exterior face of wall. Stop flexible flashing 1/2 inch (13 mm) back from outside face of wall, and adhere flexible flashing to top of metal flashing termination.
 - 7. Cut flexible flashing off flush with face of wall after masonry wall construction is completed.

3.9 FIELD QUALITY CONTROL

- A. Testing and Inspecting: Owner will engage special inspectors to perform tests and inspections and prepare reports. Allow inspectors access to scaffolding and work areas as needed to perform tests and inspections. Retesting of materials that fail to comply with specified requirements shall be done at Contractor's expense.
- B. Testing Frequency: One set of tests for each 5000 sq. ft. (464 sq. m) of wall area or portion thereof.
- C. Clay Masonry Unit Test: For each type of unit provided, according to ASTM C 67 for compressive strength.
- D. Mortar Aggregate Ratio Test (Proportion Specification): For each mix provided, according to ASTM C 780.
- E. Mortar Test (Property Specification): For each mix provided, according to ASTM C 780. Test mortar for compressive strength.
- F. Grout Test (Compressive Strength): For each mix provided, according to ASTM C 1019.
- G. Prism Test: For each type of construction provided, according to ASTM C 1314 at 7 days and at 28 days.

3.10 REPAIRING, POINTING, AND CLEANING

- A. Remove and replace masonry units that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Install new units to match adjoining units; install in fresh mortar, pointed to eliminate evidence of replacement.
- B. Pointing: During the tooling of joints, enlarge voids and holes, except weep holes, and completely fill with mortar. Point up joints, including corners, openings, and adjacent construction, to provide a neat, uniform appearance. Prepare joints for sealant application, where indicated.
- C. In-Progress Cleaning: Clean unit masonry as work progresses by dry brushing to remove mortar fins and smears before tooling joints.
- D. Final Cleaning: After mortar is thoroughly set and cured, clean exposed masonry as follows:
 - 1. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.
 - 2. Test cleaning methods on sample wall panel; leave one-half of panel uncleaned for comparison purposes. Obtain Architect's approval of sample cleaning before proceeding with cleaning of masonry.
 - 3. Protect adjacent stone and nonmasonry surfaces from contact with cleaner by covering them with liquid strippable masking agent or polyethylene film and waterproof masking tape.
 - 4. Wet wall surfaces with water before applying cleaners; remove cleaners promptly by rinsing surfaces thoroughly with clear water.

- 5. Clean brick by bucket-and-brush hand-cleaning method described in BIA Technical Notes 20.
- 6. Clean concrete masonry by applicable cleaning methods indicated in NCMA TEK 8-4A.
- 7. Clean masonry with a proprietary acidic cleaner applied according to manufacturer's written instructions.
- 8. Clean stone trim to comply with stone supplier's written instructions.
- 9. Clean limestone units to comply with recommendations in ILI's "Indiana Limestone Handbook."

3.11 MASONRY WASTE DISPOSAL

- A. Salvageable Materials: Unless otherwise indicated, excess masonry materials are Contractor's property. At completion of unit masonry work, remove from Project site.
- B. Waste Disposal as Fill Material: Dispose of clean masonry waste, including excess or soil-contaminated sand, waste mortar, and broken masonry units, by crushing and mixing with fill material as fill is placed.
 - 1. Crush masonry waste to less than 4 inches (100 mm) in each dimension.
 - 2. Mix masonry waste with at least two parts of specified fill material for each part of masonry waste. Fill material is specified in Section 312000 "Earth Moving."
 - 3. Do not dispose of masonry waste as fill within 18 inches (450 mm) of finished grade.
- C. Masonry Waste Recycling: Return broken CMUs not used as fill to manufacturer for recycling.
- D. Excess Masonry Waste: Remove excess clean masonry waste that cannot be used as fill, as described above or recycled, and other masonry waste, and legally dispose of off Owner's property.

END OF SECTION 042000

SECTION 079200 - JOINT SEALANTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

- 1. Silicone joint sealants.
- 2. Nonstaining silicone joint sealants.
- 3. Urethane joint sealants.

B. Related Requirements:

1. Section 079100 "Preformed Joint Seals" for preformed compressible foam and precured joint seals.

1.3 ACTION SUBMITTALS

- A. Product Data: For each joint-sealant product.
- B. Samples for Initial Selection: Manufacturer's color charts consisting of strips of cured sealants showing the full range of colors available for each product exposed to view.
- C. Samples for Verification: For each kind and color of joint sealant required, provide Samples with joint sealants in 1/2-inch- (13-mm-) wide joints formed between two 6-inch- (150-mm-) long strips of material matching the appearance of exposed surfaces adjacent to joint sealants.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified testing agency.
- B. Product Test Reports: For each kind of joint sealant, for tests performed by a qualified testing agency.
- C. Field-Adhesion-Test Reports: For each sealant application tested.
- D. Sample Warranties: For special warranties.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: An authorized representative who is trained and approved by manufacturer.
- B. Product Testing: Test joint sealants using a qualified testing agency.
 - 1. Testing Agency Qualifications: Qualified according to ASTM C 1021 to conduct the testing indicated.
- C. Mockups: Install sealant in mockups of assemblies specified in other Sections that are indicated to receive joint sealants specified in this Section. Use materials and installation methods specified in this Section.

1.6 PRECONSTRUCTION TESTING

- A. Preconstruction Field-Adhesion Testing: Before installing sealants, field test their adhesion to Project joint substrates as follows:
 - 1. Locate test joints where indicated on Project or, if not indicated, as directed by Engineer.
 - 2. Conduct field tests for each kind of sealant and joint substrate.
 - 3. Notify Engineer seven days in advance of dates and times when test joints will be erected.
 - 4. Arrange for tests to take place with joint-sealant manufacturer's technical representative present.
 - a. Test Method: Test joint sealants according to Method A, Field-Applied Sealant Joint Hand Pull Tab, in Appendix X1.1 in ASTM C 1193 or Method A, Tail Procedure, in ASTM C 1521.
 - 1) For joints with dissimilar substrates, verify adhesion to each substrate separately; extend cut along one side, verifying adhesion to opposite side. Repeat procedure for opposite side.
 - 5. Report whether sealant failed to adhere to joint substrates or tore cohesively. Include data on pull distance used to test each kind of product and joint substrate. For sealants that fail adhesively, retest until satisfactory adhesion is obtained.
 - 6. Evaluation of Preconstruction Field-Adhesion-Test Results: Sealants not evidencing adhesive failure from testing, in absence of other indications of noncompliance with requirements, will be considered satisfactory. Do not use sealants that fail to adhere to joint substrates during testing.

1.7 FIELD CONDITIONS

- A. Do not proceed with installation of joint sealants under the following conditions:
 - 1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer[or are below 40 deg F (5 deg C)].
 - 2. When joint substrates are wet.

- 3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
- 4. Where contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

1.8 WARRANTY

- A. Special Installer's Warranty: Installer agrees to repair or replace joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
 - 1. Warranty Period: Two years from date of Substantial Completion.
- B. Special Manufacturer's Warranty: Manufacturer agrees to furnish joint sealants to repair or replace those joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
 - 1. Warranty Period: Five years from date of Substantial Completion.
- C. Special warranties specified in this article exclude deterioration or failure of joint sealants from the following:
 - 1. Movement of the structure caused by stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression.
 - 2. Disintegration of joint substrates from causes exceeding design specifications.
 - 3. Mechanical damage caused by individuals, tools, or other outside agents.
 - 4. Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.

PART 2 - PRODUCTS

2.1 JOINT SEALANTS, GENERAL

- A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer, based on testing and field experience.
- B. Colors of Exposed Joint Sealants: As selected by Owner from manufacturer's full range.

2.2 SILICONE JOINT SEALANTS

- A. Silicone, S, NS, 100/50, NT: Single-component, nonsag, plus 100 percent and minus 50 percent movement capability, nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 100/50, Use NT.
- B. Silicone, S, NS, 50, NT: Single-component, nonsag, plus 50 percent and minus 50 percent movement capability, nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 50, Use NT.

- C. Silicone, S, NS, 100/50, T, NT: Single-component, nonsag, plus 100 percent and minus 50 percent movement capability, traffic- and nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 100/50, Uses T and NT.
- D. Silicone, S, NS, 50, T, NT: Single-component, nonsag, plus 50 percent and minus 50 percent movement capability, traffic- and nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 50, Uses T and NT.

2.3 NONSTAINING SILICONE JOINT SEALANTS

- A. Nonstaining Joint Sealants: No staining of substrates when tested according to ASTM C 1248.
- B. Silicone, Nonstaining, S, NS, 100/50, NT: Nonstaining, single-component, nonsag, plus 100 percent and minus 50 percent movement capability, nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 100/50, Use NT.
- C. Silicone, Nonstaining, S, NS, 50, NT: Nonstaining, single-component, nonsag, plus 50 percent and minus 50 percent movement capability, nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 50, Use NT.
- D. Silicone, Nonstaining, S, NS, 100/50, T, NT: Nonstaining, single-component, nonsag, plus 100 percent and minus 50 percent movement capability, traffic- and nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 100/50, Uses T and NT.
- E. Silicone, Nonstaining, M, NS, 50, NT: Nonstaining, multicomponent, nonsag, plus 50 percent and minus 50 percent movement capability, nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type M, Grade NS, Class 50, Use NT.

2.4 URETHANE JOINT SEALANTS

- A. Urethane, S, NS, 100/50, T, NT: Single-component, nonsag, plus 100 percent and minus 50 percent movement capability, traffic- and nontraffic-use, urethane joint sealant; ASTM C 920, Type S, Grade NS, Class 100/50, Uses T and NT.
- B. Urethane, M, NS, 50, NT: Multicomponent, nonsag, plus 50 percent and minus 50 percent movement capability nontraffic-use, urethane joint sealant; ASTM C 920, Type M, Grade NS, Class 50, Use NT.
- C. Urethane, M, NS, 50, T, NT: Multicomponent, nonsag, plus 50 percent and minus 50 percent movement capability, traffic- and nontraffic-use, urethane joint sealant; ASTM C 920, Type M, Grade NS, Class 50, Uses T and NT.

2.5 JOINT-SEALANT BACKING

A. Sealant Backing Material, General: Nonstaining; compatible with joint substrates, sealants, primers, and other joint fillers; and approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.

- B. Cylindrical Sealant Backings: ASTM C 1330, Type O (open-cell material), and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.
- C. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint. Provide self-adhesive tape where applicable.

2.6 MISCELLANEOUS MATERIALS

- A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.
- B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.
- C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:
 - 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.
 - 2. Clean porous joint substrate surfaces by brushing, grinding, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air. Porous joint substrates include the following:
 - a. Concrete.

- b. Masonry.
- c. Stone.
- 3. Remove laitance and form-release agents from concrete.
- 4. Clean nonporous joint substrate surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants. Nonporous joint substrates include the following:
 - a. Metal.
 - b. Glass.
- B. Joint Priming: Prime joint substrates where recommended by joint-sealant manufacturer or as indicated by preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant or primer with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.3 INSTALLATION OF JOINT SEALANTS

- A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.
- B. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- C. Install sealant backings of kind indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
 - 1. Do not leave gaps between ends of sealant backings.
 - 2. Do not stretch, twist, puncture, or tear sealant backings.
 - 3. Remove absorbent sealant backings that have become wet before sealant application, and replace them with dry materials.
- D. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.
- E. Install sealants using proven techniques that comply with the following and at the same time backings are installed:
 - 1. Place sealants so they directly contact and fully wet joint substrates.
 - 2. Completely fill recesses in each joint configuration.
 - 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.

- F. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified in subparagraphs below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
 - 1. Remove excess sealant from surfaces adjacent to joints.
 - 2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
 - 3. Provide concave joint profile per Figure 8A in ASTM C 1193 unless otherwise indicated.
 - 4. Provide flush joint profile at skyward joints according to Figure 8B in ASTM C 1193.

3.4 FIELD QUALITY CONTROL

- A. Field-Adhesion Testing: Field test joint-sealant adhesion to joint substrates as follows:
 - 1. Extent of Testing: Test completed and cured sealant joints as follows:
 - a. Perform 5 tests for the first 1000 feet (300 m) of joint length for each kind of sealant and joint substrate.
 - b. Perform one test for each 1000 feet (300 m) of joint length thereafter or one test per each floor per elevation.
 - 2. Test Method: Test joint sealants according to Method A, Field-Applied Sealant Joint Hand Pull Tab, in Appendix X1 in ASTM C 1193 or Method A, Tail Procedure, in ASTM C 1521.
 - a. For joints with dissimilar substrates, verify adhesion to each substrate separately; extend cut along one side, verifying adhesion to opposite side. Repeat procedure for opposite side.
 - 3. Inspect tested joints and report on the following:
 - a. Whether sealants filled joint cavities and are free of voids.
 - b. Whether sealant dimensions and configurations comply with specified requirements.
 - c. Whether sealants in joints connected to pulled-out portion failed to adhere to joint substrates or tore cohesively. Include data on pull distance used to test each kind of product and joint substrate. Compare these results to determine if adhesion complies with sealant manufacturer's field-adhesion hand-pull test criteria.
 - 4. Record test results in a field-adhesion-test log. Include dates when sealants were installed, names of persons who installed sealants, test dates, test locations, whether joints were primed, adhesion results and percent elongations, sealant material, sealant configuration, and sealant dimensions.
 - 5. Repair sealants pulled from test area by applying new sealants following same procedures used originally to seal joints. Ensure that original sealant surfaces are clean and that new sealant contacts original sealant.
- B. Evaluation of Field-Adhesion-Test Results: Sealants not evidencing adhesive failure from testing or noncompliance with other indicated requirements will be considered satisfactory.

Remove sealants that fail to adhere to joint substrates during testing or to comply with other requirements. Retest failed applications until test results prove sealants comply with indicated requirements.

3.5 CLEANING

A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

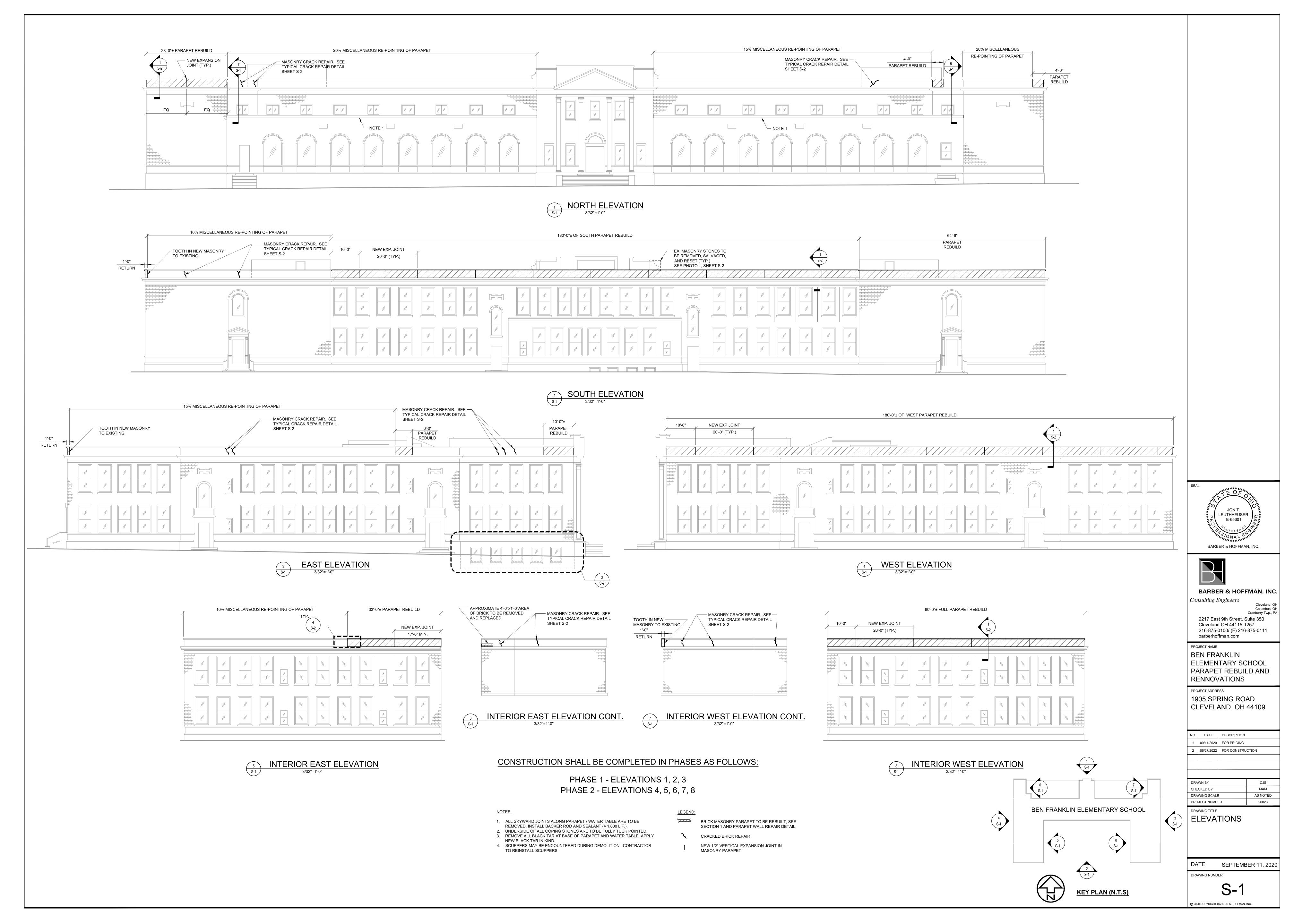
3.6 PROTECTION

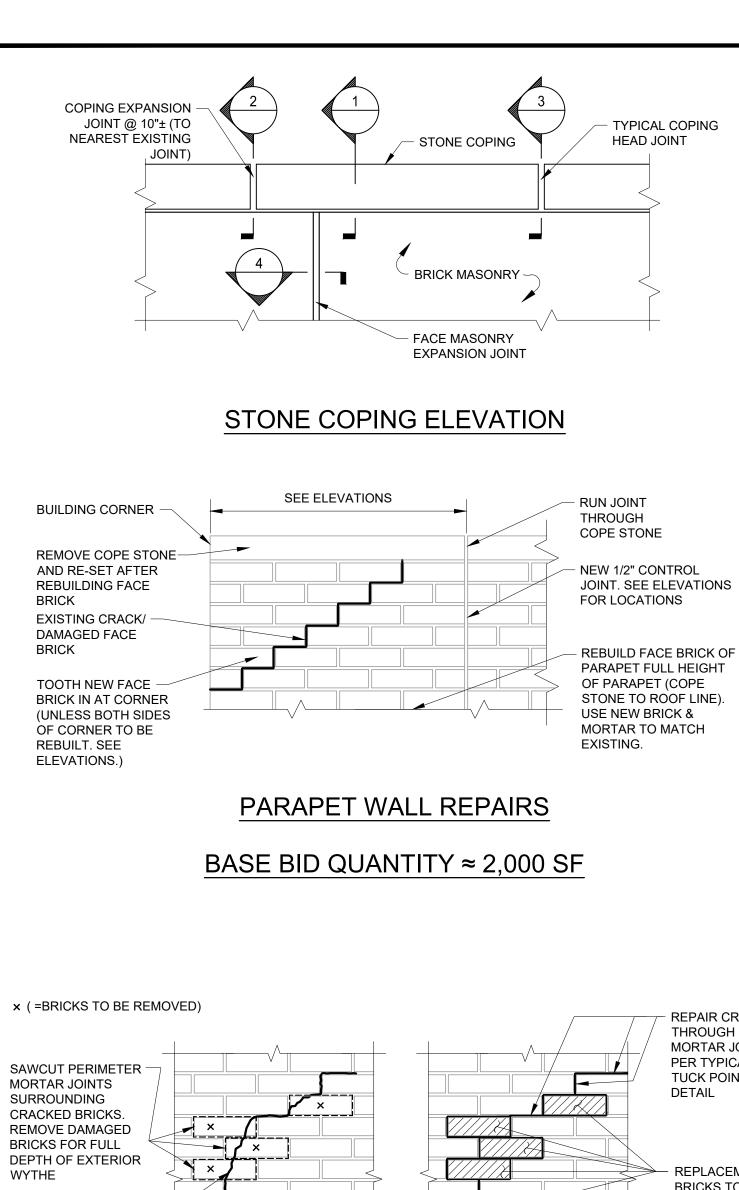
A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out, remove, and repair damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

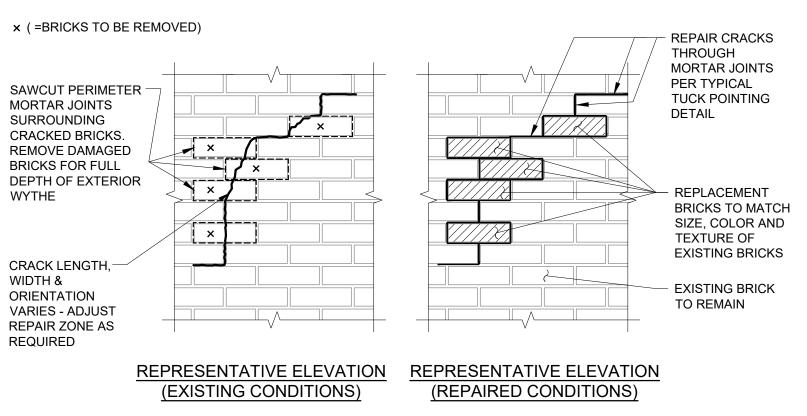
3.7 JOINT-SEALANT SCHEDULE

- A. Joint-Sealant Application: Exterior joints in vertical surfaces and horizontal nontraffic surfaces.
 - 1. Joint Locations:
 - a. Construction joints in cast-in-place concrete.
 - b. Control and expansion joints in unit masonry.
 - c. Joints in dimension stone cladding.
 - d. Joints between different materials listed above.
 - e. Other joints as indicated on Drawings.
 - 2. Joint Sealant: Silicone, nonstaining, S, NS, 50, NT.
 - 3. Joint-Sealant Color: As selected by Owner from manufacturer's full range of colors.

END OF SECTION 079200

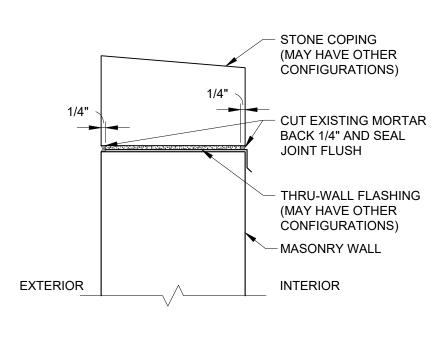






CRACKED BRICK REPLACEMENT DETAIL

BASE BID QUANTITY ≈ 100 EA.



SECTION 1
TYPICAL COPING BED JOINT

SECTION 2

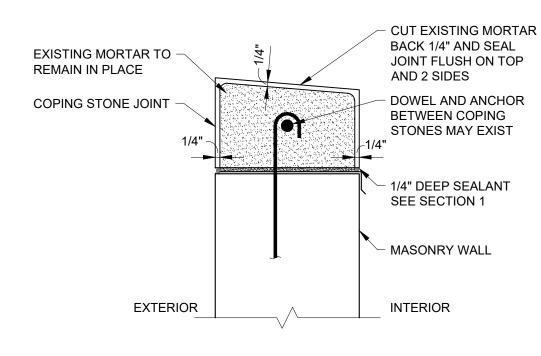
COPING EXPANSION JOINT

3/8"±1/8" DEEP SEALANT

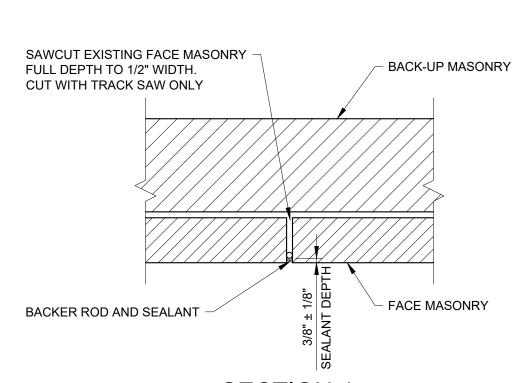
COPING STONE JOINT-

EXTERIOR

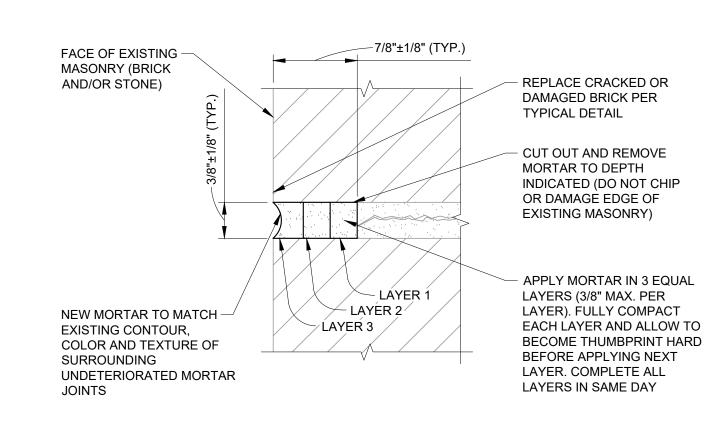
BACKER ROD —



SECTION 3
TYPICAL COPING HEAD JOINT



SECTION 4
FACE MASONRY EXPANSION JOINT



OPEN JOINT (SAWCUT

MORTAR OUT OF ENTIRE

WIDTH OF HEAD JOINT.

DO NOT CUT DOWELS

DOWEL AND ANCHOR

BETWEEN COPING

STONES MAY EXIST

1/4" DEEP SEALANT

SEE SECTION 1

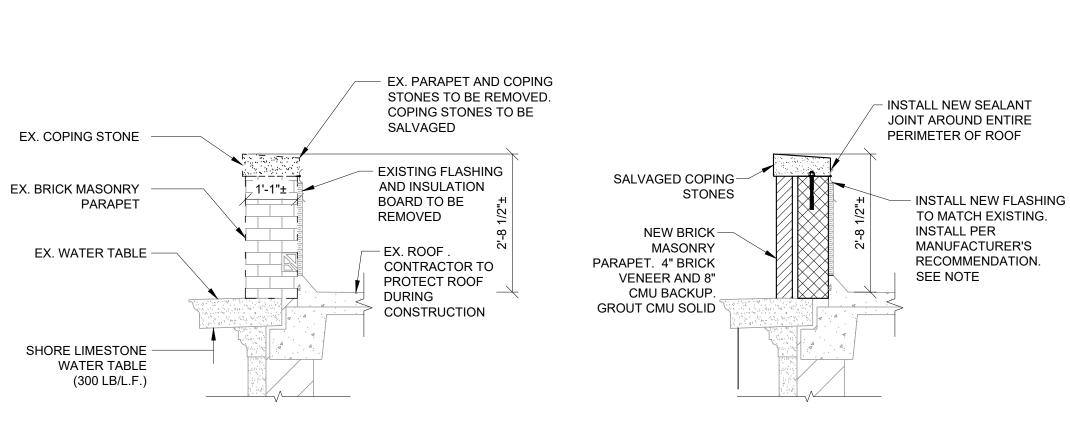
MASONRY WALL

INTERIOR

OR ANCHORS.)

TYPICAL PLAN OR SECTION DETAIL TUCK POINTING OF MASONRY JOINTS

BASE BID QUANTITY ≈ 5,000 LF



DEMO SECTION 1

1/2"=1'-0"

REINSTALL SALVAGED

COPING STONES

 ot new Parapet ot

THIS SECTION IS TYPICAL FOR ALL NEW

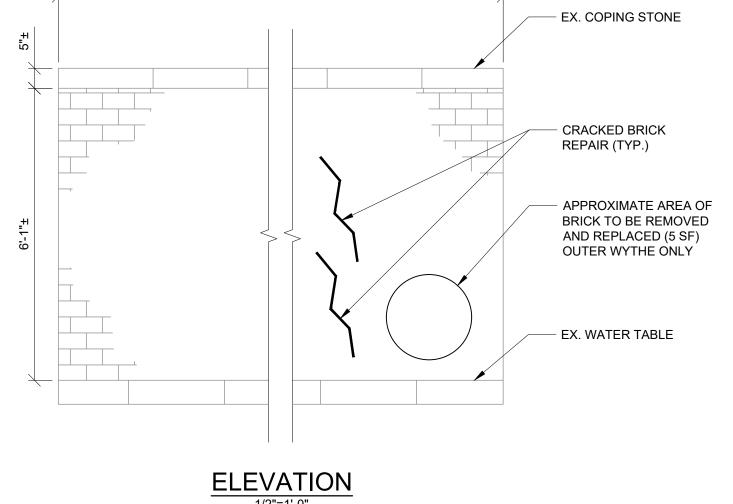
PARAPETS ABUTTING EXISTING

1/2" EXP. JOINT -

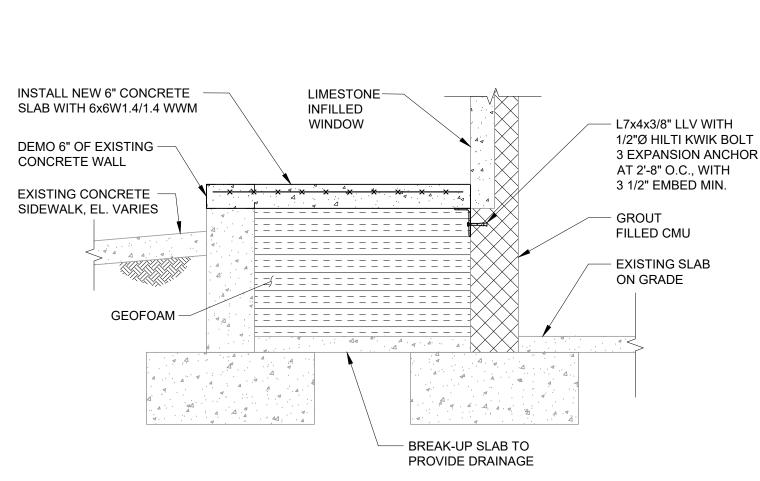
 $\overset{}{
ightarrow}$ EXISTING PARAPET =



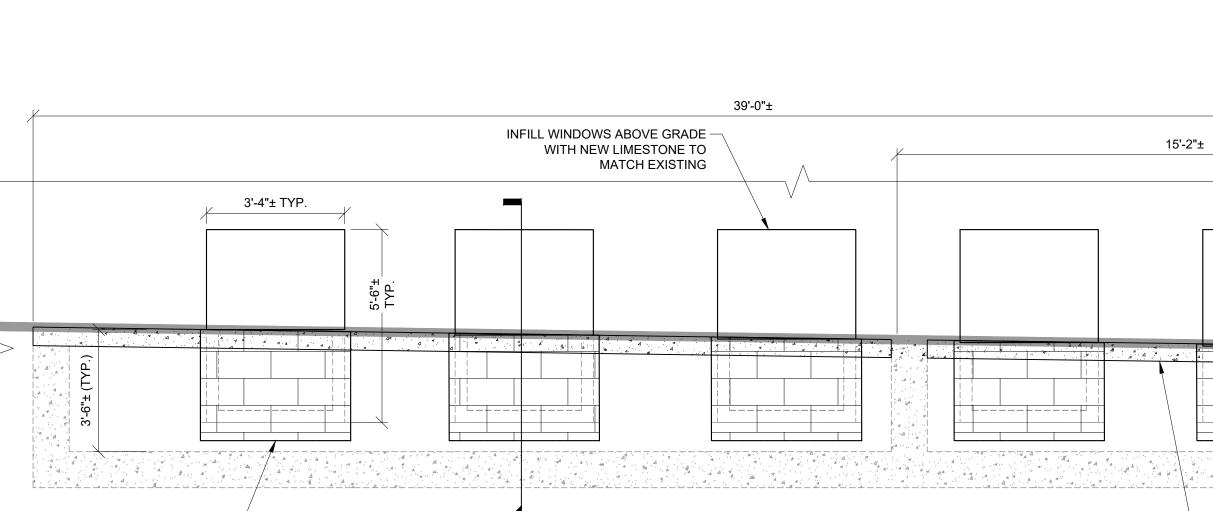
PHOTO 1



38'-6"±



<u>SECTION A-A</u>



AREA WELL TO BE FREE OF DEBRIS PRIOR TO INFILL

LIMESTONE INFILL AT WINDOWS WILL BE PROVIDED BY OWNER. CONTRACTOR TO COORDINATE WITH

REMOVE GRATING AND ALL SUPPORTING STEEL

DETAIL 3

AND RETURN TO OWNER.

REMOVE WINDOW AND ALL -

WITH CMU BELOW GRADE

AND GROUT SOLID

ASSOCIATED PARTS. INFILL

CODES AND STANDARDS

- New construction has been designed to, and shall be constructed in accordance with the following building codes and standards:
 A. 2017 Ohio Building Code (OBC 2017)
 B. City of Cleveland, Ohio, Code of Ordinances
- C. ASCE 7-10, Minimum Design Loads for Buildings and Other Structures
 Unless explicitly modified in the Contract Drawings and Specifications, the Contractor shall comply with provisions of:
- A. ACI 530-13, Building Code Requirements for Masonry Structures

 B. ACI 530.1-13, Specification for Masonry Structures

DESIGN STRESSES

Masonry Brick (ASTM C216 Grade SW)	f'm = 2,000 psi
Mortar (ASTM C270)	Type M or S
Grout (ASTM C476)	3,000 psi

STRUCTURAL TESTING AND SPECIAL INSPECTIONS

Special structural testing and inspections are not required per the Building Code, Section 1704.2 Exceptions

GENERAL

- All new construction shall comply with the Contract Documents and the Building Code.
 Typical details and general notes apply to all parts of the work except where specifically detailed or unless otherwise noted.
 Drawings are not to be scaled.
- The Contractor shall verify and be responsible for all dimensions and conditions which impact the work. Field verify sizes, elevations, etc., prior to fabrication.
 The Contractor shall carefully review the drawings to identify the scope of work required, visit the site to relate the scope of work to existing conditions and determine the extent to which those conditions and physical surroundings will impact the work.
 Existing conditions as shown on these plans are for reference only. The Contractor is required to field verify all existing conditions prior to construction.
- 7. The Contractor shall resolve any conflicts on the drawings with the Engineer before proceeding with the work.
 8. Any deviation, modification, or substitution from the approved set of structural drawings
- shall be submitted to the Owner, and Engineer for review/approval prior to its use or inclusion on site.

 9. The Contractor shall provide all necessary shores, braces, and guys required to support
- all loads to which the building structure and components may be subjected during construction. Shoring systems shall be designed, signed, and sealed by a professional engineer licensed in the jurisdiction where the project is located.

 The Contractor shall provide means, method, techniques, sequence, and procedure of
- construction as required.

 11. The Contractor shall protect all work, materials, and equipment from damage and shall provide proper storage facilities for materials and equipment during construction.
- The Contractor shall protect all work, materials, and equipment from damage and shall provide proper storage facilities for materials and equipment during construction.
 Site visits performed by the Engineer do not constitute inspections of means and
- methods of construction performed by the Contractor.

 13. Structural observations performed by the Engineer during construction are not the continuous and special inspection services and do not waive the responsibility for the inspections required of the Building Department Inspector or the testing agency. Observations also do not guarantee the Contractor's performance and shall not be considered as supervision of construction.

DEMOLITION

- Notify all local agencies having jurisdiction.
 Demolition procedures, shoring requirements, sequence techniques, etc., either given in or implied by these drawings, are suggestions only. Contractor shall retain, at his own expense, a professional engineer licensed in the jurisdiction where the project is located to determine all construction phase requirements. Contractor shall submit drawings, signed and sealed by his Engineer, to the Owner and Engineer for concept review and record purposes. Contractor shall be solely responsible for the protection, stability, etc., of existing and new structures during execution of the work.
- Before undertaking any demolition work, ascertain the existing conditions of the properties and buildings adjoining or in close proximity to the premises by survey.
 Contractor shall perform all work in such a manner as to protect existing and adjacent structures and be responsible to properly repair any damage that occurs as a result of his work. Contractor shall repair all damage to sidewalks, utility lines, or any other public or private properties resulting from the execution of the work at no cost to the Owner or
- Cease operations and notify Owner and Engineer immediately if safety or integrity of structure appears to be endangered. Properly brace and support structure before resuming operations.
- Notify Owner and Engineer immediately if any portion of existing structure which is not to be demolished is damaged. Contractor shall pay for all repair costs, including design and inspection expenses.
 Do not cut or alter any structural members without written authorization of the Engineer
- unless indicated on the structural drawings.

 8. Do not allow resulting debris to accumulate. Dispose of this material in a legal manner.

TEMPORARY SHORING AND BRACING

- 1. Structure is designed to be self-supporting and stable after the building is fully
- Each contractor shall be responsible for erection procedures and sequence, shall maintain stability of the building and its component parts, and shall be responsible for adequacy of temporary or incomplete construction and connections during erection. Such responsibilities include, but are not limited to: addition of shoring as required to support forms, walls, and other elements as required during construction, sheeting, temporary connections, bracing, guys, or tie-downs
- necessary to maintain stability of parts, subassemblies, or all of the structure.

 3. Contractor shall assume full design responsibility for temporary shoring and bracing, which shall be designed, signed, and sealed by a professional engineer licensed in the jurisdiction where project is located.
- 4. Temporary shoring shall be maintained throughout construction and shall be removed only after completion of all required supporting elements.
- removed only after completion of all required supporting elements.

 5. Remove any remaining temporary shoring after construction is complete.

MASONRY CONSTRUCTION

- Masonry walls shown on structural drawings have been designed in accordance with ACI 530, Building Code Requirements for Masonry Structures.
- Masonry walls shall be constructed in accordance with ACI 530.1, Specifications for Masonry Structures, and the project specifications.
 Determine compressive strength of masonry (f'm) by the unit strength method
- Determine compressive strength of masonry (f'm) by the unit strength method (Section 1.4,B.2 of ACI 530.1).
 A. Mortar shall meet the Property Specifications' requirements of ASTM C270,
- and shall be field tested according to ASTM C780.

 B. The strength of grout shall be determined by tests in accordance with ASTM C1019.
- Intersecting walls shall be anchored by one of the following methods (does not apply at control joints or where non-load-bearing partitions abut bearing walls):
 A. Fifty percent of the units at the intersection shall be laid in an overlapping masonry bonding pattern, with alternate units having a bearing of not less
- than 3" on the unit below.

 B. Walls shall be tied by galvanized steel straps 1 1/2" x 1/4" x 24" with 2" bend at 90° each end. Grout straps solid into cores of block at 24" maximum
- vertical spacing.

 5. Unless otherwise noted, provide galvanized ladder type joint reinforcement at 16" on
- center vertically per ASTM A82.

 6. Welding of reinforcing bars (including tack welding) is not permitted without
- permission of Engineer in writing.7. Wall reinforcing shall be held in position during grouting.

POST-INSTALLED ANCHORS

- Anchorage to hardened concrete or masonry shall include torque controlled expansion anchors and adhesive anchors of size, number and spacing as shown on a shade of the state of the shade of the s
- the drawings.

 2. All anchors shall be installed in accordance with the Manufacturer's Printed
- All anchors shall be installed in accordance with the Manufacturer's Printed Installation Instructions (MPII).
- Anchors shall be installed in holes drilled with a rotary impact hammer drill. Core
 drilling of holes is not permitted. Holes and anchor shall be thoroughly cleaned per
 the MPII prior to installation of the anchor.
- the MPII prior to installation of the anchor.

 4. Stainless steel anchors shall be used at all exterior locations and where specifically noted on the drawings.
- noted on the drawings.

 5. Remove and replace misplaced or malfunctioning anchors. Patch failed anchor
- locations with high-strength non-shrink, non-metallic grout.

 6. Installed adhesive anchors shall be securely held in-place to prevent displacement
- o. Installed adhesive anchors shall be securely held in-place to prevent displacement while the adhesive cures.7. Quality Control:
- A. All anchors shall be periodically inspected to meet the requirements of MPII and the ICC-ES ESR report for the product.

 B. All anchor installers shall be trained by the manufacturer or manufacturer's
- representative for each individual product being installed.

 10. Submittals:

 A. Technical product literature, highlighting each anchor and size to be used on
- B. Manufacturer's Printed Installation Instructions (MPII) for each anchor type.
 C. Engineering Design Data: For each substitution request, provide calculations substantiating specified design requirements, sealed by a professional
- engineer licensed in the jurisdiction where project is located.

 11. Where a specific type of anchorage is indicated on the drawings, substitution for a different type of anchorage shall meet the requirements of ACI 355.2 Category 1 or ACI 355.4 Category 1 for anchorage into concrete or shall have an ICC-ES ESR report for anchorage into masonry. Substitution shall not be permitted without prior
- written approval of the Engineer of Record.

 14. Anchors into masonry shall be supplied as an entire system and shall be as follows:

 A. Torque Controlled Expansion Anchors (Expansion Anchors) in solid or grout filled masonry as indicated on the drawings shall be Hilti KWIK Bolt 3
- Expansion Anchor (ICC-ES Evaluation Report: ESR# 1385).
 B. Adhesive anchors in hollow, solid or grout filled masonry as indicated on the drawings shall be Hilti HIT-HY 70 Hybrid for Masonry Construction (ICC-ES Evaluation Report: ESR# 4143). Screen tubes shall be used for all connections to hollow masonry. The following anchor rods shall be used with
- the system:

 1) All-threaded rod shall be Hilti HAS-E rod.

 2) Stainless steel anchor rods shall be AISI Type 304 or 316.
- Requirements and design parameters of post-installed anchors into masonry:
 A. Masonry grout shall have a minimum compressive strength of 2,000 psi and a minimum age of 21-days at the time of installation for adhesive anchors and 7-days for expansion anchors.
- B. Masonry temperature at the time of installation of adhesive anchors shall be between 41°F, and 104°F.
- between 41°F, and 104°F.

 C. Masonry may be water saturated or dry; water filled holes shall not be
- D. Embedment depth and anchor projection shall be as detailed on the drawings. Unless otherwise noted, minimum embedment depths, spacing, and edge distance shall be by the table below.

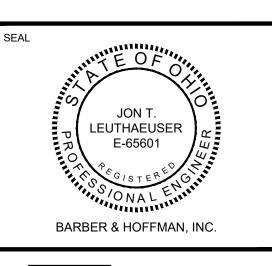
Post-installed Masonry Anchors						
	Torque	-controlled A	Anchors	Adl	nesive Anch	ors
Diameter	Minimum Embed.	Min. Edge Distance	Minimum Spacing	Minimum Embed.	Min. Edge Distance	Minimum Spacing
3/8"	2 1/2"	5"	6"	3 1/2"	12"	13 1/2"
1/2"	3 1/2"	7 1/4"	7 3/4"	4 1/2"	12"	18"
5/8"	4"	8 1/2"	9"	5 3/4	20"	22 1/2"
3/4"	4 3/4"	9 3/4"	10 3/4"	6 3/4"	20"	27"

- EX. GRADE

- COMPLETELY INFILL AREA WELL

WITH GEOFOAM AND TOP WITH

6" CONCRETE SLAB TO GRADE





Columbus, OH

Cranberry Twp., PA 2217 East 9th Street, Suite 350 Cleveland OH 44115-1257 216-875-0100/ (F) 216-875-0111 barberhoffman.com

Consulting Engineers

PROJECT NAME

BEN FRANKLIN

ELEMENTARY SCHOOL

PARAPET REBUILD AND

PROJECT ADDRESS

1905 SPRING ROAD
CLEVELAND, OH 44109

RENNOVATIONS

 NO.
 DATE
 DESCRIPTION

 1
 09/11/2020
 FOR PRICING

 2
 06/27/2022
 FOR CONSTRUCTION

DRAWN BY CJS
CHECKED BY MAM

DRAWING SCALE

DRAWING TITLE

General Notes, Details

SEPTEMBER 11, 2020

AS NOTED

& Sections

DRAWING NUMBER

S-2

Cleveland Municipal School District Benjamin Franklin Elementary

SECTION 012200 - UNIT PRICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for unit prices.

1.3 DEFINITIONS

A. Unit price is an amount incorporated into the Agreement, applicable during the duration of the Work as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

1.4 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, overhead, and profit.
- B. Measurement and Payment: See individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- D. List of Unit Prices: A schedule of unit prices is included in Part 3. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.

UNIT PRICES 012200 - 1

Cleveland Municipal School District Benjamin Franklin Elementary

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF UNIT PRICES

- A. Unit Price No. 1: Parapet Rebuild.
 - 1. Description: Remove existing limestone coping stone and salvage. Demolish brick masonry parapet to roof level. Shore existing limestone water table. Install new 3-wythe brick masonry parapet and salvaged limestone coping to match existing surrounding parapet. Repair roofing and scuppers as required.
 - 2. Unit of Measurement: Square Feet.
- B. Unit Price No. 2: Re-Pointing of Masonry Joints.
 - 1. Description: Cut out and remove existing deteriorated mortar to depths indicated on the drawings, then install new pointing mortar to match existing, building it up in three individual layers, as per the drawings and specifications. Remove loose paint if indicated
 - 2. Unit of Measurement: Square Feet.
- C. Unit Price No. 3: Masonry Crack Repair.
 - 1. Description: Cut back and clean out existing crack for the width and depth indicated. Install sealant primer on cut surfaces of joint (per manufacturing recommendations). Color to match cleaned stone. Install closed cell backer rod and urethane sealant.
 - 2. Unit of Measurement: Lineal Feet.
- D. Unit Price No. 4: Sealant Installation at Skyward Joints.
 - 1. Description: Cut out and remove existing deteriorated mortar joints to a depth of ¾" and install new closed-cell foam backer rod and urethane sealant in those joints
 - 2. Unit of Measurement: Lineal Feet.

END OF SECTION 012200

UNIT PRICES 012200 - 2

DOCUMENT 004113 - BID FORM - STIPULATED SUM (SINGLE-PRIME CONTRACT)

1.1	BID INFORMATION
A.	Bidder:
B.	Project Name: Benjamin Franklin Elementary Parapet Rebuild and Renovations.
C.	Project Location: 1905 Spring Road Cleveland, Ohio 44109.
D.	Owner: Cleveland Municipal School District.
E.	Owner Project Number: #21354
F.	Engineer: Barber & Hoffman Inc. / Mike Mazzocco
G.	Engineer Project Number: 20023.
1.2	CERTIFICATIONS AND BASE BID
A.	Base Bid, Single-Prime (All Trades) Contract: The undersigned Bidder, having carefully examined the Procurement and Contracting Requirements, Conditions of the Contract, Drawings, Specifications, and all subsequent Addenda, as prepared by Barber & Hoffman, Inc., having visited the site, and being familiar with all conditions and requirements of the Work, hereby agrees to furnish all material, labor, equipment and services, including all scheduled allowances, necessary to complete the construction of the above-named project, according to the requirements of the Procurement and Contracting Documents, for the stipulated sum of:
	 Dollars (\$). The above amount may be modified by amounts indicated by the Bidder on the attached Document 004322 "Unit Prices Form"
1.3	BID GUARANTEE
A.	The undersigned Bidder agrees to execute a contract for this Work in the above amount and to furnish surety as specified within 10 days after a written Notice of Award, if offered within 60 days after receipt of bids, and on failure to do so agrees to forfeit to Owner the attached cash, cashier's check, certified check, U.S. money order, or bid bond, as liquidated damages for such failure, in the following amount constituting five percent (5%) of the Base Bid amount above:
	1Dollars (\$).
B.	In the event Owner does not offer Notice of Award within the time limits stated above, Owner will return to the undersigned the cash, cashier's check, certified check, U.S. money order, or

bid bond.

Cleveland Municipal School District Benjamin Franklin Elementary Parapet Rebuild and Renovations

1.4 SUBCONTRACTORS AND S	SUPPL	IERS
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A.	The following companies shall execute subcontracts for the portions of the Work indicated: 1. Masonry Work:
	2. Roofing Work:3. Electrical Work:
1.5	TIME OF COMPLETION
A.	The undersigned Bidder proposes and agrees hereby to commence the Work of the Contract Documents on a date specified in a written Notice to Proceed to be issued by Owner, and shall fully complete the Work within 456 calendar days.
1.6	ACKNOWLEDGEMENT OF ADDENDA
A.	The undersigned Bidder acknowledges receipt of and use of the following Addenda in the preparation of this Bid:
	1. Addendum No. 1, dated
	2. Addendum No. 2, dated
	 Addendum No. 3, dated Addendum No. 4, dated
	Madendum 100, dated
1.7	BID SUPPLEMENTS
A.	 The following supplements are a part of this Bid Form and are attached hereto. Bid Form Supplement - Unit Prices. Bid Form Supplement - Bid Bond Form (AIA Document A310-2010).
1.8	CONTRACTOR'S LICENSE
A.	The undersigned further states that it is a duly licensed contractor, for the type of work proposed, in Cleveland Ohio, and that all fees, permits, etc., pursuant to submitting this proposal have been paid in full.
1.9	SUBMISSION OF BID
A.	Respectfully submitted this day of, 2021.
В.	Submitted By:(Name of bidding firm or corporation).
C.	Authorized Signature:(Handwritten signature).
D.	Signed By:(Type or print name).
E.	Title:(Owner/Partner/President/Vice President).

Cleveland Municipal School District Benjamin Franklin Elementary Parapet Rebuild and Renovations

F.	Witnessed By:	(Handwritten signature)
G.	Attest:	(Handwritten signature).
H.	By:	(Type or print name).
I.	Title:	(Corporate Secretary or Assistant Secretary).
J.	Street Address:	·
K.	City, State, Zip:	
L.	Phone:	
M.	License No.:	·
N.	Federal ID No.:	(Affix Corporate Seal Here).

END OF DOCUMENT 004113