



240 Continental Drive
Suite 200
Newark, Delaware 19713
Tel. (302) 738-7551
Fax (302) 454-5980

Addendum No. 1

Delaware Army National Guard
Duncan Armory/Readiness Center – Envelope and Interior Improvements
New Castle, Delaware
OMB/DFM Contract No.: MC7601000102
DEARNG Contract No.:2018-04

Tt Project No. 200-76984-18001

Addendum No. 01
to
Drawings and Project Manual
August 20, 2018

To: ALL BIDDERS

This ADDENDUM forms a part of the BIDDING AND CONTRACT DOCUMENTS and modifies the following documents:

Original DRAWINGS dated August 15, 2018
PROJECT MANUAL dated August 15, 2018

Acknowledge receipt of the ADDENDUM in the space provided on the FORM OF PROPOSAL

This ADDENDUM consists of three (3) pages and the following:

1.1 GENERAL ADMINISTRATIVE DISCUSSION

- A. This is a mandatory Pre-Bid Meeting and prime bidders are limited to those in attendance. See attached sign in sheet for attendees.
- B. Attached is the Pre-Bid Sign-in Sheet. All attendees will receive Addendum number 1 (this document). Only plan holders will receive subsequent Addenda.
- C. All questions and substitution requests must go to Chuck Dobbs of Tetra Tech (Tt): chuck.dobbs@tetrattech.com, via e-mail, and to Tt's administrative assistant team's e-mail address: ier.deng@tetrattech.com
- D. Critical Dates:
 - 1. **Bid Due Date: as advertised: Wednesday, September 5, 2018 by 2:00pm.**
 - 2. Sub-walk thru: No formal day will be established, call Bill Davis at (302) 326-7131, to schedule access to the building for your subs.
 - 3. Cut off for questions and Substitutions: 8/24/18 (Close of Business)
 - 4. Last Addendum (for technical content): 8/30/18
- E. Addenda: all Pre-bid meeting attendees will receive a copy of Addendum 1. Only plan holders will receive copies of subsequent Addenda.

F. Bid Form Discussion:

- a. A new Bid form will be issued. It will include the mandated number of calendar days of 180. It should be noted that
- b. Subcontractor List was discussed: carpentry and Storefront installer will be added.

G. This Project is governed by State of Delaware Wage Rates.

H. Demolition work and Project Phasing:

- a. Demolition: Since the Flooring and windows are asbestos composite materials, they will be removed by hazardous material abatement contract. Bidders shall assume that the asbestos removal work for each floor will require two weeks each.
- b. Phasing: This project will be divided into two phases: The first phase will be to complete the second floor work, and the second phase will be the balance of the work on the first floor. The bidders for this contract shall be responsible for the temporary relocation within the building of the furnishings in the offices spaces, and the kitchen equipment.

I. References to "DEARNG" is the Delaware Army National Guard

1.2 **THE SCOPE OF WORK WAS REVIEWED**

A. The scope of work was reviewed – work includes

1. Installation of new VCT tile and painting of the walls in the designated spaces on the first and second floors.
2. Installation of new epoxy flooring and painting of the walls in the kitchen
3. Installation of athletic flooring in the Fitness room and painting of the walls.
4. Painting of the Drill hall walls roof deck and structure. Note: that the red sprinkler pipes must be protected from the new painting.
5. Replacement of the windows in the first floor offices, the Fitness Room and the Drill Hall.
6. Replacement of two exterior double HM doors.
7. Replacement of the main entrance storefront doors and associated side lites.

1.3 **PROJECT MANUAL MODIFICATIONS**

A. Section 00 41 13 - Bid Form

1. **REPLACE** Section 00 41 13 Bid Form in its entirety with the **REVISED** Spec Section attached this addendum.

B. Section 01 10 00

1. Paragraph 1.4 A 2 – ADD a fourth solid bullet for the Fitness Room: Install new Athletic Flooring & paint the walls.
2. Paragraph 1.6 B – Project Work Sequence: CHANGE to the following outline:
 1. Week one thru four – All work on 2nd Floor
 - a. GC temporary shifts furniture back and forth between re-locates furniture

C. Section 09 65 66 – Resilient Athletic Flooring

1. **ADD** Spec Section in its entirety, attached to this Addendum.

D. Section 09 91 00 - Interior Painting

1. **REPLACE** Section 09 91 00 Interior Painting in its entirety with **REVISED** Spec Section attached to this addendum.

1.4 **DRAWING MODIFICATIONS**

- A. AD-101 - 1st Fl Demo Plan
 - 1. Doors to be removed in the Mechanical Rom and the Kitchen: **CHANGE** the key note tag from “6” to “5”
 - 2. **DELETE** the key note tags with note “5” that point into the Stair Towers ST1 & ST2
- B. A-101 – 1st Fl FLOOR PLAN – **REPLACE** originally issued version with the attached copy.
- C. A-102 – 2nd Fl FLOOR PLAN – **REPLACE** originally issued version with the attached copy.
- D. A-103 – ELEVATIONS & SCHEDULES – **REPLACE** the door schedule in it’s entirety with the version on the attached ASK-1.
- E. A-104 – **DELETE** Detail 3 and all work associated with it.
- F. **ADD** attached Drawing E-101 1st Fl. Electrical Demo & New Work Plan

1.5 **QUESTIONS/CLARIFICATIONS:**

- 1. Q: Since the DEARNG is off every other Monday, will the contractor not be allowed to work these days and therefore we must deduct these from our planned working days included in the 180 calendar days of the project?
A: Since no DEARNG staff will be in the building on the no work Mondays, no activities (including construction) can take place in or around the facility on these days. The established 180 day time period is continuous calendar days. The off Mondays get counted in the 180 days.

ATTACHMENTS

Pre-Bid Sign-In Sheet
Bid Register (current plan holders).
Spec Section 00 41 13 REVISED Bid Form
Spec Section 09 65 66 Resilient Athletic Flooring
Revised Drawing A-101
Revised Drawing A-102
Drawing E-101
Sketch – ASK-1
2018 and 2019 DEARNG Calendars

END OF ADDENDUM No. 1

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TETRA TECH

240 Continental Drive, Suite 200, Newark, Delaware 19713

PREBID MEETING SIGN-IN SHEET

DELAWARE ARMY NATIONAL GUARD

DUNCAN READINESS CENTER – ENVELOPE & INTERIOR

TT PROJECT NO.: 200-76984-18001

DATE: August 15, 2018

Name	Company	Physical Address	Telephone	Fax	e-mail
1 <u>Bill Michelinie</u>	<u>BCI</u>	<u>34 Industrial Blvd.</u>	<u>302-</u>	<u>302-</u>	<u>bmichelinie@</u>
2 <u>BILL BOOTH</u>	<u>Commonwealth</u>	<u>New Castle, DE 19720</u>	<u>325-2700</u>	<u>325-2733</u>	<u>bci-online.com</u>
3 <u>Ryan Jackson</u>	<u>Commonwealth</u>	<u>2317 FA Ave</u>	<u>302</u>	<u>302</u>	<u>bbooth@its</u>
4 <u>Jim Kelly</u>	<u>Commonwealth</u>	<u>WILM, DE. 17806</u>	<u>654-6644</u>	<u>654-2604</u>	<u>Commonwealth.com</u>
5 <u>Paul Anderson</u>	<u>Amakor Inc</u>	<u>72 Clinton St</u>	<u>(302) 834-8664</u>	<u>(302) 834-8681</u>	<u>Amakor@aol.com</u>
6 <u>David Pepper</u>	<u>Plymouth</u>	<u>Delaware City DE 19806</u>	<u>983 Hows Ave</u>	<u>610-239-9940</u>	<u>jimkelly@plymou.com</u>
7 <u>Kurt Vandenberg</u>	<u>EDS</u>	<u>Norristown PA 19401</u>	<u>110 S. Poplar St</u>	<u>302-421-5700</u>	<u>PJAnderson@edscomproy.com</u>
8 <u>Shannon Gerard</u>	<u>GES</u>	<u>Wilmington DE 19801</u>	<u>70 Albemarle Dr Newark</u>	<u>302-421-5715</u>	<u>KVandenbrack@edscomproy.com</u>
9 <u>Brian Smith</u>	<u>GES</u>	<u>DE 19702</u>	<u>DE 19702</u>	<u>302-908-3070</u>	<u>dpepper@gesconcell.com</u>
10 <u>Josh George</u>	<u>EDS</u>	<u>404 Jarralls RD</u>	<u>1105 Poplar St. Wilmington</u>	<u>302-421-5715</u>	<u>KVandenbrack@edscomproy.com</u>
11 <u>Tony Ventresca</u>	<u>Gerardi Construction Inc</u>	<u>Felton, DE 19943</u>	<u>281 F. Evergreen St.</u>	<u>302-745-6252</u>	<u>gerard.constructioninc@gmail.com</u>
12 <u>Lou DeLede</u>	<u>BSS Contractors</u>	<u>West Grove PA 17380</u>	<u>(610) 345-1316</u>	<u>(610) 345-1318</u>	<u>bsmith@bsscontractors.com</u>
13 <u>Tim Smith</u>	<u>Whiting-Turner</u>	<u>131 Continental Ave. Suite 404</u>	<u>302-292-0676</u>	<u>302-292-0676</u>	<u>joshua.george@whiting-turner.com</u>
	<u>Ventresca Bros., Inc.</u>	<u>2300 N. DuPont Hwy.</u>	<u>302-658-6436</u>	<u>302-658-2360</u>	<u>tony@ventrescabros.com</u>
	<u>DELDEO BUILDERS</u>	<u>New Castle, DE 19720</u>	<u>302-771-0443</u>	<u>302-771-0445</u>	<u>tony@ventrescabros.com</u>
	<u>BrightFields</u>	<u>100 NATHANS RD</u>	<u>302-656-9600</u>	<u>302-656-9700</u>	<u>tony@brightfieldsinc.com</u>
		<u>CLAXMONT DE</u>			
		<u>801 Industrial St.</u>			
		<u>WILM, DE</u>			

	Name	Company	Physical Address	Telephone	Fax	e-mail
14	CHRISTINE WARE	HARBORSTONE	100 Elizabeth Way Oxford PA 19363	610-467-0873		J.Royce@harborstone.com
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Delaware Army National Guard
Duncan Readiness Center - Envelope & Interior Renovations

200-76984-18001

Bids Due: 2:00 PM Wednesday, September 5, 2018
Security Officer's Desk
Biden National Guard/Reserve Center -
250 Airport Road
New Castle, De 19720

REGISTER OF BID DOCUMENTS
PLEASE PRINT CLEARLY

\$ 100.00 per set

#01	Name of Company:	<u>CONTRACTOR'S REGISTER INC. (Blue Box)</u>		
	Physical Address:	<u>800 E. Main St.</u>		
	City, State:	<u>Jefferson Valley, NY 10535</u>		
	Contact:	<u>Donna Famulari</u>	GC:	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
	Phone:	<u>800-431-2584</u>		
	Fax:		Date:	<u>8/15/18</u>
	E-Mail:	<u>dfamulari@bluebook.com</u>		
#02	Name of Company:	<u>Brandywine Contractors</u>		
	Physical Address:	<u>34 Industrial Blvd.</u>		
	City, State:	<u>New Castle, DE 19720</u>		
	Contact:	<u>Bill Michelinie</u>	GC:	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
	Phone:	<u>302-325-2700</u>		
	Fax:		Date:	<u>8/15/18</u>
	E-Mail:	<u>bmichelinie@pci-online.com</u>		
#03	Name of Company:	<u>AMAKOR</u>		
	Physical Address:	<u>72 Clinton St., PO Box 636</u>		
	City, State:	<u>Delaware City, DE 19706</u>		
	Contact:	<u>Ryan Jackson</u>	GC:	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
	Phone:	<u>302-834-8664</u>		
	Fax:		Date:	<u>8/15/18</u>
	E-Mail:	<u>Amakor@aol.com</u>		

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\$ 100.00 per set

#04	Name of Company:	<u>GUARDIAN ENV. SERV.</u>		
	Physical Address:	<u>70 Albe Drive</u>		
	City, State:	<u>Newark, DE 19702</u>		
	Contact:	<u>David Pepper</u>	GC:	YES <input type="checkbox"/> NO <input type="checkbox"/>
	Phone:	<u>302-918-3070</u>		
	Fax:		Date:	<u>8/15/18</u>
	E-Mail:	<u>dpepper@gesoncall.com</u>		
#05	Name of Company:	<u>Gerardi</u>		
	Physical Address:	<u>404 Jarrells Rd.</u>		
	City, State:	<u>Felton, DE 19943</u>		
	Contact:	<u>Shannon Gerardi</u>	GC:	YES <input type="checkbox"/> NO <input type="checkbox"/>
	Phone:	<u>302-745-6052</u>		
	Fax:		Date:	<u>8/15/18</u>
	E-Mail:	<u>gerardiconstructioninc@gmail.com</u>		
#06	Name of Company:	<u>Deldeo.</u>		
	Physical Address:	<u>100 Naamans Rd. Ste 3-F</u>		
	City, State:	<u>Claymont, DE 19703</u>		
	Contact:	<u>Lou Deldeo</u>	GC:	YES <input type="checkbox"/> NO <input type="checkbox"/>
	Phone:	<u>302-791-0243</u>		
	Fax:		Date:	<u>8/15/18</u>
	E-Mail:	<u>loudeldeo@comcast.net</u>		

Delaware Army National Guard
Duncan Readiness Center - Envelope & Interior Renovations

200-76984-18001

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250 Airport Road
New Castle, De 19720

REGISTER OF BID DOCUMENTS
PLEASE PRINT CLEARLY

\$ 100.00 per set

#07	Name of Company: <u>Ventresca Bros., Inc.</u> Physical Address: <u>2300 N. DuPont Hwy.</u> City, State: <u>New Castle, DE 19720</u> Contact: <u>Tony Ventresca</u> GC: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> Phone: <u>302-658-6436</u> Fax: <u>302-658-2360</u> Date: <u>8/17/18</u> E-Mail: <u>tony@ventrescabros.com</u>
#08	Name of Company: _____ Physical Address: _____ City, State: _____ Contact: _____ GC: YES <input type="checkbox"/> NO <input type="checkbox"/> Phone: _____ Fax: _____ Date: _____ E-Mail: _____
#09	Name of Company: _____ Physical Address: _____ City, State: _____ Contact: _____ GC: YES <input type="checkbox"/> NO <input type="checkbox"/> Phone: _____ Fax: _____ Date: _____ E-Mail: _____

BID FORM

**DELAWARE ARMY NATIONAL GUARD
ENVELOPE AND INTERIOR IMPROVEMENTS
AT THE
DUNCAN READINESS CENTER
NEW CASTLE, DELAWARE
OMB/DFM PROJECT NO.: MC7601000102
DEARNG CONTRACT NO.: 2018-14**

ALTERNATES - NA

Alternate prices conform to applicable project specification section. Refer to specifications for a complete description of the following Alternates. An “ADD” or “DEDUCT” amount is indicated by the crossed-out part that does not apply.

BID FORM

UNIT PRICES: _NA

Unit prices conform to applicable project specification section. Refer to the specifications for a complete description of the following Unit Prices:

**DELAWARE ARMY NATIONAL GUARD
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DUNCAN READINESS CENTER
NEW CASTLE, DELAWARE
OMB/DFM PROJECT NO.: MC7601000102
DEARNG CONTRACT NO.: 2018-14**

BID FORM

I/We acknowledge Addendums numbered _____ and the price(s) submitted include any cost/schedule impact they may have.

This bid shall remain valid and cannot be withdrawn for thirty (30) days from the date of opening of bids (60 days for School Districts and Department of Education), and the undersigned shall abide by the Bid Security forfeiture provisions. Bid Security is attached to this Bid.

The Owner shall have the right to reject any or all bids, and to waive any informality or irregularity in any bid received.

This bid is based upon work being accomplished by the Sub-Contractors named on the list attached to this bid.

Should I/We be awarded this contract, I/We pledge to achieve substantial completion of all the work within 180 calendar days of the Notice to Proceed.

The undersigned represents and warrants that he has complied and shall comply with all requirements of local, state, and national laws; that no legal requirement has been or shall be violated in making or accepting this bid, in awarding the contract to him or in the prosecution of the work required; that the bid is legal and firm; that he has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding.

Upon receipt of written notice of the acceptance of this Bid, the Bidder shall, within twenty (20) calendar days, execute the agreement in the required form and deliver the Contract Bonds, and Insurance Certificates, required by the Contract Documents.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

(State of Corporation)

Business Address: _____

Witness: _____ **By:** _____
(SEAL) (Authorized Signature)

(Title)
Date: _____

ATTACHMENTS

Sub-Contractor List
Non-Collusion Statement
Affidavit of Employee Drug Testing Program
Bid Security
(Others as Required by Project Manuals)

**DELAWARE ARMY NATIONAL GUARD
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DEARNG CONTRACT NO.: 2018-14**

BID FORM

SUBCONTRACTOR LIST

In accordance with Title 29, Chapter 6962 (d)(10)b Delaware Code, the following sub-contractor listing must accompany the bid submittal. The name and address of the sub-contractor **must be listed for each category** where the bidder intends to use a sub-contractor to perform that category of work. In order to provide full disclosure and acceptance of the bid by the *Owner*, **it is required that bidders list themselves as being the sub-contractor for all categories where he/she is qualified and intends to perform such work.** This form must be filled out completely with no additions or deletions.

<u>Subcontractor Category</u>	<u>Subcontractor</u>	<u>Address (City & State)</u>	<u>Subcontractors tax payer ID # or Delaware Business license #</u>
1. Painting	_____	_____	_____
2. Flooring	_____	_____	_____
3. Store Front Installer	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____

**DELAWARE ARMY NATIONAL GUARD
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NEW CASTLE, DELAWARE
OMB/DFM PROJECT NO.: MC7601000102
DEARNG CONTRACT NO.: 2018-14**

BID FORM

NON-COLLUSION STATEMENT

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this proposal submitted this date to the State of Delaware, Delaware Army National Guard.

AFFIRMATION: Within the past five years, has your firm, any affiliate, any predecessor company or entity, owner, Director, officer, partner or proprietor been the subject of a Federal, State, Local government suspension or debarment?

YES _____ NO _____ If yes, please explain (use separate page and include with Bid Form.)

All the terms and conditions of OMB/DFM No. MC7601000102/ DEARNG NO.: 2018-14 have been thoroughly examined and are understood.

NAME OF BIDDER:

**AUTHORIZED REPRESENTATIVE
(TYPED):**

**AUTHORIZED REPRESENTATIVE
(SIGNATURE):**

TITLE:

ADDRESS OF BIDDER:

E-MAIL:

PHONE NUMBER:

Sworn to and Subscribed before me this _____ day of _____ 20____.

My Commission expires _____. NOTARY PUBLIC _____.

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

**DELAWARE ARMY NATIONAL GUARD
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DEARNG CONTRACT NO.: 2018-14**

**AFFIDAVIT
OF
EMPLOYEE DRUG TESTING PROGRAM**

4104 Regulations for the Drug Testing of Contractor and Subcontractor Employees Working on Large Public Works Projects requires that Contractors and Subcontractors implement a program of mandatory drug testing for Employees who work on Large Public Works Contracts funded all or in part with public funds.

We hereby certify that we have in place or will implement during the entire term of the contract a Mandatory Drug Testing Program for our employees on the jobsite, including subcontractors that complies with this regulation:

Contractor/Subcontractor Name: _____

Contractor/Subcontractor Address: _____

Authorized Representative (typed or printed): _____

Authorized Representative (signature): _____

Title: _____

Sworn to and Subscribed before me this _____ day of _____, 20____.

My Commission expires _____. NOTARY PUBLIC _____.

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

SECTION 09 65 66

RESILIENT ATHLETIC FLOORING

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. Interlocking, rubber floor tile.
- B. Related Requirements:
 - 1. Section 096513 "Resilient Base and Accessories" for wall base and accessories installed with resilient athletic flooring.

1.3 COORDINATION

- A. Coordinate layout and installation of flooring with floor inserts for gymnasium equipment.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Show installation details and locations of the following:
 - 1. Border tiles.
 - 2. Floor patterns.
 - 3. Layout, colors, widths, and dimensions of game lines and markers.
 - 4. Locations of floor inserts for athletic equipment installed through flooring.
 - 5. Seam locations for sheet flooring.
- C. Samples: For each exposed product and for each type, color, and pattern specified, 6-inch-square in size and of the same thickness indicated for the Work.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For flooring Installer.

1.6 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For resilient athletic flooring to include in maintenance manuals.

1.7 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Floor Tile: Furnish no fewer than 1 box for each 50 boxes or fraction thereof, of each type, color, pattern, and size of floor tile installed.

1.8 QUALITY ASSURANCE

- A. Sheet Vinyl Flooring Installer Qualifications: An experienced installer who has completed sheet vinyl flooring installations using seaming methods indicated for this Project and similar in material, design, and extent to that indicated for this Project; who is acceptable to manufacturer; and whose work has resulted in installations with a record of successful in-service performance.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in original packages and containers, with seals unbroken, bearing manufacturer's labels indicating brand name and directions for storing.
- B. Store materials to prevent deterioration.
 - 1. Store tiles on flat surfaces.
 - 2. Store rolls upright.

1.10 FIELD CONDITIONS

- A. Adhesively Applied Products:
 - 1. Maintain temperatures during installation within range recommended in writing by manufacturer, but not less than 70 deg F or more than 95 deg F, in spaces to receive flooring 48 hours before installation, during installation, and 48 hours after installation unless longer period is recommended in writing by manufacturer.
 - 2. After postinstallation period, maintain temperatures within range recommended in writing by manufacturer, but not less than 55 deg F or more than 95 deg F.
 - 3. Close spaces to traffic during flooring installation.
 - 4. Close spaces to traffic for 48 hours after flooring installation unless manufacturer recommends longer period in writing.
- B. Install flooring after other finishing operations, including painting, have been completed.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Flooring products shall comply with the requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."

2.2 INTERLOCKING, RUBBER FLOOR TILE

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Aacer Flooring, LLC.
 - 2. Action Floor Systems, LLC.
 - 3. Amarco Products.
 - 4. American Floor Products Company, Inc.
 - 5. Conner Sports Surface Solutions.
 - 6. DINO FLEX® Recycled Rubber Surfaces.
 - 7. Flexco.
 - 8. Horner Flooring Company, Inc.
 - 9. Johnsonite; a Tarkett company.
 - 10. Mateflex.
 - 11. Mondo America Inc.
 - 12. Pawling Corporation.
 - 13. Regupol America.
 - 14. Robbins Sports Surfaces.
 - 15. Roppe Corporation, USA.
- B. Provide the following Basis of Design Product or approved equal: Roppe Corporation – “Recoil”
- C. Description: Athletic flooring consisting of modular rubber tiles with precision cut, interlocking edges, for free-lay installation.
- D. Material Recycled-rubber compound.
 - 1. Recycled Content: Postconsumer recycled content plus one-half of preconsumer recycled content not less than 50 percent.
- E. Tile Interlock: Hidden.
- F. Traffic-Surface Texture: Nondirectional, stipple texture.
 - 1. Provide reversible tiles (with traffic-surface texture on both sides).
- G. Size: Manufacturer's standard-size square tile, no less than 36” x 36”.
- H. Thickness: 1/2 inch

- I. Weight: 8.2 – 10.7 LBs per tile.
- J. Color and Pattern: Roppe “Recoil” : no.375 or As selected by Architect from manufacturer's full range.
- K. Border: Interlocking, beveled-edge tiles, of same material as floor tile; with bevels that transition from thickness of floor tile to surface below it; with straight outside edges; for use where flooring corners and edges do not abut vertical surfaces.
 - 1. Border Color and Pattern: NA.
- L. Trowelable Leveling and Patching Compound: Latex-modified, hydraulic-cement-based formulation approved by flooring manufacturer.
- M. Adhesives: Water-resistant type recommended in writing by manufacturer for substrate and conditions indicated.
 - 1. Adhesives shall have a VOC content of 50 g/L or less.
 - 2. Adhesive shall comply with the testing and product requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."
- N. Game-Line and Marker Paint: Complete system including primer, if any, compatible with flooring and recommended in writing by flooring and paint manufacturers for use indicated.
 - 1. Products shall comply with the requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for installation tolerances, moisture content, and other conditions affecting performance of the Work.
 - 1. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of resilient products.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Prepare substrates according to manufacturer's written instructions to ensure adhesion of flooring.

- B. Concrete Substrates: Prepare according to ASTM F710.
 - 1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
 - 2. Alkalinity Testing: Perform pH testing according to ASTM F710. Proceed with installation only if pH readings are within Manufacturer's acceptable range.
 - 3. Moisture Testing: Perform tests so that each test area does not exceed 100 sq. ft., and perform no fewer than three tests in each installation area and with test areas evenly spaced in installation areas.
 - a. Anhydrous Calcium Chloride Test: ASTM F1869. Proceed with installation only after substrates have maximum moisture-vapor-emission rate that complies with the manufacturer's requirements in 24 hours.
 - b. Relative Humidity Test: Using in-situ probes, ASTM F2170. Proceed with installation only after substrates have a maximum percentage that complies with the manufacturers requirements.
- C. Remove substrate coatings and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended in writing by manufacturer. Do not use solvents.
- D. Use trowelable leveling and patching compound to fill cracks, holes, and depressions in substrates.
- E. Move flooring and installation materials into spaces where they will be installed at least 48 hours in advance of installation unless manufacturer recommends a longer period in writing.
 - 1. Do not install flooring until it is the same temperature as space where it is to be installed.
- F. Sweep and vacuum clean substrates to be covered by flooring immediately before installation. After cleaning, examine substrates for moisture, alkaline salts, carbonation, and dust. Proceed with installation only after unsatisfactory conditions have been corrected.

3.3 FLOORING INSTALLATION, GENERAL

- A. Comply with manufacturer's written installation instructions.
- B. Scribe, cut, and fit flooring to butt neatly and tightly to vertical surfaces, equipment anchors, floor outlets, and other interruptions of floor surface.
- C. Extend flooring into toe spaces, door reveals, closets, and similar openings unless otherwise indicated.
- D. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating subfloor markings on flooring. Use nonpermanent, nonstaining marking device.

3.4 FLOOR TILE INSTALLATION

- A. Lay out tiles from center marks established with principal walls, discounting minor offsets, so tiles at opposite edges of room are of equal width. Adjust as necessary to avoid using cut widths that equal less than one-half tile at perimeter.
 - 1. Lay tiles square with room axis.
- B. Discard broken, cracked, chipped, or deformed tiles.
- C. Tile Matching: Match tiles for color and pattern by selecting tiles from cartons in same sequence as manufactured and packaged if so numbered.
 - 1. Lay tiles with grain direction alternating in adjacent tiles (basket-weave pattern).
- D. Adhered Floor Tile: Adhere products to substrates using a full spread of adhesive applied to substrate to comply with adhesive and flooring manufacturers' written instructions, including those for trowel notching, adhesive mixing, and adhesive open and working times.
 - 1. Provide completed installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, and other surface imperfections.
- E. Free-Lay Tile: Place flooring at locations indicated with units securely interconnected and fully seated on substrate to form a smooth, level surface.

3.5 CLEANING AND PROTECTION

- A. Perform the following operations immediately after completing flooring installation:
 - 1. Remove adhesive and other blemishes from flooring surfaces.
 - 2. Sweep and vacuum flooring thoroughly.
 - 3. Damp-mop flooring to remove marks and soil after time period recommended in writing by manufacturer.
- B. Protect flooring from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period. Use protection methods recommended in writing by manufacturer.
 - 1. Do not move heavy and sharp objects directly over flooring. Protect flooring with plywood or hardboard panels to prevent damage from storing or moving objects over flooring.

END OF SECTION

SECTION 09 91 23

PAINTING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes surface preparation and application of paint systems, for the following:
 - 1. Interior applications.
 - a. Painting systems indicated on Drawings and in Schedules applied to new and existing interior surfaces and related components including but not limited to items such as hollow metal doors frames, doors, access doors, trim pieces, window sash and trim etc., unless otherwise indicated, including appropriate surface preparation for all new or existing surfaces to be painted including previously painted surfaces and surfaces with existing wall coverings

1.3 SUBMITTALS

- A. Product Data: For each type of product for substrates indicated. Include preparation requirements and application instructions. Include all paint products under one cover sheet.
 - 1. CMU.
 - 2. steel.
 - 3. Gypsum board.
- B. Samples for Initial Selection: For each type of product indicated.
- C. Samples for Verification: For each type of finish system and in each color and gloss of finish indicated.
 - 1. Submit Samples on rigid backing, 8 inches square.
 - a. For wood finishes, submit Samples on representative samples of actual wood substrates, 8 inches square.
 - 2. Step coats on Samples to show each coat required for system.
 - 3. Label each coat of each Sample.
 - 4. Label each Sample for location and application area.

D. Product List: For each product indicated, include the following:

1. Cross-reference to finish system and locations of application areas. Use same designations indicated on Drawings and in schedules.
2. VOC content.

E. Coatings Maintenance Manual:

1. Upon conclusion of the project, the contractor or paint manufacture/supplier shall furnish a coatings maintenance manual such as Sherwin Williams "Custodian Project Color and Product Information" report. Manual shall include an Area Summary with finish schedule, Area Detail designating where each product/color/finish was used, product data pages, Material Safety Data Sheets, care and cleaning instructions. Touch up procedures and color samples of each color and finish used. All information contained in a self-bound 3 ring hole punched catalog.

F. Informational Submittals

1. Qualification Data: For applicator.

G. Maintenance Material Submittals

1. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - a. Paint: 10 percent, but not less than 1 gal. of each material and color applied.
 - b. Stains and Transparent Finishes: 10 percent, but not less than 1 gal. of each material and color applied.

1.4 QUALITY ASSURANCE

A. Applicator Qualifications: A firm or individual, experienced in applying finishes specified in this Section, who has successfully completed a minimum of five previous projects similar in nature, size, and extent to this Project; familiar with special requirements indicated; and with sufficient trained staff to apply manufacturer's products according to specified requirements.

B. Mockups: Apply mockups of each finish system indicated to verify preliminary selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.

1. Architect will select one surface to represent surfaces and conditions for application of each finish system specified in Part 3.
 - a. Wall and Ceiling Surfaces: Provide samples of at least 100 sq. ft.
 - b. Other Items: Architect will designate items or areas required.
2. Final approval of color selections will be based on mockups.

- a. If preliminary color selections are not approved, apply additional mockups of additional colors selected by Architect at no added cost to Owner.
 3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
 4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
- C. Preinstallation Conference: Conduct conference at Project site.
1. Agenda: Include, at a minimum, the following items on the conference agenda:
 - a. Review all systems and materials to be used in the finish installation.
 - b. Review and coordinate substrate preparation and related construction.
 - c. Review sequencing of application.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.
1. Maintain containers in clean condition, free of foreign materials and residue.
 2. Remove rags and waste from storage areas daily.

1.6 FIELD CONDITIONS

- A. Apply finishes only when temperature of surfaces to be coated and surrounding air temperatures are between 50 and 95 deg F.
- B. Do not apply finishes when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.
- C. Do not apply exterior finishes in snow, rain, fog, or mist.
- D. Lighting: Do not install finishes until a lighting level of not less than 80 fc is provided on the surfaces to receive finishing.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, by a single source manufacture, but are not limited to, the following:
1. Benjamin Moore & Co.
 2. PPG Architectural Finishes, Inc.

3. Sherwin-Williams Company (The).

B. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to products listed in Part 3 articles for the application indicated.

2.2 MATERIALS, GENERAL

A. Material Compatibility:

1. Provide materials for use within each finish system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
2. For each coat in a finish system, provide products recommended in writing by manufacturers of topcoat for use in finish system and on substrate indicated.
3. Provide products of same manufacturer for each coat in a finish system.

B. VOC Compliance: All paint products shall meet Delaware requirements for Volatile Organic Compound (VOC) and Northeastern Ozone Transport Commission (OTC) regulations, January 2005.

C. VOC Content: Products shall comply with VOC limits of authorities having jurisdiction and, for interior coatings applied at project site, the following VOC limits, exclusive of colorants added to a tint base, when calculated according to 40 CFR 59, Subpart D (EPA Method 24)].

1. Flat Paints and Coatings: 50 g/L.
2. Nonflat Paints and Coatings: 150 g/L.
3. Dry-Fog Coatings: 400 g/L.
4. Primers, Sealers, and Undercoaters: 200 g/L.
5. Anti-Corrosive and Anti-Rust Paints Applied to Ferrous Metals: 250 g/L.
6. Zinc-Rich Industrial Maintenance Primers: 340 g/L.
7. Pre-Treatment Wash Primers: 420 g/L.
8. Floor Coatings: 100 g/L.
9. Clear Wood Finishes, Varnishes: VOC not more than 350 g/L
10. Shellacs, Clear: 730 g/L.
11. Shellacs, Pigmented: 550 g/L.
12. Stains: VOC not more than 250 g/L.

D. Low-Emitting Materials: Interior finishes shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."

E. Colors: As selected by Architect from manufacturer's full range.

1. 25 percent of surface area will be painted with deep tones.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
 - 1. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
 - a. Concrete: 12 percent.
 - b. Masonry (Clay and CMU): 12 percent.
 - c. Wood: 15 percent.
 - d. Gypsum Board: 12 percent.
 - e. Plaster: 8 percent.
- B. Gypsum Board Substrates: Verify that finishing compound is sanded smooth.
- C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- D. Proceed with coating application only after unsatisfactory conditions have been corrected.
 - 1. Beginning coating application constitutes Contractor's acceptance of substrates and conditions.

3.2 PREPARATION

- A. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be finished. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and finishing.
 - 1. After completing finishing operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection.
- B. Clean substrates of substances that could impair bond of finishes, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
 - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce finish systems indicated.
- C. Concrete Substrates: Remove release agents, curing compounds, efflorescence, and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be coated exceeds that permitted in manufacturer's written instructions.
- D. Masonry Substrates: Remove efflorescence and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces or if alkalinity of mortar joints exceed that permitted in manufacturer's written instructions.

- E. Steel Substrates: Remove rust, loose mill scale, and shop primer if any. Clean using methods recommended in writing by paint manufacturer but not less than the following:
 - 1. SSPC-SP 3, "Power Tool Cleaning."
 - 2. SSPC-SP 11, "Power Tool Cleaning to Bare Metal."
- F. Shop-Primed Steel Substrates: Clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop-primed surfaces.
- G. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.
- H. Alteration Work: Comply with applicable surface preparation requirements specified and as recommended by finish materials manufacturer for existing surfaces to receive paint or other finishes, including cleaning, sanding, and roughening as required for proper adherence of new finish material.
 - 1. Existing Woodwork: Strip existing wood finish to bare wood using commercially available solvents compatible with finish. Use in strict accordance with manufacturer's printed instructions. After stripping operation is complete and surface is dry, sand surface with sandpaper, using random orbital sanding machine.

3.3 APPLICATION

- A. Apply finishes according to manufacturer's written instructions.
 - 1. Use applicators and techniques suited for finish and substrate indicated.
 - 2. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
 - 3. Paint back sides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.
 - 4. Do not apply paints over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
- B. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of the same material are to be applied. Tint undercoats to match color of finish coat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.
- C. If undercoats or other conditions show through final coat, apply additional coats until cured film has a uniform coating finish, color, and appearance.
- D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections. Produce sharp glass lines and color breaks.
- E. Alterations: Finish new surfaces adjacent to unaltered existing surfaces with finish of same type and surface texture as corresponding adjacent surfaces, unless otherwise indicated. Finish patched, damaged, or extended surfaces to match existing surfaces.

3.4 FIELD QUALITY CONTROL

- A. Dry Film Thickness Testing: Owner will engage the services of a qualified testing and inspecting agency to inspect and test paint for dry film thickness.
 - 1. Contractor shall touch up and restore painted surfaces damaged by testing.
 - 2. If test results show that dry film thickness of applied paint does not comply with paint manufacturer's written recommendations, Contractor shall pay for testing and apply additional coats as needed to provide dry film thickness that complies with paint manufacturer's written recommendations.

3.5 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing coating application, clean spattered surfaces. Remove spattered coatings by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from finish operation. Correct damage by cleaning, repairing, replacing, and recoating, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced finished surfaces.

3.6 PAINTING SCHEDULE

- A. Concrete Substrates, Vertical Surfaces:
 - 1. First Coat:
 - a. Benjamin Moore & Co.; Moore's Acrylic Masonry Primer 066.
 - b. PPG Architectural Finishes; Inc.; Perma-Crete Alkali-Resistant Primer 4-603.
 - c. Sherwin-Williams Company (The); Loxon Concrete & Masonry Primer (A24W8300.)
 - 2. Second and Third Coats (Semi-Gloss):
 - a. Benjamin Moore & Co.; N539 Ultra Spec 500 Interior Semi-Gloss.
 - b. PPG Architectural Finishes; Inc.; Speedhide Interior Semi-Gloss Latex 6-500.
 - c. Sherwin-Williams Company (The); Pro Mar 200 Interior Latex S/G B31 Series.
- B. Concrete Substrates, Vertical Surfaces (Deep Tone Accent Colors):
 - 1. First Coat: Use tinted primer.
 - a. Benjamin Moore & Co.; Moore's Acrylic Masonry Primer 066.
 - b. PPG Architectural Finishes; Inc.; Perma-Crete Alkali-Resistant Primer 4-603.

- c. Sherwin-Williams Company (The); Loxon Concrete & Masonry Primer (A24W8300.)
 2. Second and Third Coats (Semi-Gloss): Additional coats may be required.
 - a. Benjamin Moore & Co.; DTM Acrylic Semi-Gloss P29.
 - b. PPG Architectural Finishes; Inc.; Speedhide Interior Semi-Gloss Latex 6-500.
 - c. Sherwin-Williams Company (The); ProMar 200 Zero VOC S/G B31-2600.
- C. CMU Substrates:
 1. First Coat:
 - a. Benjamin Moore & Co.; Super Spec Masonry Int-Ext Hi-Build Block Filler 206-01.
 - b. PPG Architectural Finishes; Inc.; Speedhide Interior/Exterior Latex Block Filler 6-7.
 - c. Sherwin-Williams Company (The); PrepRite Block Filler B25W25
 2. Second and Third Coats (Semi-Gloss):
 - a. Benjamin Moore & Co.; N539 Ultra Spec 500 Interior Semi-Gloss.
 - b. PPG Architectural Finishes; Inc.; Speedhide Interior Semi-Gloss Latex 6-500.
 - c. Sherwin-Williams Company (The); Pro Mar 200 Interior Latex S/G B31 Series.
- D. Steel Substrates:
 1. First Coat:
 - a. Benjamin Moore & Co.; Acrylic Metal Primer P04.
 - b. PPG Architectural Finishes; Inc.; Pitt-Tech Interior/Exterior Industrial DTM Primer/Finish Enamel 90-712.
 - c. Sherwin-Williams Company (The); DTM Acrylic Primer Finish B66W1.
 2. Second and Third Coats (Semi-Gloss):
 - a. Benjamin Moore & Co.; DTM Acrylic Semi-Gloss P29.
 - b. PPG Architectural Finishes; Inc.; Pitt-Tech Industrial DTM Acrylic Satin 90-474.
 - c. Sherwin-Williams Company (The); DTM Acrylic Coating S/G (B66-200 Series) or Gloss (B66-100 Series.)
- E. Galvanized-Metal Substrates:
 1. First Coat:
 - a. Benjamin Moore & Co.; Acrylic Metal Primer P04.
 - b. PPG Architectural Finishes; Inc.; Pitt-Tech Interior/Exterior Industrial DTM Primer/Finish Enamel 90-712.
 - c. Sherwin-Williams Company (The); DTM Acrylic Primer Finish B66W1.
 2. Second and Third Coats:

- a. Benjamin Moore & Co.; DTM Acrylic Semi-Gloss P29.
- b. PPG Architectural Finishes; Inc.; Pitt-Tech Industrial DTM Acrylic Satin 90-474.
- c. Sherwin-Williams Company (The); A100 Exterior Latex Satin (A82) or Gloss (A8).

3. Second and Third Coats:

- a. Benjamin Moore & Co.; DTM Acrylic Semi-Gloss P29.
- b. PPG Architectural Finishes; Inc.; Speed Super Tech Latex Dry Fog Spray Paint 6-724XL.
- c. Sherwin-Williams Company (The); Waterborne Acrylic Dry Fall Eg-Shell B42W2.

F. Epoxy Floors

1. Provide the following Basis of Design product or approved equal: Sherwin-Williams Company (The), "Armorseal 8100 Epoxy Floor Coating."
 - a. Scarify existing floor coating prior to applying new coating.

G. Gypsum Board Substrates:

1. First Coat:

- a. Benjamin Moore & Co.; Moorcraft Super Spec Latex Enamel Underbody 253.
- b. PPG Architectural Finishes; Inc.; Speedhide Interior Latex Primer/Sealer 6-2
- c. Sherwin-Williams Company (The); Prep Rite 200 Interior Latex Primer B28W200.

2. Second and Third Coats (Semi-Gloss):

- a. Benjamin Moore & Co.; N539 Ultra Spec 500 Interior Semi-Gloss.
- b. PPG Architectural Finishes; Inc.; Speedhide Interior Semi-Gloss Latex 6-500.
- c. Sherwin-Williams Company (The); Pro Mar 200 Interior Latex S/G B31 Series.
- d. PPG Architectural Finishes; Inc.; Olympic Interior Gloss Polyurethane 43884 thinned (Quart size only – OTC).
- e. Sherwin-Williams Company (The); Minwax High Build Polyurethane Satin (009919945)

3. Second and Third Coats (Semi-Gloss/High Gloss):

- a. Benjamin Moore & Co.; Benwood Stays Clear Semi-Gloss Acrylic Polyurethane 422.
- b. PPG Architectural Finishes; Inc.; Olympic Interior Semi-Gloss Polyurethane 43884 (Quart size only – OTC).
- c. Sherwin-Williams Company (The); Minwax High Build Polyurethane Semi-gloss (009919945).

H. Hollow Metal Doors and Frames, including Glazing Frame: Basis of Design.

1. 1st Coat

- a. Sherwin Williams: Pro Industrial Pro-Cryl Universal Primer B66-310
- 2. 2nd and 3rd Coats (Semi-gloss)
 - a. Sherwin Williams: Pro Industrial Water Based: Pre-Catylized Epoxy.

END OF SECTION

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E

D

C


B

A

DOOR SCHEDULE														
MARK	SIZE		TYPE						DETAILS			GLAZING TYPE	FIRE RATING	REMARKS
	WIDTH & HEIGHT	THK.	DOOR			FRAME			Head	Jamb	THLD			
			TYPE	MTL.	FIN.	TYPE	MTL.	FIN.						
100A	(1) 36"& (1) 32" x 84"	1 3/4	B	ALUM.	PTD	ALUM.	ALUM.	PTD	TYPE 1	TYPE 1	SEE SPEC	GL1	—	ELECTRIC OPERATOR
100B	(1) 36" & (1) 32" X 84"	1 3/4	B	ALUM	PTD	ALUM.	ALUM.	PTD	TYPE 1	TYPE 1	SEE SPEC	GL2	—	ELECTRIC OPERATOR
100C	(2) 36" X 84"	1 3/4	A	HM	PTD	EXTG	EXTG	PTD	TYPE 2	TYPE 2	—	—	—	
103	(2) 36" X 84"	1 3/4	A	HM	PTD	EXTG	EXTG	PTD	TYPE 2	TYPE 2	SEE SPEC	—	—	
109A	(2) 36" X 84"	1 3/4	C	HM	PTD	EXTG—	EXTG—	PTD	TYPE 2	TYPE 2	—	GL2	—	
122	(2) 36" X 84"	1 3/4	B	HM	PTD	EXTG	EXTG	PTD	TYPE 2	TYPE 2	SEE SPEC	GL2	—	

NOTE: THIS SCHEDULE REPLACES THE ORIGINAL VERSION IN IT'S ENTIRETY

THIS SKETCH MODIFIES DRAWING A-103



TETRA TECH

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240 CONTINENTAL DR.
NEWARK, DE 19713
302-454-5989

MARK	DATE	DESCRIPTION	BY
	8/20/18	ISSUED IN ADDENDUM 1	CED

DELAWARE ARMY NATIONAL GUARD

STERN DUNCAN READINESS CENTER
ENVELOPE AND INTERIOR IMPROVEMENTS

REVISED DOOR SCHEDULE

Project No.: 200-76984-18001

Designed By: CED

Drawn By:

Checked By:

ASK-1

January 2018						
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5/4/9 Work Schedule						
Scheduled FTS Flex Days						
Federal Holidays						
JANUARY						
1 New Year's Day						
15 Martin Luther King's Birthday						
8-hour days: 12, 26						

FEBRUARY						
19 Washington's Birthday						
8-hour days: 9, 23						

MARCH						
8-hour days: 9, 23						
APRIL						
8-hour days: 6, 20						
MAY						
28 Memorial Day						
8-hour days: 4, 18						
JUNE						
8-hour days: 1, 15, 29						

JULY						
4 Independence Day						
8-hour days: 13, 27						
AUGUST						
8-hour days: 10, 24						

SEPTEMBER						
3 Labor Day						
8-hour days: 7, 21						
OCTOBER						
8 Columbus Day						
8-hour days: 4, 19						

NOVEMBER						
12 Veterans Day Observed						
22 Thanksgiving Day						
8-hour days: 2, 16, 30						
DECEMBER						
25 Christmas Day						
8-hour days: 14, 28						

July 2018						
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5-8/4-10 Work Schedule						
Scheduled FTS Flex Days						
Federal Holidays						
8 hours						
10 hours						

July 2018						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

February 2018						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28			

JANUARY
 1 New Year's Day (8)
 15 Martin Luther King's Birthday (8)

FEBRUARY
 19 Washington's Birthday (8)

MARCH

APRIL

MAY
 28 Memorial Day (8)

JUNE

JULY
 4 Independence Day (10)

August 2018						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

March 2018						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

September 2018						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

April 2018						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

AUGUST

SEPTEMBER
 3 Labor Day (8)

OCTOBER
 8 Columbus Day (8)

October 2018						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

May 2018						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

NOVEMBER
 12 Veterans Day Observed (8)
 22 Thanksgiving Day (10)

DECEMBER
 25 Christmas Day (8)

November 2018						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

June 2018						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

December 2018						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

January 2019						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

February 2019						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

March 2019						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

April 2019						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

May 2019						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

June 2019						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

5/4/9 Work Schedule

Scheduled FTS Flex Days

Federal Holidays

JANUARY
 1 New Year's Day
 21 Martin Luther King's Birthday
 8-hour days: 11, 25

FEBRUARY
 18 Washington's Birthday
 8-hour days: 8, 22

MARCH
 8-hour days: 8, 22

APRIL
 8-hour days: 5, 18

MAY
 27 Memorial Day
 8-hour days: 3, 17, 31

JUNE
 8-hour days: 14, 28

JULY
 4 Independence Day
 8-hour days: 12, 26

AUGUST
 8-hour days: 9, 23

SEPTEMBER
 2 Labor Day
 8-hour days: 6, 20

OCTOBER
 14 Columbus Day
 8-hour days: 4, 18

NOVEMBER
 11 Veterans Day
 28 Thanksgiving Day
 8-hour days: 1, 15, 27

DECEMBER
 25 Christmas Day
 8-hour days: 13, 27

July 2019						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

August 2019						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

September 2019						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

October 2019						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

November 2019						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

December 2019						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				