Inspiring Design for Your Future

September 16, 2026
File No. 81675-109-DTPAB-25-LSA

ADDENDUM No. 2

PROJECT: Police Administration Building Renovations

OWNER: Darby Township

ENGINEER: Paul Drzal, RA

THE ATTENTION OF ALL CONTRACTORS IS CALLED TO THE FOLLOWING ADDENDUM

The following addendum amends and alters the plans and specifications for this project and takes precedence over related items therein.

The following changes have been made to the bid package:

1. The Special Conditions section of the specifications have been revised to verify the time of completion and correcting the project name.

PLEASE ACKNOWLEDDGE RECEIPT OF ADDENDUM BY SIGNING AND EMAILING BACK TO mbeltran@cataniaengineering.com.

Company	Signature
Title	Date

Catania **E**ngineering **A**ssociates, Inc., Engineers and Land Surveyors
520 W. MacDade Boulevard, Milmont Park, PA 19033-3321
Phone: 610-532-2884 - Fax: 610-532-2923 - Email: office10@cataniaengineering.com
Web: cataniaengineering.com

SPECIFICATIONS AND BID DOCUMENTS

FOR

POLICE ADMINISTRATION BUILDING RENOVATIONS

FOR

DARBY TOWNSHIP
21 BARTRAM AVENUE
GLENOLDEN, PA 19036

BID OPENING
September 23, 2026
10:00 AM

PREPARED BY
CATANIA ENGINEERING ASSOC., INC.
520 W. MAC DADE BOULEVARD
MILMONT PARK, PA 19033

SEPTEMBER 2026

FILE #81675-109-DTPAB-25-LSA

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NOTICE TO BIDDERS

TOWNSHIP OF DARBY
DELAWARE COUNTY, PA

Sealed bids will be received by the Township of Darby until 10:00 A.M. on September 23rd, 2026. At the Board of Commissioners meeting on October 21st, 2026, all sealed bids received will be publicly opened and read aloud for the *Darby Township Police Administration Building Renovations*.

All Bid Documents, Construction Plans and Specifications are available online via the PennBid Program at www.PennBid.net at no cost to prospective bidders. The successful bidder, who is awarded the contract, will be required to pay PennBid program a fee of 1/3% of the contract award value. There is a minimum award fee of $150.00 and a maximum of $6,000.00. Bidders must confirm the fees associated with the awarded bid.

A bid bond in the amount of ten percent (10%) of the total bid made payable to the Township of Darby must accompany each bid.

Bidder's attention is called to all of the requirements contained in the bid package, particularly to the Prevailing Wage Rates, various insurance requirements, various equal opportunity provisions and the requirements for a payment bond and performance bond for 100% of the contract price and a one-year maintenance bond for 10% of the contract price.

The Township of Darby reserves the right to accept or reject any or all bids thereof, and waive any informality in the bidding, as they deem in the interest of the Township.

BY ORDER OF THE BOARD OF COMMISSIONERS
TOWNSHIP OF DARBY

Ieasa A. Nichols, MHS, CBCO
Township of Darby
21 North Bartram Avenue
Glenolden, PA 19036-1206
610.586.1514
www.darbytwp.org

SECTION 00100
INSTRUCTIONS TO BIDDERS

1. THE WORK: Renovations to the Police Administration Building in Darby Township, Delaware County, PA.

2. SECURING DOCUMENTS

   Copies of the proposed Contract Documents may be obtained from www.PennBid.net upon the conditions set forth in the invitation to bid.

3. BID FORM

   In order to receive consideration, make Bids in strict accordance with the following:

   A. Make Bids upon the forms provided therefore, properly signed and with all items filled out. Do not change the wording of the Bid form, and do not add words to the Bid form. Unauthorized conditions, limitations, or provisions attached to the Bid will be cause for rejection of the Bid. If alterations by erasure or interlineation are made for any reason, explain over such erasure or interlineation with a signed statement from the Bidder.

   B. No telegraphic Bid or telegraphic modification of a Bid will be considered. No Bids received after the time fixed for receiving them will be considered. Late Bids will be returned to the Bidder unopened.

   C. Address Bids to the Owner and deliver to the address given in the Invitation to Bid on or before the day and hour set for opening the Bids. Enclose each Bid in a sealed envelope bearing the title of the work, the name of the Bidder, and the date and hour of the Bid opening. Submit only the original signed copy of the Bid. It is the sole responsibility of the Bidder to see that his Bid is received on time.

4. BONDS

   A. Bid security in the amount stated in the Invitation to Bid must accompany each Bid. The successful Bidder's security will be retained until he has signed the Contract and has furnished required Certificates of Insurance.

   B. The Owner reserves the right to retain the security of all Bidders until the successful Bidder enters into the Contract or until 30 days after Bid opening, whichever is sooner. Other Bid security will be returned as soon as practicable. If any Bidder refuses to enter into a Contract, the Owner may retain his Bid security as Liquidated Damages but not as a penalty.

   C. Prior to signing the Contract, the Owner will require the successful Bidder to secure and post a Labor and Materials Payment Bond and Performance Bond, each in the amount of 100% of the Contract Sum, and each on the form provided therefore in the Project Manual. Such bonds shall be issued by Surety acceptable to the Owner. Costs of such bonds will be paid for by the Contractor. In lieu of the above bonds, Federal or Commonwealth chartered lending institution irrevocable letters of credit and restrictive or escrow accounts, equal to 100% of the contract amount, will be acceptable.

   D. Upon completion, a one-year maintenance bond in the amount of 10% of contract shall be furnished. In lieu of said bond, the Owner will withhold retainage due on contract.

5. EXAMINATION OF DOCUMENTS AND SITE OF WORK

Before submitting a Bid, each Bidder shall examine the Drawings carefully, shall read the Specifications and all other proposed Contract Documents, and shall visit the site of the Work. Each Bidder shall fully inform himself prior to Bidding as to existing conditions and limitations under which the Work is to be performed, and shall include in his Bid a sum to cover the cost of items necessary to perform the Work as set forth in the proposed Contract Documents. No allowance will be made to a Bidder because of lack of such examination or knowledge. The submission of a Bid will be considered as conclusive evidence that the Bidder has made such examination.

6. PROOF OF COMPETENCY OF BIDDER+-

A Bidder will be required to furnish evidence satisfactory to the Owner that he and his proposed subcontractors have sufficient means and experience in the types of work called for to assure completion of Contract in a satisfactory manner.

7. WITHDRAWAL OF BIDS

A. A Bidder may withdraw his Bid, either personally or by written request, at any time prior to the scheduled time for opening of Bids.

B. No Bidder may withdraw his Bid for a period of 120 calendar days after the date set for opening thereof, and Bids shall be subject to acceptance by the Owner during this period.

8. AWARD OR REJECTION OF BIDS

The Contract, if awarded, will be awarded to the responsible Bidder who has proposed the lowest Contract Sum, subject to the Owner's right to reject any or all Bids and to waive informality and irregularity in the Bids and in the Bidding.

9. EXECUTION OF AGREEMENT

A. The Form of Agreement which the successful Bidder will be required to execute is included in the Project Manual.

B. The Bidder to whom the Contract is awarded shall, within 15 calendar days after notice of award and receipt of Agreement forms from the Owner, sign and deliver copies to the Owner.

C. At or prior to delivery of the signed Agreement, the Bidder to whom the Contract is awarded shall deliver to the Owner those Certificates of Insurance required by the Contract Documents and such Labor and Materials Payment Bonds and Performance Bond as are required by the Owner.

D. Bonds and Certificates of Insurance shall be approved by the Owner before the successful Bidder may proceed with the Work. Failure or refusal to provide Bonds or Certificates of Insurance in a form satisfactory to the Owner shall subject the successful Bidder to loss of time from the allowable construction period equal to the time of delay in furnishing the required material.

10. INTERPRETATION OF CONTRACT DOCUMENTS PRIOR TO BIDDING

A. If any person contemplating submitting a Bid for construction of the Work is in doubt as to the true meaning of any part of the proposed Contract Documents or finds discrepancies in or omissions from any part of the proposed Contract Documents, he may submit to the Engineer a written request for interpretation thereof not later than 7 days before Bids will be opened. The person submitting the request shall be responsible for its prompt delivery.

B. Interpretation or correction of proposed Contract Documents will be made only by Addendum and will be mailed or delivered to each General Contract Bidder of record. The Owner will not be responsible for any other explanations or interpretations of the proposed Contract Documents.

11. PRE-BID CONFERENCE **N/A**

A mandatory Pre-Bid Conference will be held for the purpose of considering questions posed by Bidders. The conference will be open to all prospective Bidders and will be held at the following:

12. CONSTRUCTION TIME AND LIQUIDATED DAMAGES

A. The Agreement will include a stipulation that the Work be completed in a period of: **60 calendar days** following receipt of the Owner's Notice to Proceed.

B. The Agreement will include a stipulation that Liquidated Damages will be established in the amount of **$500.00** per calendar day for each calendar day after the agreed completion date that the Work is not fully certified by the Engineer as being Substantially Complete as that stage of completion is defined in the conditions of the Contract.

13. NON-COLLUSION AFFIDAVIT

The Non-Collusion Affidavit must be submitted with the Bid proposal or the Bid will be held to be invalid.

14. MATERIAL SAFETY DATA SHEETS

Material Safety Data Sheets must be submitted for respective products, in compliance with Federal Hazard Communication Standard Act (29 CFR 1910, 1200) and various State Right-to-Know Laws.

END OF INSTRUCTION TO BIDDERS

SECTION 004116
FORM OF PROPOSAL - CONTRACT A - GENERAL CONSTRUCTION

TO: Darby Township
21 Bartam Avenue
Glenolden, PA 09036

FROM: _____
_____
_____
Phone: _____
Fax: _____
Email: _____
: _____

Dear Council Members:

The undersigned, having familiarized himself with the existing conditions in the Project Area affecting the cost of the Work, and with the Contract Documents which includes the Notice to Bidders, Instructions to Bidders, Non-Collusion Affidavit, Form of Proposal, Bid Bond, Articles of Agreement, Performance Bond, Labor and Materials Bond, General Conditions, Special Conditions and Technical Specifications and Drawings, as prepared by Catania Engineering Associates, Inc., Consulting Engineers, 520 W. Mac Dade Boulevard, Milmont Park, PA 19033 (610-532-2884), hereby proposes to furnish and install all supervision, technical personnel, labor, materials, machinery, tools, appurtenances and equipment required for the Police Administration Building Renovations in accordance with the above listed documents for the total sum of:

_____
AMOUNT IN WRITING (BASE BID ITEMS)

_____
AMOUNT IN FIGURES

based on the following description and the contract documents:

Base Bid

Item	Description	Price
BB-1	REMOVE EXISTING FINISH FLOORING IN AREAS INDICATED ON THE PLAN AND INSTALL NEW FINISH FLOORING AS SPECIFIED.	$
BB-2	REMOVE DAMAGED ACOUSTICAL CEILING TILES IN AREAS INDICATED ON THE PLAN AND REPLACE WITH NEW ACOUSTICAL CEILING TILES AS SPECIFIED.	$
BB-3	REMOVE DAMAGED GYPSUM CEILING PANELS IN AREAS INDICATED ON THE PLAN AND REPLACE WITH NEW GYPSUM CEILING PANELS AS SPECIFIED.	$
BB-4	REMOVE EXISTING BUILT IN MILLWORK AS INDICATED ON THE PLANS AND FABRICATE / INSTALL NEW MILLWORK AS SPECIFIED.	$
BB-5	ADD ADDITIONAL RECEPTACLES TO AREAS INDICATED ON THE PLAN.	$
BB-6	ADD NEW WALL MOUNTED FLAT PANEL DISPLAY AS INDICATED ON THE PLAN.	$
BB-7	REPAIR DRYWALL AND STUD PARTITIONS AS INDICATED ON THE PLAN.	$
	BASE BID TOTAL:	***$***

Add Alternates

Item	Description	Price
A1	REMOVE EXISTING (2) STALL SHOWERS. MODIFY ROUGH FRAMING, PLUMB, AND INSTALL (1) NEW ADA COMPLIANT STALL TRANSFER SHOWER AS INDICATED ON THE PLANS.	$
A2	REMOVE EXISTING CONCRETE SIDEWALK. PREPARE AND INSTALL NEW CONCRETE SIDEWALK.	$
A3	INSTALL NEW SWITCH CONTROLLED MECHANICAL EXHAUST FAN IN EVIDENCE ROOM w/ EXHAUST DUCT TO TERMINATE AT ROOF LEVEL.	$

Base Bid Total	$
Add Alternates Total	$
Grand Total	$

The Township reserves the right to award items separately, i.e.: only award first floor work or only award second floor work.

In submitting this Bid, the Bidder understands that the right is reserved by the Owner to reject any and all Bids. If written notice of the acceptance of this Bid is mailed, telegraphed or delivered to the undersigned within 30 days after the opening thereof, or at any time thereafter before this Bid is withdrawn, the undersigned agrees to execute and deliver an Agreement in the prescribed form and furnish the required bond within 10 days after the Agreement is presented to him for signature.

Security in the sum of Dollars ($_____) in the form of is submitted herewith in accordance with the INSTRUCTIONS TO BIDDERS.

Attached hereto is an affidavit in proof that the undersigned has not colluded with any person in respect to this bid or any other bid or the submitting of bids for the Contract for which this Bid is submitted.

The Bidder is prepared to submit a Financial and Experience Statement and Bidder's Qualifications Statement upon request.

WE HEREBY ACKNOWLEDGE RECEIPT OF ADDENDUM #_____ DATED _____.

Respectfully submitted:

By: _____ _____

Name Title

_____ _____

Email address

_____

_____

_____

Business Address and Zip Code (SEAL – if bid is by a corporation)

WORKER'S CLASSIFICATION

A list of the classes of all workers to be used on this project must be included with your Form of Proposal. This must include classes for any and all sub-contractors to be utilized.

SUBCONTRACTOR DECLARATION FORM

Each prime contractor is required to submit a list of subcontractors it intends to use on the project.

Subcontractor	Business Address	Type of Work

_____

Project Name

_____

Prime Contractor

_____

Signature

SECTION 004313

BID BOND

KNOW ALL MEN BY THESE PRESENTS, THAT WE, _____ as PRINCIPAL, and _____ as SURETY, are held and firmly bound unto the _____ (hereinafter called the OWNER), in the penal sum of _____ ($_____) lawful money of the United States, for payment of which sum well and truly to be made, we bond ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THE OBLIGATION IS SUCH that whereas the Principal has submitted the accompanying Bid dated _____ for _____.

NOW, THEREFORE, if the Principal shall not withdraw said Bid within the time specified therein after the opening of the same, and shall within 10 days after the Principal is notified by the Owner of the award of such Contract to him, enter into a written contract with the Owner, in accordance with the Bid as accepted; and give bond with good and sufficient surety or sureties as may be required for the faithful performance and proper fulfillment and labor supplied, if required in said Contract; or in event of the withdrawal of said Bid within the period specified, or the failure to enter into such Contract and give such bonds within the time specified if the Principal shall pay the Owner the difference between the amount specified in said Bid and the amount for which the Owner may procure the required materials or supplies, or both, if the latter amount of the former, together with any other expenses and costs that may have been incurred by the Owner, then the above obligation shall be void and of no effect, otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above bonded parties have executed this instrument under their several seals this_____ day of _____, 20_____, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

WITNESSED BY:

_____ _____
(Individual Principal) (Name of Partner)

_____ _____
(Business Address)

ATTEST:

_____ _____
(Corporate Principal) (Corporate Surety)

By:_____

_____
(Business Address)

SEAL

(Power of Attorney for person signing for Surety Company must be attached to Bond.)

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the Secretary of the corporation as Principal in the within bond; and that _____ who signed the said bond on behalf of the Principal was then the _____ of said corporation; that I know his signature, and his signature thereto is genuine; and that said bond was duly signed, sealed and attested to for an in behalf of said corporation by the authority of its governing body.

_____
(Corporate Seal)

We, the undersigned, will provide _____ as Principal, a Performance and Payment Bond on the form provided, to the Owner in the penal sum of the Principal's bid for _____

.

_____
(Surety)

_____
(Address)

Date:_____

Signed:_____
(Attorney-in-fact)

NON-COLLUSION AFFIDAVIT

State of _____:

:§

County of _____:

I, the undersigned, state that I am authorized to make this Affidavit on behalf of my firm, and its Owners, Directors and Officers. I am the person responsible in my firm for the price(s) and the amount of this Bid.

I state that:

The price(s) and amount(s) of this Bid have been arrived at independently and without consultation, communication or agreement with any other Contractor, Bidder or potential Bidder.

Neither the price(s) nor the amount(s) of this Bid, and neither the approximate price(s) nor approximate amount(s) of this Bid have been disclosed to any other firm or person who is a Bidder or potential Bidder, and they will not be disclosed before Bid opening.

No attempt has been made or will be made to induce any firm or person to refrain from bidding on this Contract, or to submit any intentionally high or competitive Bid or other form of Complementary Bid.

The Bid of my firm is made in good faith and not pursuant to any Agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive Bid.

This firm, its affiliates, subsidiaries, officers, directors and employees are not currently under investigation by any governmental agency and have not in the last 4 years been convicted or found liable for any act prohibited by state or federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding on any public contract, except as follows:

I state that this firm understands and acknowledges that the above representations are material and important, and will be relied on by the Owner in awarding the Contract(s) for which this Bid is submitted. I understand, and my firm understands, that any misstatement in this Affidavit is and shall be treated as fraudulent concealment from the Owner of the true facts relating to the submission of Bids for this Contract.

FIRM _____

NAME _____

TITLE _____

SWORN TO AND SUBSCRIBED BEFORE ME
THIS _____ DAY _____ 20____.

_____

NOTARY PUBLIC

MY COMMISSION EXPIRES _____.

INSTRUCTIONS FOR NON-COLLUSION AFFIDAVIT

1. This Non-Collusion Affidavit is material to any contract awarded pursuant to this Bid. According to the Pennsylvania Anti-Rigging Act, 73 P.S. §§ 1611 eq seq., governmental agencies may require Non-Collusion Affidavits to be submitted together with Bids.
2. This Non-Collusion Affidavit must be executed by the member, officer or employee of the Bidder who makes the final decision on prices and the amount quoted in the Bid.
3. Bid rigging and other efforts to restrain competition, and the making of false sworn statements in connection with the submission of bids are unlawfully and may be subject to criminal prosecution. The person who signs the Affidavit should examine it carefully before signing and assure himself or herself that each statement is true and accurate, making diligent inquiry, as necessary, of all other persons employed by or associated with the Bidder with responsibilities for the preparation, approval or submission of the Bid.
4. In the case of a Bid submitted by a joint venture, each party to the venture must be identified in the Bid Documents, and an Affidavit must be submitted separately on behalf of each party.
5. The term "Complementary Bid" as used in the Affidavit has the meaning commonly associated with that term in the bidding process, and includes the knowing submission of Bids higher than the Bid of another firm, any intentionally high or noncompetitive Bid, and any other form of Bid submitted for the purpose of giving a false appearance of competition.

Failure to file an affidavit in compliance with these instructions may result in disqualification of the Bid.

SECTION 001153
BIDDER'S QUALIFICATIONS

All questions must be answered and the date given must be clear and comprehensive. This statement must be notarized. If necessary, questions may be answered on separate attached sheets. The Bidder may submit additional information if he so desires.

1. Name of Bidder:
2. Permanent main office address:
3. When Organized:
4. If a corporation, where incorporated:
5. How many years have you been engaged in the contracting business under your present firm or trade name?
6. Contracts on hand: Schedule these showing amount of each contract and the appropriate anticipated dates of completion.
7. General character of work performed by your company:
8. Have you ever failed to complete any work awarded to you? If so, where and why.
9. Have you ever defaulted on a contract? If so, where and why.
10. List the more important projects recently completed by your company, stating the approximate cost for each and the month and year completed.
11. List your major equipment available for this contract:
12. List experience in construction work similar in importance to this project:
13. List background and experience of the principal members of your organization, including the officers:
14. List credit available: $
15. List bank references:
16. Will you, upon request, fill out a detailed financial statement and furnish any other information which may be required by the Owner?
17. The undersigned hereby authorizes and requests any person, firm or corporation to furnish any information requested by the Owner in verification of the recitals comprising this Statement of Bidder's Qualifications.

Bidder: _____

By: _____

Title: _____

Dated this _____ day of _____, 20_____.

State of _____

County of_____:

_____being duly sworn deposes and says that he is _____of _____ and that the answers to the foregoing questions and all statements therein contained are true and correct.

Subscribed and sworn to before me this _____ day of _____, 20___.

_____Notary Public

My commission expires: _____

AGREEMENT

ARTICLES OF AGREEMENT made and concluded this _____ day of _____, 2026, between , party of the first part, hereinafter called the Contractor, and Darby Township, party of the second part, hereinafter called the Owner.

1. The Contractor, for and in consideration of the payments mentioned to be made in Article 2 by the Owner, agrees to and with the Owner to complete all of the work or such part as may be directed by the Owner in accordance with the plans mentioned and the preceding specifications, under the supervision and to the satisfaction of the Engineer and to the approval of the Owner.

2. The Owner agrees to pay the Contractor for the work embodied in this Contract and described in the specifications, the prices given in the bidding sheet, which is made a part of this Contract.

3. Should the Contractor at any time refuse or neglect to supply a sufficiency of properly skilled workmen, or of materials of the proper quality, or fail in any respect to prosecute the work with promptness and diligence, or fail in the performance of any of the agreements herein contained, such refusal, neglect or failure being certified by the Engineer, the Owner shall be at liberty after 3 days written notice to the Contractor to provide any such labor or materials and to deduct the cost thereof from any monies then due or thereafter to become due to the Contractor under this Contract, and if the Engineer shall certify that such refusal, neglect or failure is sufficient ground for such action, the Owner shall also be at liberty to terminate the employment of the Contractor for the said work and either call upon the Surety to complete said Contract or to enter upon the premises and take possession for the purpose of completing the work included under this Contract, of all materials, tools and appliances thereon and to employ any other person or persons to finish the work and to provide the materials therefore, and in case of such discontinuance of the employment of the Contractor shall not be entitled to receive any further payments under this Contract until said work shall be wholly finished, at which time, if the unpaid balance of the amount to be paid under this Contract shall exceed the expenses incurred by the Owner in finishing the work, such excess shall be paid to the Contractor by the Owner, but if such expense shall exceed such unpaid balance, the Contractor shall pay the difference to the Owner. The expenses incurred through such default shall be audited by the Engineer, whose certificate thereof shall be conclusive and binding upon the parties.

4. The Contractor agrees not to sublet any portion of the Contract, contracts for furnishing and delivery of materials and machinery to be excepted, without the consent of the Owner, and the Contractor further agrees to hold himself responsible for the performance of any work he may sublet.

5. It is further agreed between the parties hereto that no certificate given or payment made under this Contract, except the final payment, shall be conclusive evidence of the performance of this Contract either wholly or in part, and that no payment shall be construed to be an acceptance of defective work or improper material.

6. It is further agreed between the parties hereto that when all the work embraced in this Contract shall have been completed agreeably to the specifications and in accordance with the directions and to the satisfaction of the Engineer and to the approval of the Owner, there shall be made by the Engineer a final estimate of the quantity, character and value of said work in accordance with this Agreement, when the balance appearing to be due to the Contractor shall be paid upon the Contractor, first giving a release under seal of the Owner from all claims and demands whatsoever growing in any manner out of this Agreement, and secondly the Contractor shall produce satisfactory evidence of the payment of all claims due for labor or materials furnished in the performance of the Contract.

7. The Contractor further agrees that before any work is done under this Contract that he will furnish to the Owner two bonds in form with corporate surety satisfactory to the Owner. One of the bonds in the full sum of the Contract $_____, conditioned for the full and faithful performance of the Agreement and compliance with all terms and conditions herein contained as well as for the maintenance of said work for a period of one year, including the indemnification of the Owner by the Contractor as herein provided; and the other in the full sum of the Contract $_____, conditioned for the prompt payment of all claims for labor and materials entering the work provided for in this Agreement, such bonds to be delivered to the Owner within 10 days after the date of Agreement, and before any work under this Agreement shall be done.

IN WITNESS WHEREOF, the parties of this Agreement have set their hands and seals the day and date first above mentioned.

WITNESS AT SIGNING:

_____ _____

_____ _____

Title (OWNER) (CONTRACTOR) Title

ATTEST:

_____ _____

_____ _____

CONTRACT AGREEMENT

ARTICLES OF AGREEMENT made and concluded this _____ *day of* _____*2026*, between _____party of the first part, hereinafter called the Contractor, and Darby Township party of the second part, hereinafter called the Owner, for the project known as *Darby Township Police Administration Building Renovations.*

1. The Contractor, for and in consideration of the payments mentioned to be made in Article 2 by the Owner, agrees to and with the Owner to complete all of the work or such part as may be directed by the Owner in accordance with the plans mentioned and the preceding specifications, under the supervision and to the satisfaction of the Engineer and to the approval of the Owner.

2. The Owner agrees to pay the Contractor for the work embodied in this Contract and described in the specifications, the prices given in the bidding sheet, which is made a part of this Contract.

3. Should the Contractor at any time refuse or neglect to supply a sufficiency of properly skilled workmen, or of materials of the proper quality, or fail in any respect to prosecute the work with promptness and diligence, or fail in the performance of any of the agreements herein contained, such refusal, neglect or failure being certified by the Engineer, the Owner shall be at liberty after 3 days written notice to the Contractor to provide any such labor or materials and to deduct the cost thereof from any monies then due or thereafter to become due to the Contractor under this Contract, and if the Engineer shall certify that such refusal, neglect or failure is sufficient ground for such action, the Owner shall also be at liberty to terminate the employment of the Contractor for the said work and either call upon the Surety to complete said Contract or to enter upon the premises and take possession for the purpose of completing the work included under this Contract, of all materials, tools and appliances thereon and to employ any other person or persons to finish the work and to provide the materials therefore, and in case of such discontinuance of the employment of the Contractor shall not be entitled to receive any further payments under this Contract until said work shall be wholly finished, at which time, if the unpaid balance of the amount to be paid under this Contract shall exceed the expenses incurred by the Owner in finishing the work, such excess shall be paid to the Contractor by the Owner, but if such expense shall exceed such unpaid balance, the Contractor shall pay the difference to the Owner. The expenses incurred through such default shall be audited by the Engineer, whose certificate thereof shall be conclusive and binding upon the parties.

4. The Contractor agrees not to sublet any portion of the Contract, contracts for furnishing and delivery of materials and machinery to be excepted, without the consent of the Owner, and the Contractor further agrees to hold himself responsible for the performance of any work he may sublet.

5. It is further agreed between the parties hereto that no certificate given or payment made under this Contract, except the final payment, shall be conclusive evidence of the performance of this Contract either wholly or in part, and that no payment shall be construed to be an acceptance of defective work or improper material.

6. It is further agreed between the parties hereto that when all the work embraced in this Contract shall have been completed agreeably to the specifications and in accordance with the directions and to the satisfaction of the Engineer and to the approval of the Owner, there shall be made by the Engineer a final estimate of the quantity, character and value of said work in accordance with this Agreement, when the balance appearing to be due to the Contractor shall be paid upon the Contractor, first giving a release under seal of the Owner from all claims and demands whatsoever growing in any manner out of this Agreement, and secondly the Contractor shall produce satisfactory evidence of the payment of all claims due for labor or materials furnished in the performance of the Contract.

6. The Contractor further agrees that before any work is done under this Contract that he will furnish to the Owner two bonds in form with corporate surety satisfactory to the Owner. One of the bonds in the full sum of the Contract $*81,800.00*, conditioned for the full and faithful performance of the Agreement and compliance with all terms and conditions herein contained as well as for the maintenance of said work for a period of one year, including the indemnification of the Owner by the Contractor as herein provided; and the other in the full sum of the Contract $*81,800.00*, conditioned for the prompt payment of all claims for labor and materials entering the work provided for in this Agreement, such bonds to be delivered to the Owner within 10 days after the date of Agreement, and before any work under this Agreement shall be done.

7. Contract

The executed contract documents shall consist of the following:

   a. This Agreement
   b. Addenda
   c. Invitation for Bids
   d. Instructions to Bidders

e. Signed copy of Bid
f. General Conditions
g. Special Conditions
h. Technical Specifications
i. Drawings

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

CONTRACTOR:	OWNER: Darby Townhip
_____	_____
Signature	Signature
_____	_____
Typed/printed name	Typed/printed name
_____	_____
Title	Title

Certifications:

I, _____, certify that I am the _____ of the corporation named as Contractor herein; that _____ who signed this Agreement on behalf of the Contractor, was then _____ of said corporation; that said Agreement was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

_____ (Corporate Seal

PERFORMANCE BOND

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):		**SURETY (Name and Address of Principal Place of Business):**

OWNER (Name and Address):

CONTRACT

Date:		
Amount:		
Description: (Name & Location)		

BOND

Date: (Not earlier than Contract Date):		
Amount:		
Modification to this Bond Form:		

Surety and Contractor, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Performance Bond to be duly executed on its behalf by its authorized officer, agent or representative.

CONTRACTOR AS PRINCIPAL		**SURETY**
Company: (Corp. Seal)		Company: (Corp. Seal)
Signature:		Signature:
Name & Title:		Name & Title:
		(Attach Power of Attorney)

(Space is provided below for signatures of additional parties, if required)

CONTRACTOR AS PRINCIPAL		**SURETY**
Company: (Corp. Seal)		Company: (Corp. Seal)
Signature:		Signature:
Name & Title:		Name & Title:

EJCDC No. 1910-28-A (1996 Edition)
Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, and the American Institute of Architects.

1. The CONTRACTOR and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Contract, which is incorporated herein by reference.

2. If the CONTRACTOR performs the Contract, the Surety and the CONTRACTOR have no obligation under this Bond, except to participate in conferences as provided in paragraph 3.1.

3. If there is no OWNER Default, the Surety=s obligation under this Bond shall arise after:

3.1 The OWNER has notified the CONTRACTOR and the Surety at the addresses described in paragraph 10 below, that the OWNER is considering declaring a CONTRACTOR Default and has requested and attempted to arrange a conference with the CONTRACTOR and the Surety to be held not later than fifteen days after receipt of such notice to discuss methods of performing the Contract. If the OWNER, the CONTRACTOR and the Surety agree, the CONTRACTOR shall be allowed a reasonable time to perform the Contract, but such an agreement shall not waive the OWNER=s right, if any, subsequently to declare a CONTRACTOR Default; and

3.2 The OWNER has declared a CONTRACTOR Default and formally terminated the CONTRACTOR=s right to complete the CONTRACT. Such CONTRACTOR Default shall not be declared earlier than twenty days after the CONTRACTOR and the Surety have received notice as provided in paragraph 3.1; and

3.3 The OWNER has agreed to pay the Balance of the Contract Price to:

3.3.1 The Surety in accordance with the terms of the Contract;

3.3.2 Another contractor selected pursuant to paragraph 4.3 to perform the Contract.

4. When the OWNER has satisfied the conditions of paragraph 3, the Surety shall promptly and at the Surety=s expense take one of the following actions:

4.1 Arrange for the CONTRACTOR, with consent of the OWNER, to perform and complete the Contract; or

4.2 Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or

4.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the OWNER for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by the OWNER and the contractor selected with the OWNER=s concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the Bonds issued on the Contract, and pay to the OWNER the amount of damages as described in paragraph 6 in excess of the Balance of the Contract Price incurred by the OWNER resulting from the CONTRACTOR Default; or

4.4 Waive its right to perform and complete, arrange for completion or obtain a new contractor and with reasonable promptness under the circumstances;

4.4.1 After investigation, determine the amount of which it may be liable to the OWNER and, as soon as practicable, after the amount is determined, tender payment therefor to the OWNER; or

4.4.2 Deny liability in whole or in part and notify the OWNER citing reasons therefor.

5. If the Surety does not proceed as provided in paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen days after receipt of an additional written notice from the OWNER to the Surety demanding that the Surety perform its obligations under this Bond, and the OWNER shall be entitled to enforce any remedy available to the OWNER. If the Surety proceeds as provided in paragraph 4.4, and the OWNER refuses the payment tendered of the Surety has denied pliability, in whole or in part, without further notice the OWNER shall be entitled to enforce any remedy available to the OWNER.

6. After the OWNER has terminated the CONTRACTOR=s right to complete the Contract, and if the Surety elects to act under paragraph 4.1, 4.2, 4.3 above, then the responsibilities of the Surety to the OWNER shall not be greater than those of the CONTRACTOR under the Contract, and the responsibilities of the OWNER to the Surety shall not be greater than those of the OWNER under the Contract. To a limit of the amount of this Bond, but subject to commitment by the OWNER of the Balance of the Contract Price to mitigation of costs and damages on the Contract, the Surety is obligated without duplication for:

6.1 The responsibilities of the CONTRACTOR for correction of defective Work and completion of the Contract;

6.2 Additional legal, design professional and delay costs resulting from the CONTRACTOR=s Default, and resulting from the actions or failure to act of the Surety under paragraph 4; and

6.3 Liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or non-performance of the CONTRACTOR.

7. The Surety shall not be liable to the OWNER or others for obligations of the CONTRACTOR that are unrelated to the Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the OWNER or its heirs, executors, administrators, or successors.

8. The Surety hereby waives notice of any change, including changes of time, to the Contract or to related subcontracts, purchase orders and other obligations.

9. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the Work or part of the Work is located and shall be instituted within two years after the CONTRACTOR Default or within two years after the CONTRACTOR ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

10. Notice to the Surety, the OWNER or the CONTRACTOR shall be mailed or delivered to the address shown on the signature page.

11. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the Contract was being performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted here from and provisions conforming to such statutory or other legal requirements shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

12. Definitions

12.1 Balance of the Contract Price: The total amount payable by the OWNER to the CONTRACTOR under the Contract after all proper adjustments have been made, including allowance to the CONTRACTOR of any amounts received or to be received by the OWNER in settlement of insurance or other Claims for damages to which the CONTRACTOR is entitled, reduced by all valid and proper payments made to or on behalf of the CONTRACTOR under the Contract.

12.2 Contract: The agreement between the OWNER and the CONTRACTOR identified on the signature page, including all Contract Documents and changes thereto.

12.3 CONTRACTOR Default: Failure of the CONTRACTOR identified on the signature page, including all Contract Documents and changes thereto.

12.4 OWNER Default: Failure of the Owner, which has neither been remedied nor waived, to pay the CONTRACTOR as required by the Contract or to perform and complete or comply with the other terms thereof.

PAYMENT BOND

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address): **SURETY (Name and Address of Principal Place of Business):**

OWNER (Name and Address):

CONTRACT

ate:		
nount:		
escription: (Name & Location)		

BOND

ate: (Not earlier than Contract Date):		
nount:		
odification to this Bond Form:		

Surety and Contractor, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Performance Bond to be duly executed on its behalf by its authorized officer, agent or representative.

CONTRACTOR AS PRINCIPAL		**SURETY**
Company: (Corp. Seal)		Company: (Corp. Seal)
gnature:		gnature:
ame & Title:		ame & Title:
		ttach Power of Attorney)

(Space is provided below for signatures of additional parties, if required)

CONTRACTOR AS PRINCIPAL		**SURETY**
Company: (Corp. Seal)		Company: (Corp. Seal)
Signature:		Signature:
Name & Title:		Name & Title:

EJCDC No. 1910-28-A (1996 Edition)
Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, and the American Institute of Architects.

1. The CONTRACTOR and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the OWNER to pay for labor, materials and equipment furnished for use in the performance of the Contract, which is incorporated herein by reference.

2. With respect to the OWNER, this obligation shall be null and void if the CONTRACTOR:

2.1. Promptly makes payment, directly or indirectly, for all sums due Claimants, and

2.2. Defends, indemnifies and holds harmless the OWNER from all claims, demands, liens or suits by any person or entity who furnished labor, materials or equipment for use in the performance of the Contract, provided the OWNER has promptly notified the CONTRACTOR and the Surety (at the addresses described in paragraph 12) of any claims, demands, liens or suits and tendered defense of such claims, demands, liens or suits to the CONTRACTOR and the Surety, and provided there is no OWNER Default.

3. With respect to Claimants, this obligation shall be null and void if the CONTRACTOR promptly makes payment, directly or indirectly, for all sums due.

4. The Surety shall have no obligation to Claimants under this Bond until:

4.1. Claimants who are employed by or have a direct contract with the CONTRACTOR have given notice to the Surety (at the addresses described in paragraph 12) and sent a copy, or notice thereof, to the OWNER, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.

4.2. Claimants who do not have a direct contract with the CONTRACTOR:

1. Have furnished written notice to the CONTRACTOR and sent a copy, or notice thereof, to the OWNER, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials were furnished or supplied or for whom the labor was done or performed; and

2. Have either received a rejection in whole or in part from the CONTRACTOR, or not received within 30 days of furnishing the above notice any communication from the CONTRACTOR by which the CONTRACTOR had indicated the claim will be paid directly or indirectly; and

3. Not having been paid within the above 30 days, have sent a written notice to the Surety and sent a copy, or notice thereof, to the OWNER, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to the CONTRACTOR.

5. If a notice required by paragraph 4 is given by the OWNER to the CONTRACTOR or to the Surety, that is sufficient compliance.

6. When the Claimant has satisfied the conditions of paragraph 4, the Surety shall promptly and at the Surety's expense take the following actions:

6.1. Send an answer to the Claimant, with a copy to the OWNER, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.

6.2. Pay or arrange for payment of any undisputed amounts.

7. The Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

8. Amounts owed by the OWNER to the CONTRACTOR under the Contract shall be used for the performance of the Contract and to satisfy claims, if any, under any Performance Bond. By the CONTRACTOR furnishing and the OWNER accepting this Bond, they agree that all funds earned by the CONTRACTOR in the performance of the Contract are dedicated to satisfy obligations of the CONTRACTOR and the Surety under this Bond, subject to the OWNER's priority to use the funds for the completion of the Work.

9. The Surety shall not be liable to the OWNER, Claimants or others for obligations of the CONTRACTOR that are unrelated to the Contract. The OWNER shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.

10. The Surety hereby waives notice of any change, including changes of time, to the Contract or to related Subcontracts, purchase orders and other obligations.

11. No suit or action shall be commenced by a Claimant under this Bond other than a court of competent jurisdiction in the location in which the Work or part of the Work is located or after the expiration of one year from the date (1) on which the Claimant gave the notice required by paragraph 4.1 or paragraph 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to the Surety, the OWNER or the CONTRACTOR shall be mailed or delivered to the address shown on the signature page. Actual receipt of notice by Surety, the OWNER or the CONTRACTOR, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.

13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the Contract was be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is, that this Bond shall be construed as a statutory bond and not as a common law bond.

14. Upon request of any person or entity appearing to be a potential beneficiary of this Bond, the CONTRACTOR shall promptly furnish a copy of this Bond o shall permit a copy to me made.

15. DEFINITIONS.

15.1. Claimant: An individual or entity having a direct contract with the CONTRACTOR or with a Subcontractor of the CONTRACTOR to furnish labor, materials or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Contract, architectural and engineering services required for performance of the Work of the CONTRACTOR and the CONTRACTOR's Subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

15.2. Contract: The agreement between the OWNER and the CONTRACTOR identified on the signature page, including all Contract Documents and changes thereto.

15.3. OWNER Default: Failure of the OWNER, which has neither been remedied not waived, to pay the CONTRACTOR as required by the Contract or to perform and complete or comply with the other terms thereof.

MAINTENANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we as Principal, and a corporation, as Surety, are held firmly bound unto as Obligee, in the full and just sum of ($) for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the said Principal entered into a contract with _____ dated_____ for _____

_____

WHEREAS, said contract provides that the Principal will furnish a bond conditioned to guarantee for the period of one (1) year after approval of the final estimate on said job, by the Owner, against all defects in workmanship and materials which may become apparent during said period, and

WHEREAS, the said contract has been completed, and was approved on _____ _____.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if within one (1) year from the date of approval of the said contract, the work done under the terms of said contract shall disclose poor workmanship in the execution of said work, and the carrying out of the terms of said contract, or it shall appear that defective materials were furnished thereunder, then this obligation shall remain in full force and virtue, otherwise this instrument shall be void.

Signed and sealed this _____ day of _____, 20___.

Witness:

_____ _____

Principal

By:_____

Attorney-in-Fact

AFFIDAVIT RE:
ACCEPTING PROVISIONS OF THE WORKER'S COMPENSATION ACT

STATE OF _____:
:''
COUNTY OF _____:

_____ being duly sworn according to law disposes and says that (they, he, it) (has, have) accepted the provisions of the Worker's Compensation Act of 1915 of the Commonwealth of Pennsylvania, with its supplements and amendments, and (has, have) insured (his, their, its) liability thereunder in accordance with the terms of said Act with

_____ _____
(Company)

_____
Type or Print Name of Contractor

BY: _____

(Title)

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

_____
(Notary Public)

My commission expires: _____
(Date)

GENERAL CONTRACT CONDITIONS

ARTICLE 1 - DEFINITIONS

The Contract Documents consist of the Notice to Bidders, Instructions to Bidders, Form of Proposal, Articles of Agreement, General Conditions, Special Conditions, the Drawings, the Specifications, and Addenda including all modifications thereof incorporated in the Documents before their execution. These form the Contract.

The term "Owner" as used herein refers to the Municipality or Party shown in the Notice to Bidders.

The term "Contractor" as used herein refers to the individual, firm, partnership, co-partnership or corporation who is mentioned as such in the agreement and is hereafter treated as the singular number and masculine gender.

The term "Sub-Contractor" as used herein includes only those having direct contact with the Contractor and it includes one who furnished material worked to a special design according to the drawings and specifications of this work, but does not include on who furnished material not so worked.

The term "Engineer" as used herein refers to that company or person designated by the Owner or their representative having the work in charge.

The term "Work" of the Contractor or Subcontractor includes labor or materials or both.

ARTICLE 2 - CONTRACT AND CONTRACT DOCUMENTS

The project to be constructed pursuant to this Contract will be financed with assistance from the Department of Housing and Urban Development (HUD) and is subject to all applicable Federal laws and regulations. Compliance with Federal Labor requirements will be monitored by the Office of Housing and Community Development or its designee.

All applicable State laws, municipal ordinances and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the Contract throughout and they will be deemed to be included in Contract the same as though herein written out in full.

The Contract Documents are complementary and what is called for by any one shall be as binding as if called for by all. The intention of the documents is to include all labor and materials, equipment and transportation necessary for the proper execution of the work. The Engineer will decide as to the meaning or intent of any portion of the specifications or plans, where the same may be found obscure or in dispute, he shall have the right to correct any errors or omissions therein. All work that may be called for in the specifications and not shown on the plans, or shown on the plans and not called for in the specifications, shall be executed and furnished by the Contractor as if described in both ways; and should any incidental work or material be required which is not denoted in the specifications or plans, either directly or indirectly, but which is nevertheless necessary for proper carrying out of the intent thereof, the Contractor is to understand the same to be implied and required and shall perform all such work and furnish all such material as fully as if they were partially delineated or described, and without extra cost to the Owner.

(1) Copies Furnished: Unless otherwise provided for in the Contract Documents, the Engineer will furnish to the Contractor, free of charge, copies of the Contract Drawings and Specifications reasonably necessary for the execution of the work.
Copies of the work: The Contractor shall keep one copy thereof of all drawings and specifications on the work in good order available to the Engineer and his representative.
Ownership of Plans: All drawings and specifications and copies thereof furnished by the Engineer are his property. They are to be returned to him on request at the completion of the work, prior to the time of final payment.

Contractor's Understanding: It is understood and agreed that the Contractor has, by careful examination, satisfied himself as to the nature of and location of the work, the conformation of the ground, the character of equipment and facilities needed preliminary to and during the prosecution of the work, general and local conditions, and all other matters which can in any way effect the work under this Contract. No verbal agreement or conversation with any officer, agent or employee of the Owner, either before or after the execution of this Contract, shall effect or modify any of the terms or obligations herein contained.

Errors/Omissions: The Contractor shall carefully study and compare all drawings, specifications, and other documents and shall report at once to the Engineer any error, inconsistency or omission.

ARTICLE 3 - PERFORMANCE AND PAYMENT BONDS

Simultaneously with his/her delivery of the executed Contract, the Contractor shall furnish a surety bond or bonds as security for faithful performance of this Contract and for the payment of all persons performing labor on the project under this Contract and furnishing materials in connection with this Contract, as specified in the General Conditions included herein. The surety on such bond or bonds shall be a duly authorized surety company satisfactory to the Owner. The bond shall be for 100 percent of the contract price. A Payment Bond and Performance Bond are required. Attorneys-in-Fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney. Under certain conditions, and within the limits of State and local laws and regulations, the Owner may waive the requirement that the Payment and Performance Bond be underwritten by a surety company and may authorize in lieu thereof, a personal bond backed by a letter of credit from a local lending institution for the full value of the Contract.

ARTICLE 4 - WAGE RATES

In the event that the rate of wages paid for any trade or occupant in the locality where such work is being performed are under current collective agreements of understandings between bona fide organizations of labor and employer, then the wages to be paid shall be not less than such agreed wage rates, nor less than the minimum rates compiled by the Federal Labor Standard Provision. A copy of these prevailing rates of wages has been included in these specifications.

Every Contractor and Subcontractor who is subject to this contract shall, as soon as he/she begins performance under his/her contract with the Owner, supply the Owner a schedule of the dates on which he/she is required to pay wages to employees. He/She shall also deliver to the prevailing wage coordinator within one week after each pay date, a certified copy of his/her payroll which shall exhibit for each employee paid any wages, name, current address, social security number, number of hours worked each day of the pay period and the total for each week, hourly rate of pay, job classification, fringe payments and deductions from wages. The certification of each payroll shall be executed by the Contractor, Subcontractor, or duly appointed agent thereof and shall recite that the payroll is correct and complete and that the wage rate shown is not less than those required by the contract.

Insofar as possible, local labor shall be employed on this work.

ARTICLE 5 - AFFIRMATIVE ACTION

Each bidder, Contractor or Subcontractor (hereinafter the Contractor) must fully comply with either Part 1 or Part 11, as applicable, of Executive Order 11246 as stated, during the performance of this contract or subcontract. The Contractor commits itself to the goals for minority manpower utilization in Part 1 or Part 11, as applicable, and all other requirements, terms and conditions of these bid conditions by submitting a properly signed bid.

The Contractor shall appoint a company executive to assume the responsibility for the Implementation of the requirements, terms and conditions of these bid conditions.

ARTICLE 6 - INSURANCE

The Contractor shall not commence work under this contract until he has obtained all the insurance required hereunder and such insurance has been approved by the Owner, nor shall the Contractor allow any Subcontractor to commence work on his subcontract until similar insurance required for the Subcontractor has been so obtained and approved. Approval of the insurance by the Owner shall not relieve or decrease the liability of the Contractor hereunder.

The Contractor shall file with the Owner all Certificate(s) of Insurance in a form acceptable to the Municipal Solicitor as are necessary to document the insurance coverage required hereunder, subject to the approval of the Owner and receipt of any additional forms/documentation requested, prior to final execution of the Agreement Contract and issuance of the Notice to Proceed.

Workers Compensation: All Contractors and Subcontractors shall acquire and maintain, during the term of the Contract, Workers Compensation Insurance in full compliance with the laws of the State of Pennsylvania. The Contractor shall at all times indemnify and save harmless the Owner from all claims for Workers Compensation which may be made by any

of the employees of any Subcontractor to whom the Contractor may have let the performance of any part of the work embraced in this Contract, and the Contractor will appear for and defend the Owner against any and all such claimsContractor's Liability Insurance:

The Contractor shall acquire and maintain during the term of the Contract Bodily Injury and Property Damage Liability Insurance under a standard Comprehensive General/Automobile Liability Policy which shall provide and include coverage on all Contractor's Operations, Contractor's Protective (Sublet) Liability, Contractual Liability, Completed Operations Liability, Owned Automobiles and Non-Owned and Hired Automobiles.
Property Damage Liability Insurance shall be provided on any demolition, blasting, excavating, shoring or similar operation on an "if any" basis.

Bodily Injury Liability limits shall be for an amount of no less than $500,000 for injuries, including wrongful death to any one person and subject to the same limit for each person, in amount of not less than $1,000,000 on the account of any one occurrence.

Property Damage Liability Insurance shall be an amount of not less than $500,000 per occurrence. General Liability shall be extended to provide "Broad Form Property Damage Liability", and in an amount of not less than $1,000,000 aggregate for damage on account of all occurrences.

Any combination of underlying Comprehensive General/Automobile Liability coverage with Umbrella/Excess Liability Coverage which provides no less than $1,000,000 Single Limit Bodily Injury & Property Damage Liability Insurance for the Contractor will also be acceptable.

The Owner may adjust the liability limits to coincide with local government procurement policies and practice within the limits of state and local law.

Builder's Risk Insurance: Each Contractor shall maintain insurance to protect himself and the Owner, jointly, from loss incurred by fire, lightning, extended coverage hazards, vandalism, theft, explosion and malicious mischief in the full amount of the Contract and such insurance shall cover all labor and materials connected with the work, including materials delivered to the site but not yet installed.

Installation Floater Insurance: When a Contractor is involved solely in the installation of materials and not in the construction of a building, an Installation Floater is required in lieu of a Builder's Risk Policy with the same general conditions applying as set forth in Paragraph E.

The policies as listed above shall all contain the following special provisions:
"The Company agrees that 30 days prior to cancellation or reduction of the insurance afforded by this policy with respect to the Contract involved, written notice will be mailed to the Owner.
The maintaining of such insurance as outlined herein shall in no way constitute a waiver of legal liability for damage to any adjoining buildings or their contents or the work and property of others on the site beyond the limits of insurance thus maintained. The Contractor shall hold the owner free and harmless from any injury and damage resulting from the negligent or faulty performance of the Contract by the Contractor or by his/her Subcontractors.
Each Contractor shall hold the Owner harmless from all payments for patents, either as royalty or otherwise, in the use of materials, methods, appliances, etc., that he may be in anyway involved in or connected with any part of his work or the work of his Subcontractors.
Prior to commencement of any work under Contract, the Contractor shall furnish two (2) copies of Declaration of Insurance as evidence of coverage.
Certificate Holder shall be the Owner and the Delaware County Planning Department.

ARTICLE 7 - SAFETY

The Contractor will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. He/She will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees on the work and other persons who may be affected thereby, all the work and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

The Contractor will erect and maintain, as required by the conditions and progress of the Work, all necessary safeguards for safety protection. He/She will notify Owners of adjacent utilities when prosecution of the work may affect them.

The Contractor shall comply with the safety standards provisions of applicable laws, building and construction codes and the "Manual of Accident Prevention in Construction" published by the Associated General Contractors of America, the requirements of the Occupational Safety and Health Act of 1970 (Public Law 91-596), and the requirements of Title 29 of the Code of Federal Regulations, Section 1518 as published in the "Federal Register", Volume 36, No. 75, Saturday, April 17, 1971
.
The Contractor shall maintain at his/her office or other well known place at the job site, all articles necessary for giving first aid to the injured and shall make standing arrangements for the immediate removal to a hospital or a doctor's care of persons (including employees) who may be injured at the job site. I no case shall employees be permitted to work at a job site before the employer has made a standing arrangement for removal of injured persons to a hospital or a doctors care.

Lights, signs and barricades shall be used to maintain traffic and safety for vehicular and pedestrian traffic during the course of this Contract in accordance with the specifications.

ARTICLE 8 - PERMITS

The Contractor is responsible for obtaining and paying for all necessary permits and licenses from the proper authorities. The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the work as drawn and specified. If the Contractor observes that the Contract Documents are at variance therewith, he/she shall promptly notify the owner in writing.

ARTICLE 9 - SUPERVISION

The Contractor will supervise and direct the work. He will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The Contractor will employ and maintain on the work a qualified supervisor or superintendent who shall have been designated in writing by the Contractor as the Contractor's representative at the site. The Supervisor shall have full authority to act on behalf of the Contractor and communications given to the Supervisor shall be as binding as if given to the Contractor. The Supervisor shall be present and on the site at all times as required to perform adequate supervision and coordination of the work.

The Owner and its representatives will at all times have access to the work. In addition, authorized representatives and agents of any participating federal or state agency shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials and other relevant data and records. The Contractor will provide proper facilities for such access and observation of the work and also for any inspection or testing thereof.

The Contractor shall submit a proposed program of operation, showing clearly how he/she proposed to conduct the work as to bring about the completion of his/her work within the time limit specified. This program shall outline the proposed sequence of operations, the rates of progress and the dates when his/her work will be sufficiently advanced to permit the installation of the work under other contracts, and the estimated progress payments due under the Contract. The work under this contract shall be so scheduled that as structures are completed, they can be placed into useful operation with a minimum of delay. The program shall be subject to the approval of the Owner.

All construction as proposed along all Local, County, State and Federal roads, including storage and stockpiling of materials, is to be conducted within the limits of the public right-of-way. Bracing, sheeting and shoring shall be used to keep all construction work within the construction limits unless work agreements are secured from the adjacent property Owners. It is the Contractors responsibility to secure these work agreements, if deemed necessary. Copies of the work agreements shall be delivered to the Engineer and the Owner prior to any work beginning on the affected property.

ARTICLE 10 - CLAIMS AGAINST CONTRACTOR

The Contractor shall indemnify and save the Owner or the Owner's agents harmless from all claims growing out of the lawful demands of Subcontractor's laborers, workmen, mechanics, materialmen and furnishers of machinery and parts thereof, equipment, tools and all supplies, incurred in the furtherance of the performance of the work. The Contractor shall, at the Owner's request, furnish satisfactory evidence that all obligations of the nature designated above have been

paid, discharged or waived. If the Contractor fails to do so, the Owner may, after having notified the Contractor, either pay unpaid bills or withhold from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the Contractor shall be resumed, in accordance with the terms of the Contract Documents, but in no event shall the provisions of this sentence be construed to impose any obligations upon the Owner to either the Contractor, his Surety, or any third party. In paying any unpaid bills of the Contractor, any payment so made by the owner shall be considered as a payment made under the Contract Documents by the Owner to the Contractor and the Owner shall not be liable to the Contractor for any such payments in good faith.

ARTICLE 11 – SUBCONTRACTING

Neither the Contractor nor the owner shall sell, transfer, assign, or otherwise dispose of the Contract or any portion thereof, or of his right, title, or interest therein, or his obligations thereunder.

The Contractor shall not sublet, sell, transfer or assign any portion of the Contract without written consent of the Owner or his/her designated agent. When such consent is given, the Contractor will be permitted to sublet a portion thereof, but shall perform with his/her own organization, work amounting to no less than fifty percent of the total contract cost, except that any item designated in the contract before computing the Contractor with his/her own organization. No Subcontract, or transfer of Contract, shall in any way release the Contractor of his/her liability under the Contract and bonds.

The provisions of the Contract as to performance by the Contractor shall apply to any Subcontractor, his officers, agents or employees of the Subcontractor in all respects as if he and they were employees of the Contractor and they shall be subject to the same provisions thereby as employees of the Contractor, and the work and material furnished by an Subcontractor shall be subject to the provisions as if furnished by the Contractor.

The Contractor shall not award work to Subcontractor(s) not identified on the Subcontractors Declaration form as submitted with bid, without
Prior approval of the Owner
Verification by the Delaware County Office of Housing and Community Development of the Subcontractor’s current eligibility status
Submission of all certifications as required in the INSTRUCTIONS TO BIDDERS. The Contractor shall be fully responsible to the Owner for the acts and omissions of the Subcontractor(s), and of persons either directly or indirectly employed by them, as he/she is for the acts and omissions of persons directly employed by him/her.

ARTICLE 12 - CHANGE OF WORK

The Owner reserves the right to make, at any time during the progress of the work, such increases or decreases in quantities and such alterations in details of work as may be deemed necessary or desirable. Such increases or decreases and alterations shall not invalidate the contract nor release the surety, and the Contractor agrees to perform the work as altered, the same as if it had been a part of the original contract.

Authorized alterations in plans or quantities of work involving work not covered by unit prices in the proposal shall be paid for as stipulated in the change order authorizing such work.

No changes in work covered by the approved Contract shall be made without having prior written approval of the County.

ARTICLE 13 - EXTRA WORK

Work and materials of a character for which no price is named in the Agreement shall be considered as extra work which shall be done by the Contractor only upon written order signed by the Engineer, at a price to be previously agreed upon in writing by the Contractor and the Engineer and approved by the Owner.

No bill or claim for extra work or materials shall be allowed or paid unless the doing of such work or furnishing of such extra materials shall have been authorized in writing by the Engineer.

If the Contractor shall proceed with the work after receiving the written authority therefore, as hereinbefore provided, then such extra work shall be controlled by all of the terms and provisions of this Contract, subject to such prices as are agreed upon and fixed by the Engineer and the Owner as hereinbefore provided.

If the Contractor shall fail or decline to perform such extra work as authorized in writing as aforesaid, the Owner may then arrange for the performance of the work in any manner he may see fit, the same as if the Contract had not been executed and the Contractor shall not interfere with such performance of the work, or the Owner may withhold payment of all estimated work until the Contractor's refusal or failure is eliminated. Any such extra cost to the Owner by reason of the Contractor's failure or refusal to perform such extra work shall be deducted from the amount due to the Contractor under the terms of the Contract.

In no case shall the Contractor proceed with extra work of additional quantity or dissimilar character unless written approval has been obtained from the Engineer. This paragraph supersedes all other Articles in these conditions. The

Contractor shall initiate a change order prior to beginning such work unless such an order has come from the Engineer or Owner. The change order will specify the quantity and character of work to be performed and designate the cost of the work, both in units and total cost.

ARTICLE 14 - FORCE ACCOUNT WORK

All extra work done on a force account basis will be paid for in the following manner:
For all labor, trucks, truck drivers, operators and foreman in direct charge of the specific operation, the Contractor shall receive the current local rate of wage, to be agreed upon in writing before starting such work, for each and every hour that said labor and/or trucks, truck drivers, operators and foremen are actually engaged on such work, to which shall be added an amount equal to 10% of the sum thereof.
For all materials used, the Contractor shall receive the actual cost of such materials including freight charges as shown by original receipted bills, to which cost shall be added a sum equal to 15%.
For any machinery or equipment, except small tools and equipment for which no rental is allowed, which may be deemed necessary or desirable to use, the Engineer, with the approval of the Owner, shall allow the Contractor a reasonable rental price for each and every hour that said machinery or equipment is in use on such work. Such rental price shall include fuel and lubrication and shall be agreed upon in writing by the Contractor and the Engineer and approved by the Owner before such work is begun. No percentages shall be added to such rental price.
The compensation as herein provided shall be received by the Contractor as payment in full for work done on a force account basis, including overhead, insurance and profit. The Contractor's representative and the Engineer's representative shall compare records of extra work done on a force account basis at the end of each day. All claims for extra work done on a force account basis shall be submitted to the Engineer by the Contractor, upon certified triplicate statements to which shall be attached original receipted bills covering the cost of and freight charges on all materials used in such work. Said statements shall be filed not later than the twentieth day of the month following that in which the work was actually performed and shall include all labor charges, etc., and materials charges insofar as they can be verified.
Should the Contractor refuse to prosecute the work as directed or to submit his claim as required, then the Engineer may withhold payment of all estimates until the Contractor's refusal or failure is eliminated.

ARTICLE 15 - EXAMINATION AND APPROVAL

All work and materials shall be at all times subject to the examination of and approval by the Engineer or his duly authorized representatives. The Contractor shall provide reasonable and necessary facilities for such examination. If any work should be covered up without the approval or consent of the Engineer, if required by him, it shall be uncovered for examination at the Contractor's expense.

ARTICLE 16 - DEFECTIVE WORK AND MATERIALS

Defective work and materials may be condemned by the Engineer at any time before the final acceptance of the work. The Contractor shall remove at his own expense any work or material condemned and shall rebuild and replace the same without extra cost. Previous examination will not relieve the Contractor from the responsibility for good work and materials whether overlooked by the Engineer or caused by damage from any source whatsoever.

Failure to conform with the above may be cause to discontinue the work, and the Engineer and the Owner in his or its discretion may either remedy the work or may have the Contract completed by others and charge the cost thereof as money paid the Contractor.

ARTICLE 17 - MATERIALS, APPLIANCE AND EMPLOYEES

Unless otherwise specified, all materials shall be new, and both workmanship and materials shall be of acceptable quality. The Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials.

Unless otherwise stipulated, the Contractor shall provide and pay for all materials, labor, tools, equipment, light, power, transportation and other facilities necessary for the execution and prosecution of the work in an acceptable manner and at a satisfactory rate of progress. The equipment used on any portion of the work shall be such that no injury to adjacent property or highways will result from its use.

The Contractor shall employ such superintendent, foremen and workmen as are careful and competent, and the Engineer may demand the dismissal of any person employed by the Contractor in, about or upon the work, who shall be guilty of misconduct or be incompetent or negligent in the due and proper performance of duties, or who neglects or refuses to comply with the directions given, and such person shall not be employed again thereon without the written consent of the Engineer. Should the Contractor continue to employ or again employ such person, the Owner may withhold all estimates which are or may become due, or the Engineer may suspend the work, until such orders are complied with.

The superintendent shall not be changed except with the consent of the Engineer, unless the superintendent proves to be unsatisfactory to the Contractor and/or ceases to be in his employ. The superintendent shall represent the Contractor in his absence, and all directions given to him shall be as binding as if given to the Contractor. Other important directions shall be confirmed in writing to the Contractor. Other directions shall be confirmed on written request in each case.

ARTICLE 18 - ROYALTIES AND PATENTS

The Contractor shall pay all royalties and license fees entailed by the use of any patented equipment, materials or methods of construction. He shall defend all suits and claims for infringements of any patent rights and shall save the Owner harmless on account thereof, including any costs, council fees or any other expense harmless to which the Owner may be put by reason of his failure to defend such suit or suits.

ARTICLE 19 - POINTS AND INSTRUCTIONS

The Contractor shall not proceed with the work until he has made timely demand upon the Engineer for, and has received from his, such reference points and instructions as may be necessary as the work progresses. The work shall be done in strict conformity with such points and instructions. Work done before the points and instructions are given by the Engineer shall be at the Contractor's risk, the Contractor shall furnish free of charge, all stakes and such temporary structures as may be necessary for making and maintaining points and lines and shall furnish the Engineer such facilities and materials for giving said lines and points as they may require. The Contractor must carefully preserve benchmarks, reference points and stakes, and in case of willful or careless destruction, he will be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.

ARTICLE 20 - RIGHT-OF-WAY AND STORAGE SPACE

The Owner shall provide the land upon which the work is to be done, with right of access thereto, but unless otherwise agreed upon, the Contractor shall provide space and land required and access thereto for the erection of temporary construction facilities and for storage of materials.

ARTICLE 21 - DAMAGES TO PROPERTY

In case any direct or indirect injury is done to existing street or underground structures, sewers, mains, etc., or to public or private property of any kind or to any materials or fixtures, by or because of the work, in consequence of any act or omission on the part of the Contractor, his employees or agents, the Contractor at his own cost and expense, except when hereinafter specified otherwise, shall restore such structures, property, materials, etc., to a condition equal or similar to that existing before such damage or inquiry was done, by repairing or otherwise as may be directed by the Engineer, or shall make good such damage or injury in a satisfactory manner.

ARTICLE 22 - CONTRACTOR'S LIABILITY

The work in every respect, from the execution of the contract bond and during its progress until final acceptance, shall be under the charge and in the care of the Contractor and at his risk. He shall properly safeguard against any or all injury

or damage to the public, any property, material or thing, except where stipulated otherwise in the specifications and shall alone be responsible for any damage or injury from his undertaking of this work to any person or persons or thing connected therewith. He shall indemnify and save harmless the Owner and all its officers, agents and employees from all suits or actions at law of any kind, including all costs, attorney's fees and any expense whatsoever in connection with this work, and shall, if required, show evidence of settlement of any such action before final payment is made by the Owner.

ARTICLE 23 - WORKER'S COMPENSATION ACT

The Contractor shall accept, insofar as the work covered by this contract is concerned, the provisions of the Worker's

Compensation Act of 1915 and any supplements or amendments thereto, including any which may hereafter be passed, and shall insure his liability from the Bureau of Worker's Compensation of the Department of Labor and Industry; and all contracts with subcontractors shall obtain the obligation given above insuring that they likewise will be bound in like manner.

The Contractor shall at all times indemnify and save harmless the Owner from all claims for Worker's Compensation which may be made by any of the employees of the Contractor or by any of the employees of any Subcontractor to whom the Contractor may have let the performance of any part of the work embraced in this Contract, and the Contractor will appear for and defend the Owner against any and all such claims.

ARTICLE 24 - OBSERVANCE OF LAWS

The Contractor, at all times, shall observe and comply with all Federal and State laws and local ordinances and regulations which in any manner effect the conduct of the work and all such orders or decrees as exist at present and those which may be enacted later by bodies or tribunals having any jurisdiction or authority over the work and shall indemnify and save harmless the Owner and all its officers, agents and servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by himself or his employees.

ARTICLE 25 - SERVING NOTICES

Any notice to be given to the Contractor under this Contract shall be deemed to be served if the same be delivered to the man in charge of any office used by the Contractor, or his superintendent or agent at or near the work, or deposited in the post office, postpaid, addressed to the Contractor at this last known place of business.

ARTICLE 26 - SANITARY ACCOMMODATIONS

The Contractor shall provide and maintain in a neat and sanitary condition, such necessary accommodations for the use of his employees as may be approved by the Engineer and satisfactory to the sanitary authorities. No public nuisance shall be committed.

ARTICLE 27 - RIGHTS OF VARIOUS INTERESTS

Whenever work being done by other contractors or forces of the Owner is contiguous to work covered by this Contract, the respective rights of various interest involved shall be established by the Engineer, to secure the completion of the various portions of the work in general harmony.

ARTICLE 28 - DELAYS AND EXTENSION OF TIME

If the Contractor be delayed in the completion of the work by any cause beyond his control, then the time stated in the Agreement for the completion of the work may be extended by the Owner for a period equivalent to the actual number of calendar days lost be reason of any cause aforesaid. This length of extended period shall be determined and fixed by the Owner but an extension may not be allowed unless a claim therefore is presented in writing to the Engineer within seven days of the date of occurrence of the delay.

ARTICLE 29 - FAILURE TO COMPLY WITH ORDERS, ETC.

If the Engineer shall at any time be of the opinion that the Contractor is not progressing with the work as fast as necessary

to insure its completion or to repair damage to public or private property, or is continuing to employ or re-employ negligent or careless persons, or is conducting the work in a manner disapproved by the Engineer, or is failing to prosecute the work in accordance with the provisions of the specifications, or if he stops or abandons the work on any part of the construction without the written consent of the Owner or is otherwise violating any of the provisions of the Contract, then the Engineer shall report such deficiencies and order him to remedy the same.

If, after 3 days from the date of notice, the Contractor shall have failed to comply with, then the Owner may withhold all payments until the orders of the Owner are carried out, or it may suspend any or all work, or it may place additional forces, equipment, tools and materials on parts of the work at the Contractor's expense, as hereinafter specified, or it may annual the contract as hereinafter specified.

In case the Owner should augment the Contractor's forces, equipment, etc., as herein above provided, the cost incurred in carrying on such part of the work shall be deemed as to be carried out by the Owner on account of the Contractor, and the Contractor shall be allowed therefore the contract price and Owner may retain the amount of the cost of such work from any sum or sums due or to become due to the Contractor under this Contract, but if such cost exceed such unpaid balance, the Contractor shall pay the difference to the Owner.

ARTICLE 30 - SUSPENSION OF WORK

The Owner reserves the right to suspend the whole or any part of the work contracted to be done when it is deemed to be in the best interest of the Owner to do so. In case of such suspension a proper extension of time will be allowed if the suspension is due to no fault or neglect of the Contractor due to idle equipment or forces during such suspension period. Neither an extension of time, for any reason, beyond that fixed herein for the completion, not the doing or acceptance of any part of the work called for by the contract shall be deemed to be a waiver by the Owner of the right to abrogate this Contract for abandonment or delays in the manner provided for in this Agreement.

ARTICLE 31 - ANNULMENT

The Bidders to whom the Contract is awarded must begin actual work on the ground within 10 days from the date of executing the Contract, or obtain from the Owner an extension of time. If the Contractor fails to begin the work in accordance with any notice or notices received from the Owner, or if the Contractor shall become insolvent or be declared bankrupt, or commit any act of bankruptcy or insolvency, or allow any final judgment based on any claim growing out of this Contract, to stand against him unsatisfied for a period of 48 hours, or shall make an assignment for the benefit of creditors, or from any other causes whatsoever shall not carry on the work in an acceptable manner, the Owner may give notice in writing to the Contractor and his Surety, of such delay, neglect or default, specifying the same and if the Contractor, within a period of 3 days after such notice, shall not proceed in accordance therewith, then the Owner shall have full power and authority, without violating the Contract, to take the prosecution of the work out of the hands of the Contractor, to appropriate or use of any or all materials and equipment on the ground that may be suitable and acceptable, to enter into an agreement, without advertising for bids thereof, for the completion of said contract according to the terms and provisions thereof, or to use such other methods as in its opinion shall be required for the completion of said contract in an acceptable manner. All costs and charges incurred by the Owner, together with the cost of completing the work under Contract, shall be deducted from any monies due or which may become due the Contractor. In case the expense so incurred by the Owner be less than the sum which would have been payable under the Contract if it had been completed by the Contractor, including the damages, then the Contractor shall be entitled to receive the difference, and in case such expense exceeds the sum which would have been payable under the Contract including the damages, then the Contractor and the Surety shall be liable and shall pay to the Owner the amount of said excess.

ARTICLE 32 - REMOVAL OF EQUIPMENT

In case of annulment of this Contract before completion, from any cause whatsoever, the Contractor, if notified to do so by the Owner, shall promptly remove any part or all of his equipment and supplies from site of the work, failing which, the Owner shall have the right to move such equipment and supplies at the Contractor's expense. No equipment shall be removed from the work by the Contractor except as hereinbefore designated until the usefulness of such equipment on the work has ceased, and except with the written consent of the Engineer, otherwise such removal may be considered by Owner as an abandonment of work on the part of the Contract.

ARTICLE 33 - ORDER OF COMPLETION AND USE OF COMPLETED PARTS

The Contractor shall complete any portion of the work in such order of time as may be stated in the specifications or as the Engineer may require. The Owner shall have the right to take possession of and use any completed or partially completed portion thereof of the work although the time for completing the entire work or portions thereof may not have expired; but such taking possession shall not be deemed an acceptance of the work so taken or used or any part thereof.

ARTICLE 34 - AUTHORITY OF ENGINEER

The Engineer shall have full authority to decide all questions which may arise with the Contractor relative to the quality and acceptability of materials furnished and work performed, the manner, performance and rate of progress, the interpretation of any and all plans and specifications and the acceptable fulfillment of the Contract on the part of the Contractor. The Engineer shall determine the amount and quantity of the several kinds of work performed and materials

furnished and his decision and estimates shall be conclusive on the Contractor. Such estimates shall be a condition precedent to the right of the Contractor to receive any money due under the Contract.

ARTICLE 35 - PAYMENT OF LABOR AND MATERIALS

The Contractor shall pay promptly all laborers or mechanics employed on the work embraced in these specifications, as well as for all materials and before final payment is made, the Contractor shall furnish the Owner with a release signed by all persons, firms, partnerships, corporations or bodies having furnished any material or materials for or toward the construction of said work and shall furnish to the Owner such evidence as may be required by the Owner that all labor and materials have been paid for.

ARTICLE 36 - MONTHLY ESTIMATES

As long as the work contracted for herein is executed in accordance with the provisions of this Contract and with such progress as may be satisfactory to the Owner, the Contractor shall provide to the Engineer on or about the last day of each month an approximate estimate of the amount and value of the work done and material incorporated in the work by the Contractor according to the terms of this Contract from the last day covered by the previous estimate.

The Estimate may include a reasonable amount of materials delivered at the site of the work, not to exceed 75% of the cost of said materials, which materials are acceptable for incorporation into the work but not used, provided however, that the Contractor shall produce receipted invoices certifying to the payment of such materials and shall submit to the Engineer delivery slips certifying to the delivery of such materials to the site of the work.

From the total of the estimate shall be deducted 10% of the whole to be retained by the Owner, until after the completion of the Contract and its acceptances by the Owner, as well as previous payments and charges against the Contractor and the balance shall be the amount due the Contractor on the current estimate. These estimates will then be forwarded to the Owner and following approval of the Owner will be forwarded to Delaware County for approval and payment.

Payment to the Contractor shall be made by the Delaware County Office of Housing and Community Development (OHCD) upon receiving invoice from contractor and inspection of work completed. The Owner's representative and the project engineer shall certify on the pay request that the completed work has been approved prior to the submission of the invoice. A turn-around time of 2-3 weeks is expected before said funds are forwarded to the contractor.

It is important that the progress schedule be based on achievable goals, and that the Contractor makes every effort to meet target dates. OHCD may hold the pay request in cases where the Contractor is found to be in violation of any of the terms and conditions in this contract, e.g. federal labor standards compliance, until such violations are corrected.

It is understood and agreed that if the Owner at any time during the progress of the work, considered the amount withheld on account of the above mentioned percentage in excess of the amount necessary to complete the work or necessary for the full and ample protection of the Owner then the Owner may reduce the percentage retained to an amount sufficient for its proper protection.

For contracts exceeding $50,000, retainage shall be deducted at the rate of 10% of the amount due until 50% of the contract is completed. The sum or sums withheld after the Contract is 50% completed shall be 5% of the amount due

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for the remaining work. In the event of a dispute between the contracting body and the prime Contractor, which dispute is based on increased costs claimed by one prime Contractor occasioned by delays or other actions of another prime Contractor, additional retainage in the sum of one and one half times the amount of any possible liability may be withheld until such time as a final resolution is agreed to by all parties directly or indirectly involved, unless the Contractor causing the additional claim furnishes a bond satisfactory to the contracting body to indemnify such contracting body against the claim.

No estimates given, or payments made, except final certificates of payment, shall be conclusive of the performance of the contract either wholly or in part, and no estimates or payments including the final estimate or payment shall be construed to be an acceptance of defective work or improper materials.

Payments may be withheld or reduced for failure to comply with labor standards and/or reporting of wages.

ARTICLE 37 - ACCEPTANCE AND FINAL PAYMENT

At such time as the Contractor shall have the work in condition for acceptance, he shall remove his equipment, all surplus materials, rubbish and debris resulting from or connected with the work and shall notify the Engineer that the work is ready for final inspection. If after the final inspection the Engineer shall determine that the Contractor has completed the construction contemplated by this Contract, performed the Contract on his part, the Engineer shall make a final estimate as to the entire amount of each class of work performed and as to the value thereof, with such increases or deductions as may have been made in accordance with the terms of the Contract and such deductions on account of damages, as may be due to the Owner under the Contract, or of such additions as may be due to the Contractor, and shall certify to the Owner in writing with the aggregate amount of said final estimate at the completion of the work.

No payment shall become due and payable until the Contractor shall have furnished satisfactory evidence that all labor, materials, outstanding claims an indebtedness of whatever nature arising out of the performance of the Contract have been paid. The action of the Engineer by which the Contractor is to be bound and work concluded, according to the terms of the Contract, shall be evidence of the aforesaid certificate and final payment, all prior certificates or estimates upon which payments have been made being partial payment and subject to correction in the final payment.

Contracts exceeding $50,000 shall be substantially complete if construction is sufficiently completed in accordance with Contract Documents and certified by the Engineer of the Contract body, as modified by change orders agreed to by the parties, so that the project can be used, occupied or operated for its intended use. In no event shall a project be certified as substantially complete until at least 90% of the work on the project is completed. The Contractor shall be paid in full except less only one and one half times such amount as is required to complete any then remaining uncompleted minor items which amount shall be certified by the Engineer and upon receipt by the contracting body of any guarantee bonds required, in accordance with the Contract Documents, to insure proper workmanship for a designated period of time. The certificate given by the Engineer shall list in detail each and every uncompleted item and a reasonable cost of completion. Final payment of any amount so withheld for the completion of the minor items shall be paid forthwith upon completion of the items in the certificate of the Engineer.

The acceptance of the final payment by the Contractor, made as aforesaid, shall operate as and be a release to the Owner and every member and agent thereof and from all claims and liabilities to the Contractor for anything done or furnished, for or relating to the work, or affecting the work, but this final payment shall not be considered relieving the Contractor from his indemnity obligation as described in.
The Contractor shall guarantee all materials and equipment furnished and work performed for a period of one year from the date of Substantial Completion. The Contractor warrants and guarantees for a period of one year from the date of Substantial Completion of the improvement that it is free from all defects due to faulty materials or workmanship, and the Contractor shall promptly make corrections as may be necessary by reason of such defects. The Owner will give notice of observed defects with reasonable promptness. In the event that the Contractor should fail to make repairs, adjustments, or other work which may be made necessary by such defects, the Owner may do so and charge the Contractor the cost thereby incurred. A Maintenance Bond in the amount of 10% of the Contract Price shall remain in full force and effect through the guarantee period. The Contract Bond shall remain in full force and effect through the guarantee period.

ARTICLE 38 - CORRECTION OF WORK AFTER FINAL PAYMENT

Neither the final estimate nor final payment nor any provision in the Contract shall relieve the Contractor of the

responsibility for faulty materials or workmanship, and he shall remedy without cost to the Owner any defects due thereto and pay any damage resulting therefrom, which shall appear within one year from the date of acceptance.

ARTICLE 39 - QUANTITIES

The quantities given for unit price work are to be taken as approximate only. The unit price submitted will be applied to the completed work actually done, and the Contractor paid accordingly. Any variation between the actual quantities of work as constructed and the estimated quantities of work as given in the bidding sheet will be paid for at the unit price for that particular class of work.

ARTICLE 40 - DAMAGE ON ACCOUNT OF HIGH WATER, ETC.

The Contractor shall also hold himself responsible for all damage done to his work by heavy rains or floods, and he shall take all reasonable precautions to provide against damage by heavy rains to adjoining property by building such temporary channels to carry off the storm water as the nature of the work may require.

ARTICLE 41 - ENGINEER'S DECISION

The Engineer shall have full authority to decide all questions which may arise with the Contractor relative to the quality and acceptability of materials furnished, and work performed, the manner, performance, rate of progress, the interpretation of any or all plans and specifications and the acceptable fulfillment of the Contract on the part of the Contractor. He shall determine the amount and quantity of the several kinds of work performed and the materials furnished, his decisions and estimates shall be conclusive on the Contractor, and such estimates shall be a condition precedent to the right of the Contractor to receive any money due the Contract.

ARTICLE 42 - TIME FOR COMPLETION

The time allowed for completion of the Contract from the date of the Notice to Proceed is specified by the Owner to be 60 consecutive calendar days.

ARTICLE 43 - DAMAGES FOR NOT COMPLETING WITHIN TIME LIMIT

Where actual damages for any delay in completion are impossible of determination by reason of the Owner's objection not to terminate the right of the Contractor to proceed, the Contractor and his Sureties shall be liable for and shall pay to the Owner the sum of $500.00 as fixed, agreed and liquidated damages for each calendar day of such delay after the day fixed for completion, until the work is completed or accepted; Provided that the Owner may accept the work if there has been such a degree of completion as will in the Owner's opinion make the project reasonably safe, fit and convenient for the use and accommodation for which it was intended. In such case, the Contractor shall not be charged with liquidated damages, but the Owner may assess the actual damages caused by such delay.

ARTICLE 44 - INSPECTION

Representatives of any Federal and State government having jurisdiction shall have access to the work wherever it is in preparation of progress and the Contractor shall provide proper facilities for such access and inspection.

ARTICLE 45 - FEDERAL LABOR STANDARDS

The Contractor and all Subcontractors shall strictly comply with all requirements of the Federal Labor Standard Provisions. A copy of these provisions is included and made part of this Contract. Failure to comply with any part of these regulations are just cause for penalty as provided in this Agreement. Delaware County Planning Department, Office of Housing and Community Development will monitor and determine compliance with Federal Labor Standards.

ARTICLE 46 – ARBITRATION

All claims, disputes and other matters in question arising out of, or relating to, this Contract or the breach thereof shall be decided by mutual agreement to arbitration in accordance with the Construction Arbitration Rules of the American Arbitration Association. This agreement to arbitrate shall be specifically enforceable under the prevailing arbitration law. The award rendered by the arbitrators shall be final and judgment may be entered upon it in any court having jurisdiction

thereof except in disputes between the Contractor and the Owner over the payment of retainage and final payment on contracts in excess of $50,000, either party shall have the right to appeal from any decision and award as provided by law.

Notice of the request for arbitration shall be filed in writing with the other party to the Agreement and with the American Arbitration Association, and a copy shall be filed with the Engineer. The request for arbitration shall be made within a reasonable time after the claim, dispute or other matters in question has arisen, and in no event shall it be made after institution of legal or equitable proceedings based on such claims, dispute or other matter in question would be barred by the applicable statute of limitations. The Contractor will carry on the work and maintain the progress schedule during any arbitration proceedings, unless otherwise agreed by him and the Owner in writing.

ARTICLE 47 - PENNSYLVANIA STEEL PRODUCTS PROCUREMENT ACT (NO. 1978-3)If any steel products are to be used or supplies in the performance of the contract, only steel products produced in the United States shall be used or supplies in the performance of the contract or any subcontracts thereunder. This provision shall not apply in any case where the head of the public agency, in writing, determines that the type of steel products necessary to the performance of the contract are not produced in the United States in sufficient quantities to meet the requirements of the contract.

Each Contractor shall hold the Owner harmless from all payments for patents, either as royalty or otherwise, in the use of materials, methods, appliances, etc., that he may be in any way involved in or connected with any part of his work or the work of his Subcontractors.
Prior to commencement of any work under contract, the Contractor shall furnish one (1) copy of Declaration of Insurance as evidence of coverage.

ARTICLE 48 – CURRENT REGISTRATION IN CENTRAL CONTRACTOR REGISTRATION

Must maintain current registration in the Central Contractor Registration (www.ccr.gov) at all times during which they have active federal awards funded with Recovery act funds. A Dun and Bradstreet Data Universal Numbering System (DUNS) Number (www.dnb.com) is on of the requirements for registration in the Central Contractor Registration.

ARTICLE 49– PUBLIC WORKS EMPLOYMENT VERIFICATION COMPLIANCE PROGRAM

The Commonwealth of Pennsylvania enacted Act 127 of 2012, known as the Public Works Employment Verification Act ('the Act') which requires all public work contractors and subcontractors to utilize the Federal Government's E-Verify system to ensure that all employees performing work on public work projects are authorized to work in the United States.

The Department defines a "Public Work" to be construction, reconstruction, demolition, alteration and/or repair work other than maintenance work, done under contract and paid for in whole or in part out of the funds of a public body where the estimated cost of the total project is in excess of twenty-five thousand dollars ($25,000) but shall not include work performed under a rehabilitation or manpower training program.

The Department of General Services' Public Works Employment Verification Compliance Program is responsible for the administration, education and enforcement of the Public Works Employment Verification Act 127 of 2012. It provides contractors and subcontractors with educational outreach, conducts investigations when complaints are received and random audits to ensure compliance with the requirements of this Act.

Please direct your questions to the Public Works Employment Verification Compliance Office

Mail: Department of General Services Public Works
Employment Verification Compliance Office
Room 105 Tent Bldg.
18th & Herr Streets
Harrisburg, PA 17125

END OF SECTION

SECTION 00800
SPECIAL CONDITIONS

It is intended by the execution of this Contract to complete renovations to the Darby Township Police Administration Building. Interior renovations include new finish flooring throughout, new interior painting, repair and replacement of finish ceiling materials, new millwork fabrication and installation, new receptacle, interior partition and drywall repair.

It is the Contractor's responsibility to coordinate the adjustment of the other utility facilities to meet the finished paving.

All areas disturbed by the Contractor shall be graded and seeded in accordance with these specifications and drawings.

Prices shown on the proposal sheet shall include all labor, materials and equipment necessary to complete the work in a satisfactory manner, including restoration and cleanup.

All construction equipment operated on improved municipal streets and state highways shall be equipped with rubber tires or be otherwise insulated from the paving.

During the construction procedure, the Contractor shall take all necessary precautions that may be required to prevent any physical damage or changes from occurring beyond the limits of the work or to buildings or structures adjacent to the proposed construction.

The Contractor shall maintain sufficient barricades and other warning signs during the progress of this work and both day and night shall maintain sufficient barricades, lights, danger signals and other devices for the safety of the public and the work must be conducted at all times in such a manner as to offer the least inconvenience to adjacent property owners.

Erosion Control: The Contractor shall be responsible for scheduling and implementing his work in such a way as to provide protection against any erosion of the subbase material and he shall generally conform to the Title 25 Rules and Regulations, Chapter 102 - Guidelines for Minimizing Erosion and Sediment.

The Contractor shall be responsible beyond the limits of work for any and all damage to the existing structures due to faulty construction techniques.

Area to be Occupied by Contractor: The Contractor shall confine his operation to the property lines as shown on the plan. The Contractor shall be responsible for damage resulting from trespassing upon adjacent lands, or damages to adjacent lands or property resulting from action of his agents and his employees. The Contractor shall indemnify the Owner against the performance of this Contract. The Contractor shall diligently and promptly report in writing to the Owner each such claim of injury or trespass asserted.

Permits and licenses shall be required in the amounts dictated by municipal ordinances.

The Contractor shall be responsible for cleaning of his refuse. Final inspection and payment will not be considered until this cleaning has been performed.

Temporary electric and water services required for construction shall be provided by the Contractor.

Intoxicating Beverages: At no time shall the Contractor or his workmen deliver or consume intoxicating beverages of any kind during the daily work period.

Performance of Work by Contractor: The Contractor shall perform on the site and with his own organization, work equivalent to at least 75% of the total amount of the work to be performed under the Contract. If, during the progress of the work herein under, the Contractor requests a reduction in such percentage, then the Engineer determines that it would be to the municipalities advantage, the percentage of the work required to be performed by the Contractor may be reduced; provided written approval of such reduction is obtained by the Contractor from the Engineer.

Storage: The Contractor shall confine his apparatus, the storage of materials and the operations of his workmen, to limits indicated by law, ordinances, permits or directions of the municipality and shall not unreasonably encumber the premises with his materials.

Toilet Facilities: Ample toilet facilities shall be furnished and maintained in strict conformity with State and Local county health laws by the Contractor for the use of his employees, the Engineer and the Inspector.

Claims: The successful bidder to whom the Contract is awarded agrees hereby to indemnify and save harmless the municipality and any of its employees from all suits, claims of any character, time and description brought for or on account of any injuries or damages received or sustained by any person persons, or property by or from the successful bidder or by or in consequence of any neglect in safeguarding the work or in the performance of the work, or through defective workmanship or materials or by or on account of any act, omission or misconduct of the successful bidder or any of his representatives, servants or employees.

Insurance: Insurance certificates, as follows, in a form satisfactory to the Municipal Solicitor shall be submitted at the time of executing the Contract: Statutory Worker's Compensation; Public Liability with Contractual Coverage in the amount of $500,000/$1,000,000; Property Damage in the amount of $500,000/$1,000,000 and $100,000 respectively.

Cancellation shall not be effective unless the Owner is notified in writing 20 days prior to the date of any proposed cancellation.

Contractor shall comply with the Federal Occupational Safety and Health Act of 1970 (OSHA) including proper records keeping and reporting.

Contractor shall be responsible for maintaining all construction improvements for a period of one year from the date of completion in the form of a Maintenance Bond or as an item in the Performance Bond.

Lines and Levels:

Contractor, through competent personnel and use of instruments, shall determine all lines, grades and levels, verifying their accuracy from time to time during the progress of the work.

Contractor shall work accurately to bench marks and to proper elevations and dimensions, checking conditions and details of work already in place and proposed in relation to work then to be installed.

The method and instruments used for determining all grades, lines and levels shall first be approved by the Engineer.

Non-Collusion Affidavit: The Non-Collusion Affidavit must be submitted along with the Bid proposal or the bid will be held to be invalid.

Compliance: Contractor shall comply with the Architectural Barriers Act of 1968 and Section 504 of the Rehabilitation Act of 1973; PA Act 235 of 1965, as amended, Universal Accessibility Act, and American's With Disabilities Act (ADA) of 1990.

"Or Equal" Clause: Whenever an item is specified by a manufacturer's name and model number, the Contractor may use a substitute of equal of better quality as approved by the Engineer.

Cleanup: Contractor is responsible for restoring all areas to the satisfaction of the Municipality.

END OF SECTION

PA ONE CALL REQUIREMENTS

PA ONE CALL SYSTEM, INC.

PROTECT YOURSELF

A PHONE CALL
CAN BE YOUR INSURANCE POLICY

A new way to call:

811

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WHAT YOU DON'T KNOW CAN HURT YOU.

PENNSYLVANIA ACT 187 REQUIRES NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE **ANYWHERE** IN THE COMMONWEALTH.

PENNSYLVANIA ONE CALL SYSTEM, INC.

Dig Safely.

www.paonecall.org
CALL 1-800-242-1776
WORK LOCATION REQUEST FORM

TELEPHONE NUMBER: (_____) _____ EXT.: _____ CALLER: _____

COMPANY NAME: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

WORKSITE INFORMATION:

COUNTY: _____ MUNICIPALITY: _____ WARD: _____

STREET ADDRESS: _____ STREET NAME: _____

NEAREST INTERSECTION: _____

SECOND INTERSECTION: _____

SITE MARKED IN WHITE: ☐ Yes ☐ No

LOCATION INFORMATION: _____

_____

_____

SUBDIVISION: _____ TYPE OF WORK: _____

WORKING IN: ☐ STREET ☐ SIDEWALK ☐ PUBLIC PROPERTY ☐ PRIVATE PROPERTY

☐ OTHER (SPECIFY) _____

DEPTH: _____ EXTENT OF EXCAVATION: _____

METHOD OF EXCAVATION: _____ OWNER/WORK BEING DONE FOR: _____

DURATION OF JOB: _____ PERSON TO CONTACT: _____

PHONE: (____) _____ EXT: _____ BEST TIME TO CALL: _____

FAX #: (____) _____ EMAIL ADDRESS: _____

REMARKS: _____

_____

_____

NOTIFICATION TYPE:

☐ **CONSTRUCTION** (Not less than 3 nor more than 10 Business Days) **PROPOSED DIG DATE:** _____ **TIME:** _____

☐ **DESIGN** (Not less than 10 nor more than 90 Business Days)

TO BE COMPLETED AFTER PLACING ONE CALL

LAWFUL START DATES: _____ THROUGH _____

OTHER SERIAL NUMBERS REFERENCED: _____

FACILITY OWNER MEMBERS NOTIFIED: _____

_____

_____

SERIAL NUMBER ASSIGNED: _____ DATE/TIME: _____

THERE IS AN ANNUAL FEE

DARBY TOWNSHIP- PA ONE CALL UTILITIES

CONTRACTOR TO PROVIDE A MINIMUM OF FIVE (5) WORKING DAYS NOTIFICATION FOR ADJUSTMENT OF UTILITY FACILITIES

BUCKEYE PARTNERS
5 TEK PARK
9999 HAMILTON BLVD.
BREINIGSVILLE, PA 18031
CONTACT: BETH AUMAN

AQUA PA
762 W. LANCASTER AVENUE
BRYN MAWR, PA 19010
CONTACT: STEVE PIZZI

COMCAST CABLEVISION
110 SPRINGBROOKE BLVD.
ASTON, PA 19014
CONTACT: RICH KAIN

PECO ENERGY
C/O STS TELECOM INC
3628 HORIZON DRIVE
KING OF PRUSSIA, PA 19406
CONTACT: BRANDON SHORT
EMAIL: pa.tickets@stsus.net

DELCORA
100 E. 5th Street
P. O. BOX 999
CHESTER, PA 19016-0999
CONTACT: ED BOTHWELL
800-242-1776

VERIZON PENNSYLVANIA INC.
180 SHEREE BLVD., SUITE 2100
ROOM
EXTON, PA 19341
CONTACT: KELLY BLOUNT

USIC
450 S. HENDERSON RD, SUITE B
KING OF PRUSSIA, PA 19406
GAVIN HEWITT

PREVAILING WAGE RATES

BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES

Project Name:	Darby Township Police Administration Building Renovations
General Description:	Removal and disposal of existing tile and carpet flooring throughout, reframe chase wall in holding room #119, new dispatch desks in squad room #127, prep existing concrete slab for new finish. Install new luxury vinyl plank flooring throughout, install new vinyl cove base throughout, new wall paint over existing, replace existing damaged acoustical ceiling tiles, replace existing damaged gypsum wall board ceiling, and new receptacles in squad room #127.
Project Locality	Darby Township
Awarding Agency:	Darby Township
Contract Award Date:	10/21/2026
Serial Number:	26-08098
Project Classification:	Building
Determination Date:	9/8/2026
Assigned Field Office:	Philadelphia
Field Office Phone Number:	(215)560-1858
Toll Free Phone Number:	
Project County:	Delaware County

BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES

Project: 26-08098 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Asbestos & Insulation Workers	5/1/2026		$64.51	$50.26	$114.77
Boilermaker (Commercial, Institutional, and Minor Repair Work)	3/1/2026		$41.34	$19.23	$60.57
Boilermakers	1/1/2026		$58.00	$36.57	$94.57
Bricklayer	5/1/2025		$50.00	$32.57	$82.57
Bricklayer	5/1/2026		$51.15	$34.92	$86.07
Carpenter - Chief of Party (Surveying & Layout)	5/1/2025		$54,59	$29,02	$83,61
Carpenter - Instrument Person (Surveying & Layout)	5/1/2025		$47,47	$29,02	$76,49
Carpenter - Rodman (Surveying & Layout)	5/1/2025		$23,74	$20,62	$44,36
Carpenters	5/1/2026		$48,55	$30,39	$78,94
Carpenters	5/1/2027		$50,46	$30,74	$81,20
Carpenters	5/1/2028		$52,43	$31,09	$83,52
Carpenters	5/1/2029		$54,46	$31,44	$85,90
Carpenters	5/1/2030		$56,55	$31,79	$88,34
Cement Finishers & Plasterers	5/1/2022		$38,57	$32,39	$70,96
Cement Masons	5/1/2025		$48,70	$32,46	$81,16
Dockbuilder, Pile Drivers	5/1/2026		$56,98	$37,99	$94,97
Dockbuilder/Pile Driver Diver	5/1/2026		$66,54	$41,74	$108,28
Dockbuilder/pile driver tender	5/1/2026		$56,98	$37,99	$94,97
Drywall Finisher	5/1/2025		$40,14	$32,35	$72,49
Electricians	5/4/2026		$75.05	$48.19	$123.24
Electricians	5/3/2027		$78.33	$51.16	$129.49
Electricians	5/1/2028		$81,99	$54,00	$135,99
Elevator Constructor	1/1/2025		$71,85	$45,77	$117,62
Elevator Constructor	1/1/2026		$74,86	$46,86	$121,72
Floor Coverer	5/1/2025		$51,67	$31,69	$83,36
Floor Coverer	5/1/2026		$52,84	$32,86	$85,70
Glazier	5/1/2025		$49,96	$38,34	$88,30
Glazier	5/1/2026		$51,30	$39,37	$90,67
Interior Finish	5/1/2023		$34,60	$25,80	$60,40
Iron Workers (Bridge, Structural, Ornamental, Precast)	7/1/2024		$53,20	$45,01	$98,21
Iron Workers (Riggers)	7/1/2025		$44,77	$36,27	$81,04
Iron Workers (Riggers)	7/1/2026		$48,84	$36,52	$85,36
Iron Workers (Rodman/Reinforcing)	7/1/2025		$47,80	$36,65	$84,45
Iron Workers (Rodman/Reinforcing)	7/1/2026		$52,39	$36,90	$89,29
Laborers (Class 01 - See notes)	5/1/2025		$37.25	$26.10	$63.35
Laborers (Class 02 - See notes)	5/1/2025		$41.00	$27.70	$68.70
Laborers (Class 03 - See notes)	5/1/2025		$37.67	$26.28	$63.95
Laborers (Class 04 - See notes)	5/1/2025		$37.67	$26.28	$63.95
Laborers (Class 05 - See notes)	5/1/2025		$37.25	$26.10	$63.35
Landscape Laborer	5/1/2024		$30,70	$24,23	$54,93
Landscape Laborer	5/1/2025		$32,15	$24,30	$56,45
Marble Finisher	5/1/2025		$41,17	$30,75	$71,92
Marble Finisher	5/1/2026		$42,07	$31,85	$73,92
Marble Mason	5/1/2023		$47,20	$31,95	$79,15

BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES

Project: 26-08098 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Marble Setter	5/1/2026		$51.50	$33.80	$85.30
Mason Tender, Cement	5/1/2023		$35.02	$25.98	$61.00
Millwright	5/1/2025		$57.39	$35.81	$93.20
Millwright	5/1/2026		$60.20	$35.81	$96.01
Operators (Building, Class 01 - See Notes)	5/1/2025		$54.52	$34.49	$89.01
Operators (Building, Class 01 - See Notes)	5/1/2026		$55.67	$35.34	$91.01
Operators (Building, Class 01A - See Notes)	5/1/2025		$57.52	$35.38	$92.90
Operators (Building, Class 01A - See Notes)	5/1/2026		$58.68	$36.22	$94.90
Operators (Building, Class 02 - See Notes)	5/1/2025		$54.27	$34.42	$88.69
Operators (Building, Class 02 - See Notes)	5/1/2026		$55.43	$35.26	$90.69
Operators (Building, Class 02A - See Notes)	5/1/2025		$57.29	$35.29	$92.58
Operators (Building, Class 02A - See Notes)	5/1/2026		$58.44	$36.14	$94.58
Operators (Building, Class 03 - See Notes)	5/1/2025		$50.18	$33.22	$83.40
Operators (Building, Class 03 - See Notes)	5/1/2026		$51.34	$34.06	$85.40
Operators (Building, Class 04 - See Notes)	5/1/2025		$49.88	$33.13	$83.01
Operators (Building, Class 04 - See Notes)	5/1/2026		$51.04	$33.97	$85.01
Operators (Building, Class 05 - See Notes)	5/1/2025		$48.16	$32.62	$80.78
Operators (Building, Class 05 - See Notes)	5/1/2026		$49.32	$33.46	$82.78
Operators (Building, Class 06 - See Notes)	5/1/2025		$47.17	$32.33	$79.50
Operators (Building, Class 06 - See Notes)	5/1/2026		$48.34	$33.16	$81.50
Operators (Building, Class 07A- See Notes)	5/1/2025		$66.26	$39.55	$105.81
Operators (Building, Class 07A- See Notes)	5/1/2026		$67.73	$40.48	$108.21
Operators (Building, Class 07B- See Notes)	5/1/2025		$65.97	$39.48	$105.43
Operators (Building, Class 07B- See Notes)	5/1/2026		$67.44	$40.39	$107.83
Painters Class 1 (see notes)	5/1/2025		$44.38	$34.55	$78.93
Painters Class 1 (see notes)	5/1/2026		$45.71	$35.22	$80.93
Painters - Line Stripping	12/1/2024		$44.12	$27.91	$72.03
Painters - Line Stripping	12/1/2025		$45.12	$29.41	$74.53
Painters Class 4 (see notes)	5/1/2025		$46.47	$34.55	$81.02
Painters Class 4 (see notes)	5/1/2026		$48.45	$35.22	$83.67
Plasterers	5/1/2024		$39.88	$33.08	$72.96
plumber	5/1/2025		$70.53	$39.46	$109.99
plumber	5/1/2026		$73.73	$40.36	$114.09
Pointers, Caulkers, Cleaners	5/1/2025		$51.35	$31.80	$83.15
Pointers, Caulkers, Cleaners	5/1/2026		$53.35	$32.30	$85.65
Roofers (Composition)	5/1/2024		$44.13	$34.77	$78.90
Roofers (Composition)	5/1/2026		$47.53	$35.22	$82.75
Roofers (Shingle)	5/1/2024		$34.35	$22.20	$56.55
Roofers (Slate & Tile)	5/1/2024		$37.35	$22.20	$59.55
Sheet Metal Workers	5/1/2025		$62.62	$52.17	$114.79
Sheet Metal Workers	5/1/2026		$65.06	$54.48	$119.54
Sign Makers and Hangars	7/15/2025		$33.48	$26.41	$59.89
Sign Makers and Hangars	7/15/2026		$36.38	$25.01	$61.39
Sprinklerfitters	1/1/2023		$62.23	$31.99	$94.22

BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES

Project: 26-08098 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Sprinklerfitters	5/1/2025		$70.37	$34.85	$105.22
Steamfitters	5/1/2024		$70.32	$43.09	$113.41
Steamfitters	5/1/2025		$72.52	$44.89	$117.41
Stone Masons	5/1/2025		$50.00	$32.80	$82.80
Stone Masons	5/1/2026		$51.50	$33.80	$85.30
Terrazzo Finisher	5/1/2025		$45.61	$29.41	$75.02
Terrazzo Finisher	5/1/2026		$47.78	$29.61	$77.39
Terrazzo Grinder	5/1/2025		$45.88	$29.41	$75.29
Terrazzo Grinder	5/1/2026		$47.78	$29.61	$77.39
Terrazzo Mechanics	5/1/2025		$52.21	$31.26	$83.47
Terrazzo Mechanics	5/1/2026		$53.36	$32.61	$85.97
Tile Finisher	5/1/2025		$41.17	$30.75	$71.92
Tile Finisher	5/1/2026		$42.07	$31.85	$73.92
Tile Setter	5/1/2025		$52.21	$31.26	$83.47
Tile Setter	5/1/2026		$53.36	$32.61	$85.97
Truckdriver class 1(see notes)	5/1/2024		$36.79	$22.54	$59.33
Truckdriver class 1(see notes)	5/1/2026		$38.57	$23.87	$62.44
Truckdriver class 2 (see notes)	5/1/2024		$36.89	$22.54	$59.43
Truckdriver class 2 (see notes)	5/1/2026		$38.67	$23.87	$62.54
Truckdriver class 3 (see notes)	5/1/2026		$38.92	$23.87	$62.79
Window Film / Tint Installer	6/1/2025		$27.42	$15.13	$42.55
Window Film / Tint Installer	6/1/2026		$28.35	$15.60	$43.95

BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES

Project: 26-08098 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Bricklayer	5/1/2025		$50.00	$32.57	$82.57
Bricklayer	5/1/2026		$51.15	$34.92	$86.07
Carpenter - Chief of Party (Surveying & Layout)	5/1/2025		$65,96	$30,09	$96,05
Carpenter - Chief of Party (Surveying & Layout)	5/1/2026		$67,52	$30,44	$97,96
Carpenter - Instrument Person (Surveying & Layout)	5/1/2025		$58,39	$29,06	$87,45
Carpenter - Instrument Person (Surveying & Layout)	5/1/2026		$60,09	$29,06	$89,15
Carpenter - Rodman (Surveying & Layout)	5/1/2025		$45,88	$23,19	$69,07
Carpenter - Rodman (Surveying & Layout)	5/1/2026		$46,97	$23,54	$70,51
Carpenter	5/1/2025		$57,36	$30,09	$87,45
Carpenter	5/1/2026		$58,71	$30,44	$89,15
Cement Masons	5/1/2023		$43,20	$32,91	$76,11
Cement Masons	5/1/2025		$46,55	$32,66	$79,21
Dockbuilder, Pile Drivers	5/1/2026		$56,98	$37,99	$94,97
Dockbuilder/Pile Driver Diver	5/1/2026		$61,88	$45,47	$107,35
Dockbuilder/pile driver tender	5/1/2026		$56,98	$37,99	$94,97
Electric Lineman	6/3/2024		$62,07	$33,96	$96,03
Electric Lineman	6/2/2025		$65.10	$34.45	$99.55
Iron Workers (Bridge, Structural, Ornamental, Precast)	7/1/2024		$53,20	$45,01	$98,21
Iron Workers (Riggers)	7/1/2023		$42,53	$34,14	$76,67
Iron Workers (Rodman/Reinforcing)	7/1/2023		$45,70	$34,77	$80,47
Laborers (Class 01 - See notes)	5/1/2025		$40,20	$27,80	$68,00
Laborers (Class 01 - See notes)	5/1/2026		$41,65	$27,90	$69,55
Laborers (Class 02 - See notes)	5/1/2025		$40,40	$27,80	$68,20
Laborers (Class 02 - See notes)	5/1/2026		$41,85	$27,90	$69,75
Laborers (Class 03 - See notes)	5/1/2025		$40,40	$27,80	$68,20
Laborers (Class 03 - See notes)	5/1/2026		$41,85	$27,90	$69,75
Laborers (Class 04 - See notes)	5/1/2025		$35,00	$27,80	$62,80
Laborers (Class 04 – See notes)	5/1/2026		$36,45	$27,90	$64,35
Laborers (Class 05 – See notes)	5/1/2025		$41.05	$27.80	$68.85
Laborers (Class 05 – See notes)	5/1/2026		$42.50	$27.90	$70.40
Laborers (Class 06 – See notes)	5/1/2025		$41.10	$27.80	$68.90
Laborers (Class 06 - See notes)	5/1/2026		$42.55	$27.90	$70.45
Laborers (Class 07 - See notes)	5/1/2025		$40.95	$27.80	$68.75
Laborers (Class 07 - See notes)	5/1/2026		$42.40	$27.90	$70.30
Laborers (Class 08 - See notes)	5/1/2025		$40,70	$27,80	$68,50
Laborers (Class 08 - See notes)	5/1/2026		$42,15	$27,90	$70,05
Laborers (Class 09 - See notes)	5/1/2025		$40,55	$27,80	$68,35
Laborers (Class 09 - See notes)	5/1/2026		$42,00	$27,90	$69,90
Laborers (Class 10- See notes)	5/1/2025		$40,70	$27,80	$68,50
Laborers (Class 10- See notes)	5/1/2026		$42,15	$27,90	$70,05
Laborers (Class 11 -See Notes)	5/1/2025		$40,60	$27,80	$68,40
Laborers (Class 11 -See Notes)	5/1/2026		$42,05	$27,90	$69,95
Laborers (Class 12 -See Notes)	5/1/2025		$42,30	$27,80	$70,10
Laborers (Class 12 -See Notes)	5/1/2026		$42,85	$27,90	$70,75

BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES

Project: 26-08098 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Laborers (Class 13 -See Notes)	5/1/2025		$44.33	$27.80	$72.13
Laborers (Class 13 -See Notes)	5/1/2026		$45.78	$27.90	$73.68
Laborers (Class 14 -See Notes)	5/1/2025		$40,90	$27,80	$68,70
Laborers (Class 14 -See Notes)	5/1/2026		$41,90	$27,90	$69,80
Laborers Utility (PGW ONLY) (Flagperson)	5/1/2025		$34,07	$19,73	$53,80
Laborers Utility (PGW ONLY) (Flagperson)	5/1/2026		$35,52	$19,83	$55,35
Laborers Utility (PGW ONLY)	5/1/2025		$41,10	$19,73	$60,83
Laborers Utility (PGW ONLY)	5/1/2026		$42,55	$19,83	$62,38
Landscape Laborer	5/1/2024		$30,28	$24,05	$54,33
Landscape Laborer	5/1/2025		$31,73	$24,15	$55,88
Millwright	5/1/2025		$57,39	$35,81	$93,20
Millwright	5/1/2026		$60,20	$35,81	$96,01
Operators Class 01 - See Notes (Building, Heavy, Highway)	5/1/2025		$54,52	$34,49	$89,01
Operators Class 01 - See Notes (Building, Heavy, Highway)	5/1/2026		$55,67	$35,34	$91,01
Operators Class 01a - See Notes (Building, Heavy, Highway)	5/1/2025		$57,52	$35,38	$92,90
Operators Class 01a - See Notes (Building, Heavy, Highway)	5/1/2026		$58,68	$36,22	$94,90
Operators Class 02 - See Notes (Building, Heavy, Highway)	5/1/2025		$54,27	$34,42	$88,69
Operators Class 02 - See Notes (Building, Heavy, Highway)	5/1/2026		$55,43	$35,26	$90,69
Operators Class 02a - See Notes (Building, Heavy, Highway)	5/1/2025		$57.29	$35.29	$92.58
Operators Class 02a - See Notes (Building, Heavy, Highway)	5/1/2026		$58.44	$36.14	$94.58
Operators Class 03 - See Notes (Building, Heavy, Highway)	5/1/2025		$50.18	$33.22	$83.40
Operators Class 03 - See Notes (Building, Heavy, Highway)	5/1/2026		$51,34	$34,06	$85.40
Operators Class 04 - See Notes (Building, Heavy, Highway)	5/1/2025		$49,88	$33,13	$83,01
Operators Class 04 - See Notes (Building, Heavy, Highway)	5/1/2026		$51,04	$33,97	$85,01
Operators Class 05 - See Notes (Building, Heavy, Highway)	5/1/2025		$48,16	$32,62	$80,78
Operators Class 05 - See Notes (Building, Heavy, Highway)	5/1/2026		$49,32	$33,46	$82,78
Operators Class 06 - See Notes (Building, Heavy, Highway)	5/1/2025		$47,17	$32,33	$79,50
Operators Class 06 - See Notes (Building, Heavy, Highway)	5/1/2026		$48.34	$33.16	$81.50
Operators Class 07 (A) - See Notes (Building, Heavy, Highway)	5/1/2025		$66.26	$39.55	$105.81
Operators Class 07 (A) - See Notes (Building, Heavy, Highway)	5/1/2026		$67.73	$40.48	$108.21
Operators Class 07 (B) - See Notes (Building, Heavy, Highway)	5/1/2025		$65,97	$39,46	$105.43
Operators Class 07 (B) - See Notes (Building, Heavy,	5/1/2026		$67,44	$40,39	$107.83

BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES

Project: 26-08098 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Highway)					
Painters - Line Stripping	12/1/2024		$44.12	$27.91	$72.03
Painters - Line Stripping	12/1/2025		$45.12	$29.41	$74.53
Painters Class 2 (see notes)	2/1/2025		$50.85	$33.91	$84.76
Painters Class 2 (see notes)	2/1/2026		$51.61	$35.00	$86.61
Painters Class 3 (see notes)	2/1/2025		$61.81	$33.95	$95.76
Painters Class 3 (see notes)	2/1/2026		$62.57	$35.04	$97.61
Pointers, Caulkers, Cleaners	5/1/2025		$51.35	$31.80	$83.15
Steamfitters (Heavy and Highway - Gas Distribution)	5/1/2025		$68.89	$44.73	$113.62
Truckdriver class 1(see notes)	5/1/2024		$36.64	$22.54	$59.18
Truckdriver class 1(see notes)	5/1/2026		$38.42	$23.87	$62.29
Truckdriver class 2 (see notes)	5/1/2024		$36.74	$22.54	$59.28
Truckdriver class 2 (see notes)	5/1/2026		$38.52	$23.87	$62.39
Truckdriver class 3 (see notes)	5/1/2026		$38.77	$23.87	$62.64

SECTION 011000 - SUMMARY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section Includes:

1. Project information.
2. Work covered by Contract Documents.
3. Use of Site
4. Specification and Drawing conventions.

B. Related Requirements:

1. Section 015000 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.
2. A list of the drawings is contained on the drawings cover sheet.

1.3 DEFINITIONS

A. Work Package: A group of specifications, drawings, and schedules prepared by the design team to describe a portion of the Project Work for pricing, permitting, and construction.

1.4 PROJECT INFORMATION

A. Project Identification:

Darby Township Police Administration Building

2 Studevan Plaza

Hook Road & Sharon Avenue

Sharon Hill, PA 19079

B. Owner:

Darby Township

21 N Bartram Avenue

Glenolden, PA 19036

(610) 586-1514

C. Architect:

Catania Engineering Associates, Inc.

520 W. MacDade Boulevard, Milmont Park, PA 19033

(610) 532-2884

1.5 WORK COVERED BY CONTRACT DOCUMENTS

A. The Work of Project is defined by the Contract Documents and includes, but is not limited to, the following:

1. Interior renovations including new finish flooring throughout, new interior painting, repair and replacement of finish ceiling materials, new millwork fabrication and installation, new receptacles, interior partition and drywall repair. The project includes pricing for additional alternates as described in this specification.

2. The contractor shall secure a building permit from Darby Township.

a. The contractor’s responsibility includes the submission of the building permit application to the Township. The building permit fee shall be waived by the Township.

b. Completed renovation work will result in the continuation of the Certificate of Occupancy.

B. Type of Contract:

1. Project will be administered under a single prime contract.

1.6 WORK INCLUDED

A. Base Bid

1. Mobilization

a. The work includes obtaining licenses, insurance, bonds, permits, and any other entitlements required to start the work.

2. Interior Alterations

a. Interior alterations - Level 2, removal and replacement or the covering of existing materials, elements, *equipment* or *fixtures* using new materials, elements, *equipment* or *fixtures* that serve the same purpose and the installation of any additional equipment and shall apply where the w*ork area* is equal to or less than 50 percent of the building area.

1.7 ADDITIONAL REQUIREMENTS

A. All work should be completed within the contract's time limits of (60) calendar days. The time limit begins when the Notice To Proceed order has been issued.

B. Any damage to the building caused by the Contractor during the construction process shall be restored by the Contractor within the contract's time limits.

C. The cost to restore any damaged landscaping, grass, hardscape areas should be included in the bid.

D. The contractor is responsible for providing all necessary measures to protect the public, employees, buildings, furnishings, and private property from construction damage.

E. At the end of each workday, the contractor should clear the site of the day's debris. The area shall be swept with a magnet to pick any fallen nails.

1.8 CONTRACTOR'S USE OF SITE AND PREMISES

A. Use of Site: The Contractor shall have use of Project site limited to the building area and the north parking lot as indicated on the key plan for staging of materials, dumpsters, portable toilets and for construction operations during construction period. The contractor should be mindful of building occupants and contain their operations to a limited area as the project commences.

B. The Site will continue to operate during normal hours of operation for the duration of construction.

C. Limits on Use of Site: Limit use of Project site to the areas indicated on the Drawings. Do not disturb portions of Project site beyond areas in which the Work is indicated.

1. Driveways, Walkways and Entrances: Keep driveways, walkways, and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or for storage of materials.

a. Schedule deliveries to minimize use of driveways and entrances by construction operations.

b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

D. Condition of Existing Grounds: Maintain portions of existing grounds, landscaping, and hardscaping affected by construction operations throughout construction period. Repair damage caused by construction operations.

1.9 WORK RESTRICTIONS

A. Comply with restrictions on construction operations.

1. Comply with limitations on use of public streets, work on public streets, rights of way, and other requirements of authorities having jurisdiction.

B. On-Site Work Hours: Unless otherwise approved by the Darby Township and the Township Engineer, the normal working hours shall be Monday through Friday, exclusive of holidays, 7:00 am to 4:00 pm. Any overtime inspection costs will be reimbursed by the contractor.

1. Weekend Hours: Must be approved by Darby Township and the Township Engineer.

C. Smoking and Controlled Substance Restrictions: Use of tobacco products, alcoholic beverages, and other controlled substances on Project site is not permitted.

1.10 SPECIFICATION AND DRAWING CONVENTIONS

A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:

1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.

B. Division 00 Contracting Requirements: General provisions of the Contract, including General and Supplementary Conditions, apply to all Sections of the Specifications.

C. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.

D. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:

1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

SECTION 012100 - ALLOWANCES

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 governing allowances.

B. Types of allowances include the following:

1. Lump-sum allowances.
2. Unit-cost allowances.
3. Quantity allowances.
4. Contingency allowances.

C. Related Requirements:

1. Section 012200 "Unit Prices" for procedures for using unit prices, including adjustment of quantity allowances when applicable.
2. Section 012600 "Contract Modification Procedures" for procedures for submitting and handling Change Orders.

1.3 DEFINITIONS

A. Allowance: A quantity of work or dollar amount included in the Contract, established in lieu of additional requirements, used to defer selection of actual materials and equipment to a later date when direction will be provided to Contractor. If necessary, additional requirements will be issued by Change Order.

1.4 SELECTION AND PURCHASE

A. At the earliest practical date after award of the Contract, advise Architect of the date when final selection, or purchase and delivery, of each product or system described by an allowance must be completed by the Owner to avoid delaying the Work.

B. At Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.

C. Purchase products and systems selected by Architect from the designated supplier.

1.5 ACTION SUBMITTALS

A. Submit proposals for purchase of products or systems included in allowances in the form specified for Change Orders.

1.6 INFORMATIONAL SUBMITTALS

A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.

B. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.

C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.7 LUMP-SUM ALLOWANCES

A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Architect under allowance and shall include taxes, freight**,** and delivery to Project site.

B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner or selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.

C. Unused Materials: Return unused materials purchased under an allowance to manufacturer or supplier for credit to Owner, after installation has been completed and accepted.

1.8 UNIT-COST ALLOWANCES

A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Architect under allowance and shall include taxes freight, and delivery to Project site.

B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner or selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.

C. Unused Materials: Return unused materials purchased under an allowance to manufacturer or supplier for credit to Owner, after installation has been completed and accepted.

1.9 QUANTITY ALLOWANCES

A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Architect under allowance and shall include taxes, freight, and delivery to Project site.

B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner or selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.

C. Unused Materials: Return unused materials purchased under an allowance to manufacturer or supplier for credit to Owner, after installation has been completed and accepted.

1.10 CONTINGENCY ALLOWANCES

A. Use the contingency allowance only as directed by Architect for Owner's purposes and only by Change Orders that indicate amounts to be charged to the allowance.

B. Contractor's overhead, profit, and related costs for products and equipment ordered by Owner under the contingency allowance are included in the allowance and are not part of the Contract Sum. These costs include delivery, installation, taxes, insurance, equipment rental, and similar costs.

C. Change Orders authorizing use of funds from the contingency allowance will include Contractor's related costs and reasonable overhead and profit.

D. At Project closeout, credit unused amounts remaining in the contingency allowance to Owner by Change Order.

1.11 ADJUSTMENT OF ALLOWANCES

A. Allowance Adjustment: To adjust allowance amounts, prepare a Change Order proposal based on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place where applicable. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, required maintenance materials, and similar margins.

1. Include installation costs in purchase amount only where indicated as part of the allowance.
2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other markups.
3. Submit substantiation of a change in scope of Work, if any, claimed in Change Orders related to unit-cost allowances

4. Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.

B. Submit claims for increased costs due to a change in the scope or nature of the allowance described in the Contract Documents, whether for the purchase order amount or Contractor's handling, labor, installation, overhead, and profit.

1. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of Work has changed from what could have been foreseen from information in the Contract Documents.
2. No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

A. Allowance No. 1: Quantity Allowance: Include 1000 sq. ft. of damaged roof sheathing.

1. Coordinate quantity allowance adjustment with unit-price requirements in Section 012200 "Unit Prices."

END OF SECTION 012100

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.

B. Related Requirements:

1. Section 012100 "Allowances" for procedures for using unit prices to adjust quantity allowances.
2. Section 012600 "Contract Modification Procedures" for procedures for submitting and handling Change Orders.

1.3 DEFINITIONS

A. Unit price is 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, taxes, 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 Part 3 "Schedule of Unit Prices" Article contain requirements for materials described under each unit price.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF UNIT PRICES

Base Bid

Item	Description	Unit	Qty.	Unit Price	Amount
BB.	Scope as described in the Contract Documents.	LS	1	$	$

Add Alternates

Item	Description	Unit	Qty.	Unit Price	Amount
A1.	Installation of new ADA compliant stall transfer shower as described in the Contract Documents.	LS	1	$	$
A2.	Remove and replace existing concrete sidewalk and modify roof drains as described in the Contract Documents.	LS	1	$	$
A3.	Install new switch controlled mechanical exhaust fan unit as described in the Contract Documents.	LS	1	$	$

Add Alternates Total	$
Grand Total	$

END OF SECTION 012200

SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section includes administrative and procedural requirements for alternates.

1.3 DEFINITIONS

A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if the Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.

1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternates into the Work. No other adjustments are made to the Contract Sum.

1.4 PROCEDURES

A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.

1. Include, as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation, whether or not indicated as part of alternate.

B. Execute accepted alternates under the same conditions as other Work of the Contract.

C. Schedule: A Part 3 "Schedule of Alternates" Article is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

A. Base Bid: Complete scope as described and “Base Bid” in the Contract Documents.

B. Add Alternate #1: Base Bid as stated above, and the installation of new ADA compliant stall transfer shower as described in the Contract Documents.

C. Add Alternate #2: Base Bid as stated above and remove and replace existing concrete sidewalk and modify roof drains as described in the Contract Documents.

D. Add Alternate #3: Base Bid as stated above, and installation of a new switch controlled mechanical exhaust fan unit as described in the Contract Documents.

END OF SECTION 01230

SECTION 012500 - SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section includes administrative and procedural requirements for substitutions.

B. Related Requirements:

1. Section 012100 "Allowances" for products selected under an allowance.
2. Section 012300 "Alternates" for products selected under an alternate.

1.3 DEFINITIONS

A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents.

1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
2. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required to meet other Project requirements but may offer advantage to Contractor or Owner.

1.4 ACTION SUBMITTALS

A. Substitution Requests: Submit documentation identifying product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

1. Substitution Request Form: Use CSI form 13.1A or similar.
2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:

a. Statement indicating why specified product or fabrication or installation method cannot be provided, if applicable.
b. Coordination of information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.

c. Detailed comparison of significant qualities of proposed substitutions with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes, such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
e. Samples, where applicable or requested.
f. Certificates and qualification data, where applicable or requested.
g. List of similar installations for completed projects, with project names and addresses as well as names and addresses of architects and owners.
h. Material test reports from a qualified testing agency, indicating and interpreting test results for compliance with requirements indicated.
i. Detailed comparison of Contractor's construction schedule using proposed substitutions with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
j. Cost information, including a proposal of change, if any, in the Contract Sum.
k. Contractor's certification that proposed substitution complies with requirements in the Contract Documents, except as indicated in substitution request, is compatible with related materials and is appropriate for applications indicated.

3. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within fifteen days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.

a. Forms of Acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.
b. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.

1.5 QUALITY ASSURANCE

A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

1.6 PROCEDURES

A. Coordination: Revise or adjust affected work as necessary to integrate work of the approved substitutions.

1.7 SUBSTITUTIONS

A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.

1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:

a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
b. Substitution request is fully documented and properly submitted.
c. Requested substitution will not adversely affect Contractor's construction schedule.
d. Requested substitution has received necessary approvals of authorities having jurisdiction.
e. Requested substitution is compatible with other portions of the Work.
f. Requested substitution has been coordinated with other portions of the Work.
g. Requested substitution provides specified warranty.
h. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

B. Substitutions for Convenience: Architect will consider requests for substitution if received within sixty days after the Notice of Award. Requests received after that time may be considered or rejected at discretion of Architect.

1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:

a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
b. Requested substitution does not require extensive revisions to the Contract Documents.
c. Requested substitution is consistent with the Contract Documents and will produce indicated results.
d. Substitution request is fully documented and properly submitted.
e. Requested substitution will not adversely affect Contractor's construction schedule.
f. Requested substitution has received necessary approvals of authorities having jurisdiction.
g. Requested substitution is compatible with other portions of the Work.
h. Requested substitution has been coordinated with other portions of the Work.
i. Requested substitution provides specified warranty.

j. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012500

SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section includes administrative and procedural requirements for handling and processing Contract modifications.

B. Related Requirements:

1. Section 012500 "Substitution Procedures" for administrative procedures for handling requests for substitutions made after the Contract award.

1.3 MINOR CHANGES IN THE WORK

A. Architect will issue through Construction Manager supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on form included in Project Manual.

1.4 PROPOSAL REQUESTS

A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.

1. Work Change Proposal Requests issued by Architect are not instructions either to stop work in progress or to execute the proposed change.
2. Within 5 days after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.

a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
c. Include costs of labor and supervision directly attributable to the change.
d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish

e. times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
f. Quotation Form: Use sample copies are included in Project Manual.

B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Architect.

1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
4. Include costs of labor and supervision directly attributable to the change.
5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
6. Comply with requirements in Section 012500 "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.
7. Proposal Request Form: Use sample copies are included in Project Manual.

1.5 ADMINISTRATIVE CHANGE ORDERS

A. Allowance Adjustment: See Section 012100 "Allowances" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect actual costs of allowances.

B. Unit-Price Adjustment: See Section 012200 "Unit Prices" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect measured scope of unit-price work.

1.6 CHANGE ORDER PROCEDURES

A. On Owner's approval of a Work Change Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on form included in Project Manual.

1.7 CONSTRUCTION CHANGE DIRECTIVE

A. Construction Change Directive: Architect may issue a Construction Change Directive on form included in Project Manual. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.

1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.

B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.

1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

1.8 WORK CHANGE DIRECTIVE

A. Work Change Directive: Architect may issue a Work Change Directive on form included in Project Manual. Work Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.

1. Work Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.

B. Documentation: Maintain detailed records on a time and material basis of work required by the Work Change Directive.

1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012600

SECTION 012900 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.

B. Related Requirements:

1. Section 012100 "Allowances" for procedural requirements governing the handling and processing of allowances.
2. Section 012200 "Unit Prices" for administrative requirements governing the use of unit prices.
3. Section 012600 "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.

1.3 DEFINITIONS

A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

1.4 SCHEDULE OF VALUES

A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.

1. Coordinate line items in the schedule of values with items required to be indicated as separate activities in Contractor's construction schedule.
2. Submit the schedule of values to Architect at earliest possible date, but no later than seven 7 days before the date scheduled for submittal of initial Applications for Payment.

B. Format and Content: Use Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.

1. Identification: Include the following Project identification on the schedule of values:

a. Project name and location.

b. Owner's name.
c. Owner's Project number.
d. Name of Architect.
e. Architect's Project number.
f. Contractor's name and address.
g. Date of submittal.

2. Arrange schedule of values consistent with format of AIA Document G703.
3. Arrange the schedule of values in tabular form, with separate columns to indicate the following for each item listed:

   a. Related Specification Section or division.
   b. Description of the Work.
   c. Name of subcontractor.
   d. Name of manufacturer or fabricator.
   e. Name of supplier.
   f. Change Orders (numbers) that affect value.
   g. Dollar value of the following, as a percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent. Round dollar amounts to whole dollars, with total equal to Contract Sum.

      1) Labor.
      2) Materials.
      3) Equipment.

4. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Provide multiple line items for principal subcontract amounts in excess of five percent of the Contract Sum.
5. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.

   a. Differentiate between items stored on-site and items stored off-site.

6. Allowances: Provide a separate line item in the schedule of values for each allowance. Show line-item value of unit-cost allowances, as a product of the unit cost, multiplied by measured quantity. Use information indicated in the Contract Documents to determine quantities.
7. Purchase Contracts: Provide a separate line item in the schedule of values for each Purchase contract. Show line-item value of Purchase contract. Indicate Owner payments or deposits, if any, and balance to be paid by Contractor.
8. Overhead Costs, Proportional Distribution: Include total cost and proportionate share of general overhead and profit for each line item.
9. Overhead Costs, Separate Line Items: Show cost of temporary facilities and other major cost items that are not direct cost of actual work-in-place as separate line items.
10. Temporary Facilities: Show cost of temporary facilities and other major cost items that are not direct cost of actual work-in-place as separate line items.
11. Closeout Costs. Include separate line items under Contractor and principal subcontracts for Project closeout requirements in an amount totaling five 5 percent of the Contract Sum and subcontract amount.

12. Schedule of Values Revisions: Revise the schedule of values when Change Orders or Construction Change Directives result in a change in the Contract Sum. Include at least one separate line item for each Change Order and Construction Change Directive.

1.5 APPLICATIONS FOR PAYMENT

A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments, as certified by Architect and paid for by Owner.

B. Payment Application Times: Submit Application for Payment to Architect by the first of the month. The period covered by each Application for Payment is one month, ending on the last day of the month.

1. Submit draft copy of Application for Payment seven 7 days prior to due date for review by Architect.

C. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 as form for Applications for Payment.

D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.

1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
4. Indicate separate amounts for work being carried out under Owner-requested project acceleration.

E. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Differentiate between items stored on-site and items stored off-site.

1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment for stored materials.
2. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
3. Provide summary documentation for stored materials indicating the following:

    a. Value of materials previously stored and remaining stored as of date of previous Applications for Payment.
    b. Value of previously stored materials put in place after date of previous Application for Payment and on or before date of current Application for Payment.
    c. Value of materials stored since date of previous Application for Payment and remaining stored as of date of current Application for Payment.

F. Transmittal: Submit three 3 signed and notarized original copies of each Application for Payment to Architect by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.

1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.

G. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from entities lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.

1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
2. When an application shows completion of an item, submit conditional final or full waivers.
3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
4. Submit final Application for Payment with or preceded by conditional final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.
5. Waiver Forms: Submit executed waivers of lien on forms acceptable to Owner.

H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:

1. List of subcontractors.
2. Schedule of values.
3. Contractor's construction schedule (preliminary if not final).
4. Combined Contractor's construction schedule (preliminary if not final) incorporating Work of multiple contracts, with indication of acceptance of schedule by each Contractor.
5. Products list (preliminary if not final).
6. Sustainable design action plans, including preliminary project materials cost data.
7. Schedule of unit prices.
8. Submittal schedule (preliminary if not final).
9. List of Contractor's staff assignments.
10. List of Contractor's principal consultants.
11. Copies of building permits.
12. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
13. Initial progress report.
14. Report of preconstruction conference.
15. Certificates of insurance and insurance policies.
16. Performance and payment bonds.
17. Data needed to acquire Owner's insurance.

I. Application for Payment at Substantial Completion: After Architect issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.

1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.

a. Complete administrative actions, submittals, and Work preceding this application, as described in Section 017700 "Closeout Procedures."

2. This application shall reflect Certificate(s) of Substantial Completion issued previously for Owner occupancy of designated portions of the Work.

J. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:

1. Evidence of completion of Project closeout requirements.
2. Certification of completion of final punch list items.
3. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
4. Updated final statement, accounting for final changes to the Contract Sum.
5. AIA Document G706.
6. AIA Document G706A.
7. AIA Document G707.
8. Evidence that claims have been settled.
9. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
10. Final liquidated damages settlement statement.
11. Proof that taxes, fees, and similar obligations are paid.
12. Waivers and releases.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012900

SECTION 013516 - ALTERATION PROJECT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes special procedures for alteration work.

1.2 DEFINITIONS

A. Alteration Work: This term includes remodeling, renovation, repair, and maintenance work performed within existing spaces or on existing surfaces as part of the Project.

B. Consolidate: To strengthen loose or deteriorated materials in place.

C. Design Reference Sample: A sample that represents the Architect's prebid selection of work to be matched; it may be existing work or work specially produced for the Project.

D. Dismantle: To remove by disassembling or detaching an item from a surface, using gentle methods and equipment to prevent damage to the item and surfaces; disposing of items unless indicated to be salvaged or reinstalled.

E. Match: To blend with adjacent construction and manifest no apparent difference in material type, species, cut, form, detail, color, grain, texture, or finish; as approved by Architect.

F. Refinish: To remove existing finishes to base material and apply new finish to match original, or as otherwise indicated.

G. Repair: To correct damage and defects, retaining existing materials, features, and finishes. This includes patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading materials.

H. Replace: To remove, duplicate, and reinstall entire item with new material. The original item is the pattern for creating duplicates unless otherwise indicated.

I. Replicate: To reproduce in exact detail, materials, and finish unless otherwise indicated.

J. Reproduce: To fabricate a new item, accurate in detail to the original, and from either the same or a similar material as the original, unless otherwise indicated.

K. Retain: To keep an element or detail secure and intact.

L. Strip: To remove existing finish down to base material unless otherwise indicated.

PART 2 - PRODUCTS - (Not Used)

PART 3 - EXECUTION

3.1 PROTECTION

A. Protect persons, motor vehicles, surrounding surfaces of building, building site, plants, and surrounding buildings from harm resulting from alteration work.

1. Use only proven protection methods, appropriate to each area and surface being protected.
2. Provide temporary barricades, barriers, and directional signage to exclude the public from areas where alteration work is being performed.
3. Erect temporary barriers to form and maintain fire-egress routes.
4. Contain dust and debris generated by alteration work, and prevent it from reaching the public or adjacent surfaces.
5. Provide shoring, bracing, and supports as necessary. Do not overload structural elements.
6. Protect floors and other surfaces along hauling routes from damage, wear, and staining.

B. Utility and Communications Services:

1. Notify Owner, Architect, authorities having jurisdiction, and entities owning or controlling wires, conduits, pipes, and other services affected by alteration work before commencing operations.
2. Maintain existing services unless otherwise indicated; keep in service, and protect against damage during operations. Provide temporary services during interruptions to existing utilities.

C. Existing Drains: Prior to the start of work in an area, test drainage system to ensure that it is functioning properly. Notify Architect immediately of inadequate drainage or blockage. Do not begin work in an area until the drainage system is functioning properly.

1. Prevent solids such as adhesive or mortar residue or other debris from entering the drainage system. Clean out drains and drain lines that become sluggish or blocked by sand or other materials resulting from alteration work.
2. Protect drains from pollutants. Block drains or filter out sediments, allowing only clean water to pass.

3.2 PROTECTION FROM FIRE

A. General: Follow fire-prevention plan and the following:

1. Comply with NFPA 241 requirements unless otherwise indicated.
2. Remove and keep area free of combustibles, including rubbish, paper, waste, and chemicals, unless necessary for the immediate work.

B. Fire-Control Devices: Provide and maintain fire extinguishers, fire blankets, and rag buckets for disposal of rags with combustible liquids. Maintain each as suitable for the type of fire risk in

C. each work area. Ensure that nearby personnel and the fire-watch personnel are trained in fire-extinguisher and blanket use.

3.3 GENERAL ALTERATION WORK

A. Have specialty work performed only by qualified specialists.

B. Ensure that supervisory personnel are present when work begins and during its progress.

C. Record existing work before each procedure (preconstruction), and record progress during the work. Use digital preconstruction documentation photographs.

D. Notify Architect of visible changes in the integrity of material or components whether from environmental causes including biological attack, UV degradation, freezing, or thawing or from structural defects including cracks, movement, or distortion.

1. Do not proceed with the work in question until directed by Architect.

END OF SECTION 013516

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.

B. Related Requirements:

1. Section 011000 "Summary" for work restrictions and limitations on utility interruptions.

1.3 USE CHARGES

A. Installation, removal, and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities engaged in the Project to use temporary services and facilities without cost.

B. Water Service: Owner will pay water-service use charges for water used by all entities for construction operations.

C. Electric Power Service: Owner will pay electric-power-service use charges for electricity used by all entities for construction operations.

1.4 INFORMATIONAL SUBMITTALS

A. Site Utilization Plan: Show temporary facilities, temporary utility lines and connections, staging areas, construction site entrances, vehicle circulation, and parking areas for construction personnel.

1.5 QUALITY ASSURANCE

A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.

B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

PART 2 - PRODUCTS

2.1 EQUIPMENT

A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

PART 3 - EXECUTION

3.1 TEMPORARY FACILITIES, GENERAL

A. Conservation: Coordinate construction and use of temporary facilities with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.

3.2 SUPPORT FACILITIES INSTALLATION

A. Traffic Controls: Comply with requirements of authorities having jurisdiction.

1. Protect existing site improvements to remain, including curbs, pavement, and utilities.
2. Maintain access for fire-fighting equipment and access to fire hydrants.

B. Parking: Use designated areas of Owner's existing parking areas for construction personnel.

C. Storage and Staging: Use designated areas of Project site for storage and staging needs.

D. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction.

E. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.

1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.

3.3 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.

B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.

1. Comply with work restrictions specified in Section 011000 "Summary."

C. Stormwater Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.

D. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.

E. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241; manage fire-prevention program.

1. Prohibit smoking in construction areas. Comply with additional limits on smoking specified in other Sections.
2. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.

3.4 MOISTURE AND MOLD CONTROL

A. Contractor shall protect the existing building interior from exposure to weather.

3.5 OPERATION, TERMINATION, AND REMOVAL

A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.

B. Maintenance: Maintain facilities in good operating condition until removal.

C. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
2. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period.

END OF SECTION 015000

SECTION 017300 - EXECUTION

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes general administrative and procedural requirements governing execution of the Work, including, but not limited to, the following:
   1. Installation of the Work.
   2. Cutting and patching.
   3. Progress cleaning.
   4. Starting and adjusting.
   5. Protection of installed construction.
   6. Correction of the Work.

B. Related Requirements:

   1. Section 011000 "Summary" for coordination and limits on use of Project site.
   2. Section 017700 "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, replacing defective work, and final cleaning.

1.2 DEFINITIONS

A. Cutting: Removal of in-place construction necessary to permit installation or performance of subsequent work.

B. Patching: Fitting and repair work required to restore construction to original conditions after installation of subsequent work.

1.3 QUALITY ASSURANCE

A. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.

   1. Other Construction Elements: Do not cut and patch other construction elements or components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety. Other construction elements include but are not limited to the following:

      a. Water, moisture, or vapor barriers.
      b. Membranes and flashings.
      c. Exterior curtain-wall construction.
      d. Sprayed fire-resistive material.
      e. Equipment supports.
      f. Piping, ductwork, vessels, and equipment.

g. Noise- and vibration-control elements and systems.

2. Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

B. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of specified products and equipment.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Comply with requirements specified in other Sections.

1. For projects requiring compliance with sustainable design and construction practices and procedures, use products for patching that comply with sustainable design requirements.

B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.

1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to Architect for the visual and functional performance of in-place materials. Use materials that are not considered hazardous.

C. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

1. Use cleaning products that comply with Green Seal's GS-37, or if GS-37 is not applicable, use products that comply with the California Code of Regulations maximum allowable VOC levels.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.

B. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

A. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Architect.

3.3 CONSTRUCTION LAYOUT

A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings. If discrepancies are discovered, notify Architect promptly.

3.4 INSTALLATION

A. Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.

1. Make vertical work plumb, and make horizontal work level.
2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.

B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.

C. Install products at the time and under conditions that will ensure satisfactory results as judged by Architect. Maintain conditions required for product performance until Substantial Completion.

D. Conduct construction operations, so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy of type expected for Project.

E. Sequence the Work and allow adequate clearances to accommodate movement of construction items on-site and placement in permanent locations.

F. Tools and Equipment: Select tools or equipment that minimize production of excessive noise levels.

G. Templates: Obtain and distribute to the parties involved templates for Work specified to be factory prepared and field installed. Check Shop Drawings of other portions of the Work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.

H. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions with manufacturer.

1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
2. Allow for building movement, including thermal expansion and contraction.

3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

I. Joints: Make joints of uniform width. Where joint locations in exposed Work are not indicated, arrange joints for the best visual effect, as judged by Architect. Fit exposed connections together to form hairline joints.

3.5 CUTTING AND PATCHING

A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.

1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.

B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.

C. Temporary Support: Provide temporary support of Work to be cut.

D. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.

E. Adjacent Occupied Areas: Where interference with use of adjoining areas or interruption of free passage to adjoining areas is unavoidable, coordinate cutting and patching in accordance with requirements in Section 011000 "Summary."

F. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.

1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
3. Proceed with patching after construction operations requiring cutting are complete.

G. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as practicable, as judged by Architect. Provide materials and comply with installation requirements specified in other Sections, where applicable.

1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.

2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.

    a. Clean piping, conduit, and similar features before applying paint or other finishing materials.
    b. Restore damaged pipe covering to its original condition.

3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.

    a. Where patching occurs in a painted surface, prepare substrate and apply primer and intermediate paint coats appropriate for substrate over the patch, and apply final paint coat over entire unbroken surface containing the patch, corner to corner of wall and edge to edge of ceiling. Provide additional coats until patch blends with adjacent surfaces.

4. Ceilings: Patch, repair, or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.
5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition and ensures thermal and moisture integrity of building enclosure.

H. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

3.6 PROGRESS CLEANING

A. Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.

1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
2. Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F.
3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.

    a. Use containers intended for holding waste materials of type to be stored.

4. Coordinate progress cleaning for joint-use areas where Contractor and other contractors are working concurrently.

B. Site: Maintain Project site free of waste materials and debris.

C. Work Areas: Clean areas where Work is in progress to the level of cleanliness necessary for proper execution of the Work.

1. Remove liquid spills promptly.

2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.

D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.

E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.

F. Exposed Surfaces: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

G. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways.

H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.

I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

J. Limiting Exposures: Supervise construction operations to ensure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.7 PROTECTION OF INSTALLED CONSTRUCTION

A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

B. Protection of Existing Items: Provide protection and ensure that existing items to remain undisturbed by construction are maintained in condition that existed at commencement of the Work.

C. Comply with manufacturer's written instructions for temperature and relative humidity.

3.8 CORRECTION OF THE WORK

A. Repair or remove and replace damaged, defective, or nonconforming Work. Restore damaged substrates and finishes.

1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.

B. Repair Work previously completed and subsequently damaged during construction period. Repair to like-new condition.

C. Restore permanent facilities used during construction to their specified condition.

D. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.

E. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.

F. Remove and replace chipped, scratched, and broken glass or reflective surfaces.

END OF SECTION 017300

SECTION 017700 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section includes administrative and procedural requirements for Contract closeout, including, but not limited to, the following:

1. Substantial Completion procedures.
2. Final completion procedures.
3. Warranties.
4. Final cleaning.

B. Related Requirements:

1. Section 012900 "Payment Procedures" for requirements for Applications for Payment for Substantial Completion and Final Completion.

1.3 DEFINITIONS

A. List of Incomplete Items: Contractor-prepared list of items to be completed or corrected, prepared for the Architect's use prior to Architect's inspection, to determine if the Work is substantially complete.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of cleaning agent.

B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.

C. Certified List of Incomplete Items: Final submittal at Final Completion.

1.5 CLOSEOUT SUBMITTALS

A. Certificates of Release: From authorities having jurisdiction.

B. Certificate of Insurance: For continuing coverage.

1.6 MAINTENANCE MATERIAL SUBMITTALS

A. Schedule of Maintenance Material Items: For maintenance material submittal items required by other Sections.

1.7 SUBSTANTIAL COMPLETION PROCEDURES

A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's "punch list"), indicating the value of each item on the list and reasons why the Work is incomplete.

B. Submittals Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.

1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction, permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
2. Submit closeout submittals specified in other Division 01 Sections, including Project Record Documents, operation and maintenance manuals, damage or settlement surveys, property surveys, and similar final record information.
3. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
4. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Architect. Label with manufacturer's name and model number.

C. Procedures Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
1. Participate with Owner in conducting inspection and walkthrough with local emergency responders.
2. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
3. Complete final cleaning requirements.
4. Touch up paint and otherwise repair and restore marred exposed finishes to eliminate visual defects.

D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of 10 days prior to date the Work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.

1. Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

2. Results of completed inspection will form the basis of requirements for Final Completion.

1.8 FINAL COMPLETION PROCEDURES

A. Submittals Prior to Final Completion: Before requesting final inspection for determining Final Completion, complete the following:

1. Submit a final Application for Payment in accordance with Section 012900 "Payment Procedures."
2. Certified List of Incomplete Items: Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
4. Submit Final Completion photographic documentation.

B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 10 days prior to date the Work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

1. Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.9 LIST OF INCOMPLETE ITEMS

A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.

1. Organize list of spaces in sequential order, listed by room or space number.
2. Organize items applying to each space by major element, including categories for ceilings, individual walls, floors, equipment, and building systems.
3. Include the following information at the top of each page:

    a. Project name.
    b. Date.
    c. Name of Architect.
    d. Name of Contractor.
    e. Page number.

4. Submit list of incomplete items in the following format:

    a. MS Excel Electronic File: Architect will return annotated file.
    b. PDF Electronic File: Architect will return annotated file.
    c. Web-Based Project Software Upload: Utilize software feature for creating and updating list of incomplete items (punch list).

d. Three Paper Copies: Architect will return two copies.

1.10 SUBMITTAL OF PROJECT WARRANTIES

A. Time of Submittal: Submit written warranties on request of Architect for designated portions of the Work where warranties are indicated to commence on dates other than date of Substantial Completion, or when delay in submittal of warranties might limit Owner's rights under warranty.

B. Partial Occupancy: Submit properly executed warranties within 15 days of completion of designated portions of the Work that are completed and occupied or used by Owner during construction period by separate agreement with Contractor.

C. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.

D. Warranty Electronic File: Provide warranties and bonds in PDF format. Assemble complete warranty and bond submittal package into a single electronic PDF file with bookmarks enabling navigation to each item. Provide bookmarked table of contents at beginning of document.

E. Warranties in Paper Form:

1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

1. Use cleaning products that comply with Green Seal's GS-37, or if GS-37 is not applicable, use products that comply with the California Code of Regulations maximum allowable VOC levels.

PART 3 - EXECUTION

3.1 FINAL CLEANING

A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.

B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.

1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:

    a. Clean Project site of rubbish, waste material, litter, and other foreign substances.
    b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
    c. Rake grounds that are not planted, mulched, or paved to a smooth, even-textured surface.
    d. Use a magnet or similar method to ensure no fasteners are present in and around the Project site.
    e. Remove tools, construction equipment, machinery, and surplus material from Project site.
    f. Leave Project clean and ready for occupancy.

C. Construction Waste Disposal: Comply with waste-disposal requirements.

3.2 REPAIR OF THE WORK

A. Complete repair and restoration operations required by Section 017300 "Execution" before requesting inspection for determination of Substantial Completion.

END OF SECTION 017700

SECTION 092900 - GYPSUM BOARD

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Interior gypsum board.

1.2 ACTION SUBMITTALS

A. Product Data: For the following:

1. Gypsum wallboard.

1.3 DELIVERY, STORAGE AND HANDLING

A. Store materials inside under cover and keep them dry and protected against weather, condensation, direct sunlight, construction traffic, and other potential causes of damage. Stack panels flat and supported on risers on a flat platform to prevent sagging.

1.4 FIELD CONDITIONS

A. Environmental Limitations: Comply with ASTM C840 requirements or gypsum board manufacturer's written instructions, whichever are more stringent.

B. Do not install paper-faced gypsum panels until installation areas are enclosed and conditioned.

C. Do not install panels that are wet, moisture damaged, and mold damaged.

1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

PART 2 - PRODUCTS

2.1 SOURCE LIMITATIONS

A. Obtain each type of gypsum panel and joint finishing material from single source with resources to provide products of consistent quality in appearance and physical properties.

2.2 PERFORMANCE REQUIREMENTS

A. Fire-Resistance-Rated Assemblies: For fire-resistance-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E119 by an independent testing agency.

2.3 GYPSUM BOARD, GENERAL

A. Size: Provide maximum lengths and widths available that will minimize joints in each area and that correspond with support system indicated.

2.4 INTERIOR GYPSUM BOARD

A. Gypsum Wallboard: ASTM C1396/C1396M.
   1. Thickness: 5/8 inch; match existing.
   2. Long Edges: Tapered.

B. Gypsum Ceiling Board: ASTM C1396/C1396M.
   1. Thickness: 1/2 inch.
   2. Long Edges: Tapered.

C. Interior Trim: ASTM C1047.

   1. Material: Galvanized or aluminum-coated steel sheet.
   2. Shapes:

      a. Cornerbead.
      b. Bullnose bead.
      c. LC-Bead: J-shaped; exposed long flange receives joint compound.
      d. L-Bead: L-shaped; exposed long flange receives joint compound.
      e. U-Bead: J-shaped; exposed short flange does not receive joint compound.
      f. Expansion (control) joint.
      g. Curved-Edge Cornerbead: With notched or flexible flanges.

2.5 JOINT TREATMENT MATERIALS

A. General: Comply with ASTM C475/C475M.

B. Joint Tape:

   1. Interior Gypsum Board: Paper.
   2. Exterior Gypsum Soffit Board: Paper.
   3. Glass-Mat Gypsum Sheathing Board: 10-by-10 glass mesh.
   4. Tile Backing Panels: As recommended by panel manufacturer.

C. Joint Compound for Interior Gypsum Board: For each coat, use formulation that is compatible with other compounds applied on previous or for successive coats.

1. Prefilling: At open joints, beveled panel edges, and damaged surface areas, use setting-type taping compound.
2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use all-purpose compound.

    a. Use setting-type compound for installing paper-faced metal trim accessories.

3. Fill Coat: For second coat, use all-purpose compound.
4. Finish Coat: For third coat, use all-purpose compound.

2.6 AUXILIARY MATERIALS

A. Provide auxiliary materials that comply with referenced installation standards and manufacturer's written instructions.

B. Steel Drill Screws: ASTM C1002 unless otherwise indicated.

1. Use screws complying with ASTM C954 for fastening panels to steel members from 0.033 to 0.112 inch thick.

C. Sound-Attenuation Blankets: ASTM C665, Type I (blankets without membrane facing) produced by combining thermosetting resins with mineral fibers manufactured from glass, slag wool, or rock wool.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and substrates including welded hollow-metal frames and support framing, with Installer present, for compliance with requirements and other conditions affecting performance of the Work.

B. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION AND FINISHING OF PANELS, GENERAL

A. Comply with ASTM C840.

B. Install ceiling panels across framing to minimize the number of abutting end joints and to avoid abutting end joints in central area of each ceiling. Stagger abutting end joints of adjacent panels not less than one framing member.

C. Install panels with face side out. Butt panels together for a light contact at edges and ends with not more than 1/16 inch of open space between panels. Do not force into place.

D. Locate edge and end joints over supports, except in ceiling applications where intermediate supports or gypsum board back-blocking is provided behind end joints. Do not place tapered edges against cut edges or ends. Stagger vertical joints on opposite sides of partitions. Do not make joints other than control joints at corners of framed openings.

E. Form control and expansion joints with space between edges of adjoining gypsum panels.

F. Cover both faces of support framing with gypsum panels in concealed spaces (above ceilings, etc.), except in chases braced internally.

1. Unless concealed application is indicated or required for sound, fire, air, or smoke ratings, coverage may be accomplished with scraps of not less than 8 sq. ft. in area.
2. Fit gypsum panels around ducts, pipes, and conduits.

G. Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments. Provide 1/4-inch-wide spaces at these locations and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.

H. Attachment to Steel Framing: Attach panels so leading edge or end of each panel is attached to open (unsupported) edges of stud flanges first.

I. Wood Framing: Install gypsum panels over wood framing, with floating internal corner construction. Do not attach gypsum panels across the flat grain of wide-dimension lumber, including floor joists and headers. Float gypsum panels over these members or provide control joints to counteract wood shrinkage.

J. STC-Rated Assemblies: Seal construction at perimeters, behind control joints, and at openings and penetrations with a continuous bead of acoustical sealant. Install acoustical sealant at both faces of partitions at perimeters and through penetrations. Comply with ASTM C919 and with manufacturer's written instructions for locating edge trim and closing off sound-flanking paths around or through assemblies, including sealing partitions above acoustical ceilings.

K. Install sound attenuation blankets before installing gypsum panels unless blankets are readily installed after panels have been installed on one side.

3.3 INSTALLATION OF INTERIOR GYPSUM BOARD

A. Install interior gypsum board in the following locations:

1. Wallboard Type: As indicated on Drawings.
2. Ceiling Type: As indicated on Drawings.

B. Single-Layer Application:

1. On ceilings, apply gypsum panels before wall/partition board application to greatest extent possible and at right angles to framing unless otherwise indicated.
2. On partitions/walls, apply gypsum panels horizontally (perpendicular to framing) unless otherwise indicated or required by fire-resistance-rated assembly, and minimize end joints.
    a. Stagger abutting end joints not less than one framing member in alternate courses of panels.
3. Fastening Methods: Apply gypsum panels to supports with steel drill screws.

3.4 FINISHING OF GYPSUM BOARD

A. General: Treat gypsum board joints, interior angles, edge trim, control joints, penetrations, fastener heads, surface defects, and elsewhere as required to prepare gypsum board surfaces for decoration. Promptly remove residual joint compound from adjacent surfaces.

B. Prefill open joints, beveled edges, and damaged surface areas.

C. Apply joint tape over gypsum board joints, except for trim products specifically indicated as not intended to receive tape.

D. Gypsum Board Finish Levels: Finish panels to levels indicated below and according to ASTM C840:
1. Level 4: Throughout.
    a. Primer and its application to surfaces are specified in Section 099123 "Interior Painting."

3.5 PROTECTION

A. Protect adjacent surfaces from drywall compound and promptly remove from floors and other non-drywall surfaces. Repair surfaces stained, marred, or otherwise damaged during drywall application.

B. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.

C. Remove and replace panels that are wet, moisture damaged, and mold damaged.
1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

END OF SECTION 092900

SECTION 095123 - ACOUSTICAL TILE CEILINGS

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. Acoustical tiles for ceilings.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Samples for Verification: For each component indicated and for each exposed finish required, prepared on Samples of size indicated below.

1. Acoustical Tile: Provide cut sheet or full-size samples of each type, color, pattern, and texture.

1.4 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Acoustical Ceiling Units: Full-size tiles equal to 2 percent of quantity installed.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver acoustical tiles to Project site in original, unopened packages and store them in a fully enclosed, conditioned space where they will be protected against damage from moisture, humidity, temperature extremes, direct sunlight, surface contamination, and other causes.

B. Before installing acoustical tiles, permit them to reach room temperature and a stabilized moisture content.

C. Handle acoustical tiles carefully to avoid chipping edges or damaging units in any way.

1.6 FIELD CONDITIONS

A. Environmental Limitations: Do not install acoustical tile ceilings until spaces are enclosed and weatherproof, wet work in spaces is complete and dry, work above ceilings is complete, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

1. Pressurized Plenums: Operate ventilation system for not less than 48 hours before beginning acoustical tile ceiling installation.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Seismic Performance: Acoustical ceiling shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.

B. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

1. Flame-Spread Index: Comply with ASTM E 1264 for Class A materials.
2. Smoke-Developed Index: 50 or less.

2.2 ACOUSTICAL TILES, GENERAL

A. Low-Emitting Materials: Acoustical tile ceilings 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."

B. Source Limitations:

1. Acoustical Ceiling Tile: Obtain each type from single source from single manufacturer.

C. Source Limitations: Obtain each type of acoustical ceiling tile from single source from single manufacturer.

D. Acoustical Tile Standard: Provide manufacturer's standard tiles of configuration indicated that comply with ASTM E 1264 classifications as designated by types, patterns, acoustical ratings, and light reflectance’s unless otherwise indicated.

E. Acoustical Tile Colors and Patterns: Match appearance characteristics indicated for each product type.

1. Where appearance characteristics of acoustical tiles are indicated by referencing pattern designations in ASTM E 1264 and not manufacturers' proprietary product designations, provide products selected by Architect from each manufacturer's full range that comply

2. with requirements indicated for type, pattern, color, light reflectance, acoustical performance, edge detail, and size.

2.3 ACOUSTICAL TILES

A. Basis-of-Design Product: Subject to compliance with requirements, provide comparable product by one of the following:

1. Armstrong World Industries, Inc.
2. CertainTeed Corp.
3. USG Interiors, Inc.; Subsidiary of USG Corporation.

B. Classification: Provide tiles complying with ASTM E 1264 for type, form, and pattern as follows:

1. Type and Form: Type A, Form A1.2, Pattern D, Fire Class A.

C. Color: White

D. Edge/Joint Detail: Tegular

E. Thickness: 15/16”

F. Modular Size: 24”x48”

G. Broad Spectrum Antimicrobial Fungicide and Bactericide Treatment: Provide acoustical tiles treated with manufacturer's standard antimicrobial formulation that inhibits fungus, mold, mildew, and gram-positive and gram-negative bacteria and showing no mold, mildew, or bacterial growth when tested according to ASTM D 3273 and evaluated according to ASTM D 3274 or ASTM G 21.Insert other field quality-control procedures required for Project.

2.4 CLEANING

A. Clean exposed surfaces of acoustical tile ceilings, including trim and edge moldings. Comply with manufacturer's written instructions for cleaning and touchup of minor finish damage. Remove and replace tiles and other ceiling components that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

END OF SECTION 095123

SECTION 096500

Resilient Tile Flooring

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:

1. Flooring and accessories as shown on the drawings and schedules and as indicated by the requirements of this section.

B. Related Documents

1. Drawings and General Provisions of the Contract (including General and Supplementary Conditions and Division 1 sections) apply to the work of this section.

C. Related Sections:

1. Other Division 9 sections for floor finishes related to this section but not the work of this section

2. Division 3 Concrete; not the work of this section

3. Division 6 Wood and Plastics; not the work of this section

4. Division 7 Thermal and Moisture Protection; not the work of this section

1.02 REFERENCES

A. Armstrong Flooring Technical Manuals
Armstrong Flooring Guaranteed Installation Systems instructions.

B. ASTM International:

1. ASTM E 648 Standard Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source

2. ASTM E 662 Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials

3. ASTM F 710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring

4. ASTM F 1482, Standard Guide to Wood Underlayment Products Available for Use Under Resilient Flooring

5. ASTM F 1700 Standard Specification for Solid Vinyl Tile

6. ASTM F 1861 Standard Specification for Resilient Wall Base

7. ASTM F 1869 Standard Test Method for Measuring Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride

8. ASTM F 2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes

1.03 SYSTEM DESCRIPTION

A. Performance Requirements: Provide flooring which has been manufactured, fabricated, and installed to performance criteria certified by manufacturer without defects, damage, or failure.

B. Administrative Requirements

1. Pre-installation Meeting: Conduct an on-site pre-installation meeting to verify project requirements, substrate conditions, manufacturer's installation instructions and manufacturer's warranty requirements. Comply with Division 1 Project Management and Coordination (Project Meetings) Section.

2. Pre-installation Testing: Conduct pre-installation testing as follows: [Specify testing (i.e., moisture tests, bond test, pH test, etc.).]

C. Test Installations/ Mock-ups: Install at the project site a job mock-up using acceptable products and manufacturer approved installation methods, including concrete substrate testing. Obtain Owner's and Consultant's acceptance of finish color, texture and pattern, and workmanship standards.

1. Mock-Up Size: [Specify mock-up size].

2. Maintenance: Maintain mock-up during construction for workmanship comparison; remove and legally dispose of mock-up when no longer required.

3. Incorporation: Mock-up may be incorporated into the final construction with Owner's approval.

D. Sequencing and Scheduling

1. Install flooring and accessories after the other finishing operations, including painting, have been completed. Close spaces to traffic during the installation of the flooring.

2. Do not install flooring over concrete slabs until they are sufficiently dry to achieve a bond with the adhesive, in accordance with the manufacturer's recommended bond, moisture tests and pH test.

1.04 SUBMITTALS

A. Submit shop drawings, seaming plan, coving details, and manufacturer's technical data, installation, and maintenance instructions (latest edition of Armstrong Flooring Guaranteed Installation Systems instructions for flooring and accessories.

B. Submit the manufacturer's standard samples showing the required colors for flooring and applicable accessories.

C. Submit Safety Data Sheets (SDS) available for adhesives, moisture mitigation systems, primers, patching/leveling compounds, floor finishes (polishes) and cleaning agents and Material Information Sheets for flooring products.

D. If required, submit the manufacturer's certification that the flooring has been tested by an independent laboratory and complies with the required fire tests.

E. Closeout Submittals: Submit the following:

1. Operation and Maintenance Data: Operation and maintenance data for installed products in accordance with Division 1 Closeout Submittals (Maintenance Data and Operation Data) Section. Include methods for maintaining installed products, and

2. precautions against cleaning materials and methods detrimental to finishes and performance.

3. Warranty: Warranty documents specified herein.

1.05 QUALITY ASSURANCE

A. Single-Source Responsibility: provide types of flooring and accessories supplied by one manufacturer, including moisture mitigation systems, primers, leveling and patching compounds, and adhesives.

B. Select an installer who is experienced and competent in the installation of Armstrong resilient solid vinyl tile flooring and the use of Armstrong Flooring subfloor preparation products.

1. Engage installers certified as Armstrong Commercial Flooring Certified Installers

2. Confirm installer's certification by requesting their credentials

C. Fire Performance Characteristics: Provide resilient tile flooring with the following fire performance characteristics as determined by testing material in accordance with ASTM test methods indicated below by a certified testing laboratory or other testing agency acceptable to authorities having jurisdiction:

1. ASTM E 648 (NFPA 253) Critical Radiant Flux of 0.45 watts per sq. cm. or greater, Class I

2. ASTM E 662 (NFPA 258) (Smoke Generation) Maximum Specific Optical Density of 450 or less

3. CAN/ULC-S102.2 – Flame Spread Rating and Smoke Developed – Results as tested

1.06 DELIVERY, STORAGE AND HANDLING

A. Comply with Division 1 Product Requirements Sections.

B. Comply with manufacturer's ordering instructions and lead time requirements to avoid construction delays.

C. Deliver materials in good condition to the jobsite in the manufacturer's original unopened containers that bear the name and brand of the manufacturer, project identification, and shipping and handling instructions.

D. Store materials in a clean, dry, enclosed space off the ground, protected from harmful weather conditions and at temperature and humidity conditions recommended by the manufacturer. Protect adhesives from freezing. Store flooring, adhesives, and accessories in the spaces where they will be installed for at least 48 hours before beginning installation.

1.07 PROJECT CONDITIONS

A. Maintain a minimum temperature in the spaces to receive the flooring and accessories of 65ºF (18ºC) and a maximum temperature of 85ºF (29ºC) for at least 48 hours before, during, and for not less than 48 hours after installation. Thereafter, maintain a minimum temperature of 55ºF (13ºC) in areas where work is completed. Protect all materials from the direct flow of heat from hot-air registers, radiators, or other heating fixtures and appliances. Refer to the Armstrong Flooring Guaranteed Installations Systems instructions for a complete guide on project conditions.

1.08 LIMITED WARRANTY

A. Resilient Flooring: Submit a written warranty executed by the manufacturer, agreeing to repair or replace resilient flooring that fails within the warranty period.

B. Limited Warranty Period: 20 years for Coalesce™ Luxury Flooring.

C. The Limited Warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under the requirements of the Contract Documents.

D. For the Limited Warranty to be valid, this product is required to be installed using the appropriate Armstrong Flooring Guaranteed Installation System. Product installed not using the specific instructions from the Guaranteed Installation System will void the warranty.

1.09 EXTENDED SYSTEM LIMITED WARRANTY

A. Resilient Flooring System: Submit a written warranty executed by the manufacturer, agreeing to repair or replace system (subfloor preparation products, adhesive, and floor covering) that fails within the warranty period.

B. Limited Warranty Period: 10 years on top of the Resilient Flooring Limited Warranty.

C. [S-463 Level Strong™ cement based self-leveling compound] [S-466 Patch Strong™ flexible patching and smoothing compound] [S-464 Prime Strong™ acrylic primer for porous substrates] [S-465 NP Prime Strong™ acrylic primer for non-porous substrates] [S-462 Seal Strong™ two-part moisture mitigation system].

D. The installation of an Armstrong Flooring product along with the recommended Armstrong Flooring adhesive, as well as any one of the Strong System subfloor preparation products listed above, provides 10 additional years of limited warranty coverage. The Strong System limited warranty covers the installation integrity for the length of the flooring product warranty plus 10 years. To qualify for the Strong System Warranty, any subfloor preparation product needed for an installation must be an Armstrong Flooring product.

E. For the System Limited Warranty to be valid, this product is required to be installed using the appropriate Armstrong Flooring Guaranteed Installation System. Product installed not using the specific instructions from the Guaranteed Installation System will void the warranty.

F. When Armstrong Flooring Strong System subfloor preparation products are used with other manufacturers' floor coverings, adhesives, or other subfloor preparation products, Armstrong Flooring warrants our products to be free from manufacturing defects from the date of purchase through the limited warranty period of 15 years.

1.10 MAINTENANCE

A. Extra Materials: Deliver extra materials to Owner. Furnish extra materials from same production run as products installed. Packaged with protective covering for storage and identified with appropriate labels.

1. Quantity: Furnish quantity of flooring units equal to 5% of amount installed.

2. Delivery, Storage and Protection: Comply with Owner's requirements for delivery, storage, and protection of extra material.

PART 2 - PRODUCTS

2.01 MANUFACTURER

A. Resilient tile flooring, wall base, adhesives and subfloor preparation products and accessories:

1. Armstrong Flooring Inc., 1770 Hempstead Road, Lancaster, PA 17605, armstrongflooring.com/commercial.

2. Manufacturer must have a headquarters in the United States of America.

2.02 RESILIENT TILE FLOORING MATERIALS

A. Provide Coalesce™ Luxury Flooring manufactured by Armstrong Flooring Inc.

1. Description: A layered construction consisting of a tough, clear, rigid vinyl wear layer protecting a high-fidelity print layer on a solid vinyl backing. Protected by a diamond-infused UV-cured polyurethane finish, the wear surface is embossed with different textures to enhance each of the printed visuals. Colors are insoluble in water and resistant to cleaning agents and light.

2. Reference specification - ASTM F 1700, “Standard Specification for Solid Vinyl Tile", Class III, Type B – Embossed Surface. Meets requirements for size, squareness, thickness, thickness of wear layer, residual indentation, resistance to chemicals, resistance to light and resistance to heat.

3. Pattern and Color: in [%COLOR%] [color selected from the range currently available from Armstrong Flooring Inc.].

4. Size: [18 in. x 36 in. (457 mm x 914 mm)] [6 in. x 36 in. (152 mm x 914 mm)] [18 in. x 18 in. (457 mm x 457 mm)].

5. Wear layer thickness: 0.020 in. (0.5 mm).

6. Thickness: 0.100 in. (2.5 mm).

2.03 PRODUCT SUBSTITUTION

A. Substitutions: No substitutions permitted because of the specific attributes listed in Section 2.02.

2.04 WALL BASE MATERIALS

A. For top set wall base: [Provide 1/8 in. (3.18 mm) thick, 4 in. (10.16 cm) high Armstrong Flooring Wall Base with a matte finish, conforming to ASTM F 1861, Type TP - Rubber, Thermoplastic, Group 1 - Solid, Style B – Cove.] [Provide 1/4 in. (6.35 mm) thick, 4.5 in. (11.43 cm) high Armstrong Flooring Color-Integrated Wall Base with a matte finish, conforming to ASTM F 1861, Type TP - Rubber, Thermoplastic, Group 1 - Solid, Style A – Straight.

2.05 ADHESIVES

A. Provide Armstrong S-995 Flooring Adhesive under the flooring and Armstrong S-725 Wall Base Adhesive at the wall base as recommended by the flooring manufacturer.

B. [Provide Armstrong S-319 Adhesive for field areas and S-725 Wall Base Adhesive at the wall base as recommended by the flooring manufacturer].

C. [Provide Armstrong S-1000 Flooring Adhesive under the flooring and Armstrong S-725 Wall Base Adhesive at the wall base as recommended by the flooring manufacturer].

2.06 ACCESSORIES

A. For patching, smoothing, and leveling monolithic subfloors (concrete, terrazzo, quarry tile, ceramic tile, and certain metals), provide Armstrong [S-194 Cement-Based Patch, Underlayment and Embossing Leveler / S-195 Underlayment Additive] [S-463 Level Strong™ cement based self-leveling compound] [S-466 Patch Strong™ flexible patching and smoothing compound].

B. [For priming porous substrates to aid in adhesive bond strength and reducing subfloor porosity, provide S-464 Prime Strong™ acrylic primer for porous substrates. For non-porous substrates, provide S-465 NP Prime Strong™ acrylic primer for non-porous substrates].

C. [For creating a moisture barrier, provide S-462 Seal Strong™ two-part moisture mitigation system].

D. For sealing joints between the top of wall base or integral cove cap and irregular wall surfaces such as masonry, provide plastic filler applied according to the manufacturer's recommendations.

E. Provide transition/reducing strips tapered to meet abutting materials.

F. Provide threshold of thickness and width as shown on the drawings.

G. Provide resilient edge strips of width shown on the drawings, of equal gauge to the flooring, homogeneous vinyl, or rubber composition, tapered or bullnose edge, with color to match or contrast with the flooring, or as selected by the Architect from standard colors available.

H. Provide metal edge strips of width shown on the drawings and of required thickness to protect exposed edges of the flooring. Provide units of maximum available length to minimize the number of joints. Use butt-type metal edge strips for concealed anchorage or overlap-type metal edge strips for exposed anchorage. Unless otherwise shown, provide strips made of extruded aluminum with a mill finish.

PART 3 - EXECUTION

3.01 MANUFACTURER'S INSTRUCTIONS

A. Compliance: Comply with manufacturer's product data, including technical bulletins, product catalog, installation instructions, and product carton instructions for installation and maintenance procedures as needed.

3.02 EXAMINATION

A. Site Verification of Conditions: Verify substrate conditions (which have been previously installed under other sections) are acceptable for product installation in accordance with manufacturer's instructions (i.e., moisture tests, bond test, pH test, etc.).

B. Visually inspect flooring materials, adhesives, and accessories prior to installation. Flooring material with visual defects shall not be installed and shall not be considered as a legitimate claim.

C. Examine subfloors prior to installation to determine that surfaces are smooth and free from cracks, holes, ridges, and other defects that might prevent adhesive bond or impair durability or appearance of the flooring material.

D. Inspect subfloors prior to installation to determine that surfaces are free from curing, sealing, parting and hardening compounds; residual adhesives; adhesive removers; and other foreign materials that might prevent adhesive bond. Visually inspect for evidence of moisture, alkaline salts, carbonation, dusting, mold, or mildew.

E. Report conditions contrary to contract requirements that would prevent a proper installation. Do not proceed with the installation until unsatisfactory conditions have been corrected.

F. Failure to call attention to defects or imperfections will be construed as acceptance and approval of the subfloor. Installation indicates acceptance of substrates with regard to conditions existing at the time of installation.

3.03 PREPARATION

A. [Subfloor Preparation: Smooth concrete surfaces, removing rough areas, projections, ridges, and bumps, and filling low spots, control or construction joints, and other defects with Armstrong Flooring [S-184 Fast-Setting Cement-Based Patch and Underlayment][S-194 Cement-Based Patch, Underlayment and Embossing Leveler / S-195 Underlayment Additive] [S-463 Level Strong™ cement based self-leveling compound] [S-466 Patch Strong™ flexible patching and smoothing compound] [S-464 Prime Strong™ acrylic primer for porous substrates] [S-465 NP Prime Strong™ acrylic primer for non-porous substrates] as recommended by the flooring manufacturer. Refer to Armstrong Flooring Guaranteed Installation Systems instructions and ASTM F 710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring for additional information on subfloor preparation.].

B. [Subfloor Preparation Moisture Mitigation: Smooth concrete surfaces, removing rough areas, projections, ridges, and bumps, and filling low spots, control or construction joints, mitigate moisture and other defects with Armstrong Flooring [S-194 Cement-Based Patch, Underlayment and Embossing Leveler / S-195 Underlayment Additive] [S-463 Level Strong™ cement based self-leveling compound] [S-466 Patch Strong™ flexible patching and smoothing compound] [S-462 Seal Strong™ two-part moisture mitigation system] [S-464 Prime Strong™ acrylic primer for porous substrates] [S-465 NP Prime Strong™ acrylic primer for non-porous substrates] as recommended by the flooring manufacturer. Refer to Armstrong Flooring Guaranteed Installation Systems instructions and ASTM F 710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring for additional information on subfloor preparation.].

C. Subfloor Cleaning: The surface shall be free of dust, solvents, varnish, paint, wax, oil, grease, sealers, release agents, curing compounds, residual adhesive, adhesive removers, and other foreign materials that might affect the adhesion of resilient flooring to the concrete or cause a discoloration of the flooring from below. Remove residual adhesives as recommended by the flooring manufacturer. Remove curing and hardening compounds not compatible with the adhesives used, as indicated by a bond test or by the compound manufacturer's recommendations for flooring. Avoid organic solvents. Spray paints, permanent markers and other indelible ink markers must not be used to write on the back of the flooring material or used to mark the concrete slab as they could bleed through, telegraphing up to the surface and permanently staining the flooring material. If these contaminants are present on the substrate, they must be mechanically removed prior to the installation of the flooring material. Refer to the Armstrong Flooring Guaranteed Installation Systems instructions and ASTM F 710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring for additional information on subfloor preparation.

D. When using S-995 Adhesive, perform subfloor moisture testing in accordance with ASTM F 2170, “Standard Test Method for Determining Relative Humidity in Concrete Slabs Using *in-situ* Probes” and Bond Tests as described in publication instructions "Armstrong Flooring Guaranteed Installation System," to determine if surfaces are dry; free of curing and hardening compounds, old adhesive, and other coatings; and ready to receive flooring. Internal relative humidity of the concrete shall not exceed 99%. On installations where both the Percent Relative Humidity and the Moisture Vapor Emission Rate tests are conducted, results for both tests shall comply with the allowable limits listed above. Do not proceed with flooring installation until results of moisture tests are acceptable. All test results shall be documented and retained.

E. [When using S-319 Adhesive, perform subfloor moisture testing in accordance with ASTM F 2170, “Standard Test Method for Determining Relative Humidity in Concrete Slabs Using *in-situ* Probes” and Bond Tests as described in "Armstrong Flooring Guaranteed Installation System," instructions to determine if surfaces are dry; free of curing and hardening compounds, old adhesive, and other coatings; and ready to receive flooring. Internal relative humidity of the concrete shall not exceed 99%. Do not proceed with flooring installation until results of moisture tests are acceptable. All test results shall be documented and retained].

F. [When using S-1000 Adhesive, perform subfloor moisture testing in accordance with [ASTM F 2170, “Standard Test Method for Determining Relative Humidity in Concrete Slabs Using *in-situ* Probes”] [ASTM F 1869,“Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride”] and Bond Tests as described in "Armstrong Flooring Guaranteed Installation System" instructions to determine if surfaces are dry; free of curing and hardening compounds, old adhesive, and other coatings; and ready to receive flooring. [Internal relative humidity of the concrete shall not exceed 100%.] [MVER shall not exceed 14 lbs./1000 sq. ft./24 hrs.] On installations where both the Percent Relative Humidity and the Moisture Vapor Emission Rate tests are conducted, results for both tests shall comply with the allowable limits listed above. Do not proceed with flooring installation until results of moisture tests are acceptable. All test results shall be documented and retained].

G. Concrete pH Testing: Perform pH tests on concrete floors regardless of their age or grade level. All test results shall be documented and retained.

H. Wood subfloors: Armstrong resilient floors are recommended on suspended wood subfloors with a 1/4" underlayment (see product installation systems for exceptions) and a minimum of 18" of well-ventilated air space below. Armstrong Flooring does not recommend installing resilient flooring on wood subfloors applied directly over concrete or on sleeper-construction subfloors. Loading requirements for subfloors are normally set by various building codes on both local and national levels. Trade associations such as APA–The Engineered Wood Association provide structural guidelines for meeting various code requirements. Subfloor panels are commonly marked with span ratings showing the maximum center-to-center spacing in inches of supports over which the panels should be placed.

    1. Refer to the Armstrong Flooring Guaranteed Installation Systems instructions and ASTM F 1482, Standard Guide to Wood Underlayment Products Available for Use under Resilient Flooring for additional information.

I. Wood subfloors - Surface Cleaning: Make subfloor free from dust, dirt, grease, and all foreign materials.

    1. Check panels for sources of discoloration such as contamination from paint, varnish, stain overspray or spills, plumbing sealers, asphalt, heater fuel, markers, or potential staining agents such as wood or bark not visible on the surface, edge sealers, logo markings, printed nail patterns and synthetic patches.

2. Remove old adhesive.

3. Cover adhesive, oil, or wax residue with an appropriate underlayment. If the residue is tacky, place a layer of felt or polyethylene sheeting over it to prevent a cracking sound when walking on the floor.

4. Remove all paint, varnish, oil, and wax from all subfloors. Many buildings constructed before 1978 contain lead-based paint, which can pose a health hazard if not handled properly. State and federal regulations govern activities that disturb lead-based painted surfaces and may also require notice to building occupants. **Do not remove or sand lead-based paint without consulting a qualified lead professional for guidance on lead-based paint testing and safety precautions.** Armstrong Flooring does not recommend the use of solvents to remove paint, varnish, oil, wax, or old adhesive residues because the solvents can remain in the subfloor and negatively affect the new installation. Whenever sanding, be certain the work site is well ventilated and avoid breathing dust. If high dust levels are anticipated, use appropriate National Institute for Occupational Safety and Health (NIOSH) designated dust respirator. All power sanding tools must be equipped with dust collectors. Avoid contact with skin or eyes. Wear gloves, eye protection and long-sleeve, loose fitting clothes

5. For additional information on the installation and preparation of wood and board-type underlayments see the current edition of ASTM F1482, “Standard Practice for Installation and Preparation of Panel Type Underlayments to Receive Resilient Flooring.”

6. Vacuum or broom-clean surfaces to be covered immediately before the application of flooring.

3.04 INSTALLATION OF FLOORING

A. Install flooring in strict accordance with the latest edition of Armstrong Flooring Guaranteed Installation Systems instructions. Failure to comply may result in voiding the manufacturer’s warranty listed in Section 1.08.

B. Install flooring wall to wall before the installation of floor-set cabinets, casework, furniture, equipment, movable partitions, etc. Extend flooring into toe spaces, door recesses, closets, and similar openings as shown on the drawings.

C. If required, install flooring on pan-type floor access covers. Maintain continuity of color and pattern within pieces of flooring installed on these covers. Adhere flooring to the subfloor around covers and to covers.

D. Scribe, cut, and fit to permanent fixtures, columns, walls, partitions, pipes, outlets, and built-in furniture and cabinets.

E. Roll with a 100-lb. (45.36 kilogram) roller in the field areas. Refer to specific rolling instructions of the flooring manufacturer.

F. Install flooring with adhesives, tools, and procedures in strict accordance with the manufacturer's written instructions. Observe the recommended adhesive trowel notching, open times, and working times.

3.05 INSTALLATION OF ACCESSORIES

A. Apply top set wall base to walls, columns, casework, and other permanent fixtures in areas where top-set base is required. Install base in lengths if practical, with inside corners fabricated

B. from base materials that are mitered or coped. Tightly bond base to vertical substrate with continuous contact at horizontal and vertical surfaces.

C. Fill voids with plastic filler along the top edge of the resilient wall base or integral cove cap on masonry surfaces or other similar irregular substrates.

D. Place resilient edge strips tightly butted to flooring, and secure with adhesive recommended by the edge strip manufacturer. Install edge strips at edges of flooring that would otherwise be exposed.

E. Apply [butt-type] [overlap] metal edge strips where shown on the drawings, [before] [after] flooring installation. Secure units to the substrate, complying with the edge strip manufacturer's recommendations.

3.06 CLEANING

A. Perform initial and on-going maintenance according to the latest edition of the maintenance recommendations for Coalesce™.

3.07 PROTECTION

A. Protect installed flooring as recommended by the flooring manufacturer against damage from rolling loads, other trades, or the placement of fixtures and furnishings. (See Finishing the Job in the latest edition of Armstrong Flooring Guaranteed Installation Systems instructions.

END OF SECTION

SECTION 099123 - INTERIOR PAINTING

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. Primers.
2. Water-based finish coatings.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product. Include preparation requirements and application instructions.

1. Include preparation requirements and application instructions.
2. Indicate VOC content.

B. Samples: For each type of topcoat product.

C. Samples for Initial Selection: For each type of topcoat product.

D. Product Schedule: Use same designations indicated on Drawings and in the Interior Painting Schedule to cross-reference paint systems specified in this Section. Include color designations.

1.4 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Paint Products: 5 percent, but not less than 1 gal. of each material and color applied.

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 paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F.

B. Do not apply paints when relative humidity exceeds 85 percent; at temperatures of less than 5 deg F above the dew point; or to damp or wet surfaces.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Sherwin Williams

B. Benjamin Moore

C. Source Limitations: Obtain each paint product from single source from single manufacturer.

2.2 PAINT PRODUCTS, GENERAL

A. Material Compatibility:

1. Materials for use within each paint system shall be 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 paint system, products shall be recommended in writing by topcoat manufacturers for use in paint system and on substrate indicated.

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

2.3 PRIMERS

A. Interior Latex Primer Sealer: Water-based latex sealer used on new interior plaster, concrete, and gypsum wallboard surfaces.

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.

B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:

1. Gypsum Board: 12 percent.

C. Gypsum Board Substrates: Verify that finishing compound is sanded smooth.

D. Verify suitability of substrates, including surface conditions and compatibility, with existing finishes and primers.

E. Proceed with coating application only after unsatisfactory conditions have been corrected.

1. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

A. Comply with manufacturer's written instructions and recommendations applicable to substrates and paint systems indicated.

B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.

1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.

C. Clean substrates of substances that could impair bond of paints, 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 paint systems indicated.

3.3 INSTALLATION

A. Apply paints according to manufacturer's written instructions.

1. Use applicators and techniques suited for paint 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 front and backsides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.
4. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
5. Primers specified in painting schedules may be omitted on items that are factory primed or factory finished if acceptable to topcoat manufacturers.

B. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Tint undercoats to match color of topcoat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.

C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.

D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

3.4 FIELD QUALITY CONTROL

A. Dry-Film Thickness Testing: Owner may 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.

1. Do not clean equipment with free-draining water and prevent solvents, thinners, cleaners, and other contaminants from entering into waterways, sanitary and storm drain systems, and ground.
2. Dispose of contaminants in accordance with requirements of authorities having jurisdiction.
3. Allow empty paint cans to dry before disposal.
4. Collect waste paint by type and deliver to recycling or collection facility.

B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.

C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in undamaged condition.

D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.6 INTERIOR PAINTING SCHEDULE

A. Exposed Wood Framing:

1. Latex over Latex Primer System:

a. Prime Coat: Interior latex primer for wood.
b. Intermediate Coat: Matching topcoat.
c. Topcoat: Interior, latex
d. Walls: Eggshell.
e. Ceilings: Flat.
f. Bathrooms / Locker rooms: Semigloss.

END OF SECTION 099123

SECTION 123216 - MANUFACTURED PLASTIC-LAMINATE-CLAD CASEWORK

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Plastic-laminate-clad casework.
2. Hardware and accessories.

1.2 DEFINITIONS

A. Definitions in the AWI/AWMAC/WI's "Architectural Woodwork Standards" apply to the Work of this Section.

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.4 COORDINATION

A. Coordinate sizes and locations of framing, blocking, furring, reinforcements, and other related units of Work specified in other Sections to ensure that casework can be supported and installed as indicated.

1.5 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Shop Drawings: For plastic-laminate-clad casework.

1. Include plans, elevations, sections, and attachments to other work including blocking and reinforcements required for installation.
2. Indicate types and sizes of casework.
3. Indicate manufacturer's catalog numbers for casework.
4. Show fabrication details, including types and locations of hardware.
5. Indicate locations of and clearances from adjacent walls, doors, windows, other building components, and equipment.

C. Samples: For casework and hardware finishes.

D. Samples for Initial Selection: For casework and hardware finishes.

E. Samples for Verification: For the following:

1. Plastic Laminates: 12 by 12 inches, for each type, color, pattern, and surface finish required.

    a. Provide one Sample applied to core material with specified edge material applied to one edge.

2. Thermally Fused Laminate Panels: 12 by 12 inches, for each color, pattern, and surface finish.

    a. Provide edge banding on one edge.

1.6 CLOSEOUT SUBMITTALS

A. Quality Standard Compliance Certificates: AWI's Quality Certification Program certificates.

1.7 QUALITY ASSURANCE

A. Installer Qualifications: Licensed participate in AWI's Quality Certification Program.

1.8 DELIVERY, STORAGE, AND HANDLING

A. Protect finished surfaces during handling and installation with protective covering of polyethylene film or other suitable material.

1.9 FIELD CONDITIONS

A. Established Dimensions: Where casework is indicated to fit to other construction, establish dimensions for areas where casework is to fit. Provide allowance for trimming at site, and coordinate construction to ensure that actual dimensions correspond to established dimensions.

B. Field Measurements: Where casework is indicated to fit to existing construction, verify dimensions of existing construction by field measurements before fabrication and indicate measurements on Shop Drawings. Provide fillers and scribes to allow for trimming and fitting.

C. Locate concealed framing, blocking, and reinforcements that support casework by field measurements before enclosing them, and indicate measurements on Shop Drawings.

1.10 WARRANTY

A. Special Warranty: Manufacturer agrees to repair or replace components of casework that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:

    a. Delamination of components or other failures of glue bond.
    b. Warping of components.

c. Failure of operating hardware.

2. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 GENERAL REQUIREMENTS FOR CASEWORK

A. Quality Standard: Unless otherwise indicated, comply with the AWI/AWMAC/WI's "Architectural Woodwork Standards" for grades of casework indicated for construction, finishes, installation, and other requirements.

1. Grade: Custom.

B. Product Designations:

1. Drawings indicate sizes, configurations, and finish materials of manufactured plastic-laminate-clad casework by referencing designated manufacturer's catalog numbers. Other manufacturers' casework of similar sizes and door and drawer configurations, of same finish materials, and complying with the Specifications may be considered.
2. Drawings indicate configurations of manufactured plastic-laminate-clad casework by referencing designations of Casework Design Series numbering system in the Appendix of the AWI/AWMAC/WI's "Architectural Woodwork Standards."

2.2 PLASTIC-LAMINATE-CLAD CASEWORK

A. Source Limitations: Obtain from single source from single manufacturer.

B. Design: Face-frame cabinet construction with the following door and drawer-front style:
1. Flush overlay.

C. Exposed Materials:

1. Plastic-Laminate Grade: HGS.

a. Colors and Patterns: As selected by Architect from manufacturer's full range.

2. Edgebanding: Plastic laminate matching adjacent surfaces.

a. PVC Edgebanding Color: As selected by Architect from casework manufacturer's full range.

D. Concealed Materials:
1. Plywood: Hardwood plywood.

2.3 HARDWARE AND ACCESSORIES

A. Hardware, General: Unless otherwise indicated, provide manufacturer's standard satin-finish, commercial-quality, heavy-duty hardware.

1. Use threaded metal or plastic inserts with machine screws for fastening to particleboard except where hardware is through-bolted from back side.

B. Frameless Concealed Hinges (European Type): ANSI/BHMA A156.9, Type B01602, self-closing. Provide three hinges.

C. Wire Pulls: Solid chrome-plated brass wire pulls, fastened from back with two screws.

2.4 MATERIALS

A. Maximum Moisture Content for Lumber: 7 percent for hardwood and 12 percent for softwood.

B. Hardwood Plywood: HPVA HP-1, particleboard core except where veneer core is indicated.

C. Softwood Plywood: DOC PS 1.

D. Plastic Laminate: High-pressure decorative laminate complying with NEMA LD 3.

E. PVC Edgebanding for Plastic Laminate: Rigid PVC extrusions, through color with satin finish, 3.0 mm thick at doors and drawer fronts, 1.0 mm thick elsewhere.

F. Thermally Fused Laminate Panels: Particleboard or MDF finished with thermally fused, melamine-impregnated decorative paper and complying with requirements of NEMA LD 3, Grade VGL, for Test Methods 3.3, 3.4, 3.6, 3.8, and 3.10.

1. Edgebanding for Thermally Fused Laminate (TFL) Panels: PVC or polyester edgebanding matching thermally fused laminate panels.

2.5 FABRICATION

A. Plastic-Laminate-Clad Cabinet Construction: As required by referenced quality standard, but not less than the following:

1. Bottoms and Ends of Cabinets, and Tops of Wall Cabinets and Tall Cabinets: 3/4-inch-thick plywood.
2. Shelves: 3/4-inch-thick plywood.
3. Backs of Casework: 1/4-inch-thick, veneer-core hardwood plywood dadoed into sides, bottoms, and tops where not exposed.
4. Cabinet Doors:

a. 3/4 inch thick, with particleboard or MDF cores.

B. Filler Strips: Provide as needed to close spaces between casework and walls, ceilings, and equipment. Fabricate from same material and with same finish as casework.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas, with Installer present, for compliance with requirements for installation tolerances, location of framing and reinforcements, and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Grade: Install casework to comply with same quality standard grade as item to be installed.

B. Install casework level, plumb, and true in line; shim as required using concealed shims. Where casework abuts other finished work, apply filler strips and scribe for accurate fit, with fasteners concealed where practical.

C. Base Cabinets: Set cabinets straight, level, and plumb. Adjust subtops within 1/16 inch of a single plane. Align similar adjoining doors and drawers to a tolerance of 1/16 inch. Bolt adjacent cabinets together with joints flush, tight, and uniform.

D. Wall Cabinets: Hang cabinets straight, level, and plumb. Adjust fronts and bottoms within 1/16 inch of a single plane. Fasten cabinets to hanging strips, masonry, framing, wood blocking, or reinforcements in walls and partitions. Align similar adjoining doors to a tolerance of 1/16 inch.

E. Fasten casework to adjacent units and to masonry, framing, wood blocking, or reinforcements in walls and partitions to comply with the AWI/AWMAC/WI's "Architectural Woodwork Standards."

F. Install hardware uniformly and precisely. Set hinges snug and flat in mortises unless otherwise indicated. Adjust and align hardware so moving parts operate freely and contact points meet accurately. Allow for final adjustment after installation.

G. Adjust operating hardware so doors and drawers operate smoothly without warp or bind. Lubricate operating hardware as recommended by manufacturer.

3.3 FIELD QUALITY CONTROL

A. Inspections: Provide inspection of installed Work through AWI's Quality Certification Program certifying that woodwork, including installation, complies with requirements of the Architectural Woodwork Standards for the specified grade.

1. Inspection entity to prepare and submit report of inspection.

3.4 CLEANING

A. Repair or remove and replace defective work as directed on completion of installation.

B. Clean finished surfaces, touch up as required, and remove or refinish damaged or soiled areas to match original factory finish, as approved by Architect.

END OF SECTION 123216

SECTION 321313 - CONCRETE PAVING

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes concrete paving**.**

1.2 DEFINITIONS

A. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, fly ash, slag cement, and other pozzolans.

B. W/C Ratio: The ratio by weight of water to cementitious materials.

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1. Review methods and procedures related to concrete paving, including but not limited to, the following:

a. Concrete mixture design.
b. Quality control of concrete materials and concrete paving construction practices.

2. Require representatives of each entity directly concerned with concrete paving to attend, including the following:

a. Contractor's superintendent.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Samples for Initial Selection: For each type of product, ingredient, or admixture requiring color selection.

C. Samples for Verification: For each type of product or exposed finish, prepared as Samples of size indicated below:

1. Exposed Aggregate: 10-lb Sample of each mix.

1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For qualified ready-mix concrete manufacturer.

B. Material Certificates: For the following, from manufacturer:

1. Cementitious materials.
2. Steel reinforcement and reinforcement accessories.
3. Joint fillers.

C. Material Test Reports.

D. Field quality-control reports.

1.6 QUALITY ASSURANCE

A. Ready-Mix-Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C94/C94M requirements for production facilities and equipment.

1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities" (Quality Control Manual - Section 3, "Plant Certification Checklist").

B. Testing Agency Qualifications: Qualified according to ASTM C1077 and ASTM E329 for testing indicated.

1. Personnel conducting field tests must be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-1 or an equivalent certification program.

1.7 PRECONSTRUCTION TESTING

A. Preconstruction Testing Service: Engage a qualified independent testing agency to perform preconstruction testing on concrete paving mixtures.

1.8 FIELD CONDITIONS

A. Traffic Control: Maintain access for vehicle and pedestrian traffic as required for other construction activities.

B. Cold-Weather Concrete Placement: Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing, or low temperatures. Comply with ACI 306.1 and the following:

1. When air temperature has fallen to or is expected to fall below 40 deg F, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F and not more than 80 deg F at point of placement.
2. Do not use frozen materials or materials containing ice or snow.
3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in design mixtures.

C. Hot-Weather Concrete Placement: Comply with ACI 301 and as follows when hot-weather conditions exist:

1. Cool ingredients before mixing to maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated in total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
2. Cover steel reinforcement with water-soaked burlap, so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
3. Fog-spray forms**,** and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

PART 2 - PRODUCTS

2.1 CONCRETE, GENERAL

A. ACI Publications: Comply with ACI 301 unless otherwise indicated.

2.2 FORMS

A. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, and smooth exposed surfaces.

1. Use flexible or uniformly curved forms for curves with a radius of 100 feet or less.

B. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and that will not impair subsequent treatments of concrete surfaces.

2.3 STEEL REINFORCEMENT

A. Plain-Steel Welded-Wire Reinforcement: ASTM A1064/A1064M, fabricated from galvanized steel wire into flat sheets.

2.4 CONCRETE MATERIALS

A. Cementitious Materials: Use the following cementitious materials, of same type, brand, and source throughout Project:

1. 4,000 psi mix, ¾” stone, 7% air entrainment, 5” slump.

B. Normal-Weight Aggregates: ASTM C33/C33M, uniformly graded. Provide aggregates from a single source.

1. Maximum Coarse-Aggregate Size: **3/4 inch** nominal.

2.5 CURING MATERIALS

A. Absorptive Cover: AASHTO M 182.

B. Moisture-Retaining Cover: ASTM C171, polyethylene film or white burlap-polyethylene sheet.

C. Water: Potable.

2.6 RELATED MATERIALS

A. Joint Fillers: ASTM D1751, asphalt-saturated cellulosic fiber or ASTM D8139, semirigid, closed-cell polypropylene foam in preformed strips.

B. Slip-Resistive Aggregate Finish: Factory-graded, packaged, rustproof, nonglazing, abrasive aggregate of fused aluminum-oxide granules or crushed emery aggregate containing not less than 50 percent aluminum oxide and not less than 20 percent ferric oxide; unaffected by freezing, moisture, and cleaning materials.

2.7 CONCRETE MIXTURES

A. Prepare design mixtures, proportioned according to ACI 301, for each type and strength of normal-weight concrete, and as determined by either laboratory trial mixtures or field experience.

1. Use a qualified independent testing agency for preparing and reporting proposed concrete design mixtures for the trial batch method.
2. When automatic machine placement is used, determine design mixtures and obtain laboratory test results that comply with or exceed requirements.

B. Concrete Mixtures: Normal-weight concrete.

1. 4,000 psi mix, ¾” stone, 7% air entrainment, 5” slump.

2.8 CONCRETE MIXING

A. Ready-Mixed Concrete: Measure, batch, and mix concrete materials and concrete according to ASTM C94/C94M. Furnish batch certificates for each batch discharged and used in the Work.

1. When air temperature is between 85 and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.

B. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete according to ASTM C94/C94M. Mix concrete materials in appropriate drum-type batch machine mixer.

1. For concrete batches of 1 cu. yd. or smaller, continue mixing at least 1-1/2 minutes, but not more than 5 minutes after ingredients are in mixer, before any part of batch is released.

2. For concrete batches larger than 1 cu. yd., increase mixing time by 15 seconds for each additional 1 cu. yd.
3. Provide batch ticket for each batch discharged and used in the Work, indicating Project identification name and number, date, mixture type, mixing time, quantity, and amount of water added.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine exposed subgrades and subbase surfaces for compliance with requirements for dimensional, grading, and elevation tolerances.

B. Proof-roll prepared subbase surface below concrete paving to identify soft pockets and areas of excess yielding.

1. Completely proof-roll subbase in one direction. Limit vehicle speed to 3 mph.
2. Correct subbase with soft spots and areas of pumping or rutting exceeding depth of 1/2 inch.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Remove loose material from compacted subbase surface immediately before placing concrete.

3.3 EDGE FORMS AND SCREED CONSTRUCTION

A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.

B. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

3.4 INSTALLATION OF STEEL REINFORCEMENT

A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.

B. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials.

C. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.

D. Install welded-wire reinforcement in lengths as long as practicable. Lap adjoining pieces at least one full mesh, and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.

3.5 JOINTS

A. General: Form construction, isolation, and contraction joints and tool edges true to line, with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline unless otherwise indicated.

1. When joining existing paving, place transverse joints to align with previously placed joints unless otherwise indicated.

B. Edging: After initial floating, tool edges of paving, gutters, curbs, and joints in concrete with an edging tool to a 1/4-inch radius. Repeat tooling of edges after applying surface finishes.

3.6 CONCRETE PLACEMENT

A. Before placing concrete, inspect and complete formwork installation, steel reinforcement, and items to be embedded or cast-in.

B. Remove snow, ice, or frost from subbase surface and steel reinforcement before placing concrete. Do not place concrete on frozen surfaces.

C. Moisten subbase to provide a uniform dampened condition at time concrete is placed. Do not place concrete around manholes or other structures until they are at required finish elevation and alignment.

D. Comply with ACI 301 requirements for measuring, mixing, transporting, and placing concrete.

E. Do not add water to concrete during delivery or at Project site. Do not add water to fresh concrete after testing.

F. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.

G. Consolidate concrete according to ACI 301 by mechanical vibrating equipment supplemented by hand spading, rodding, or tamping.

1. Consolidate concrete along face of forms and adjacent to transverse joints with an internal vibrator. Keep vibrator away from joint assemblies or side forms. Use only square-faced shovels for hand spreading and consolidation. Consolidate with care to prevent dislocating joint devices.

H. Screed paving surface with a straightedge and strike off.

I. Commence initial floating using bull floats or darbies to impart an open-textured and uniform surface plane before excess moisture or bleedwater appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading surface treatments.

3.7 FLOAT FINISHING

A. General: Do not add water to concrete surfaces during finishing operations.

B. Float Finish: Begin the second floating operation when bleedwater sheen has disappeared and concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots and fill low spots. Refloat surface immediately to uniform granular texture.

1. Burlap Finish: Drag a seamless strip of damp burlap across float-finished concrete, perpendicular to line of traffic, to provide a uniform, gritty texture.
2. Medium-to-Fine-Textured Broom Finish: Draw a soft-bristle broom across float-finished concrete surface, perpendicular to line of traffic, to provide a uniform, fine-line texture.
3. Medium-to-Coarse-Textured Broom Finish: Provide a coarse finish by striating float-finished concrete surface 1/16 to 1/8 inch deep with a stiff-bristled broom, perpendicular to line of traffic.

3.8 CONCRETE PROTECTION AND CURING

A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.

B. Comply with ACI 306.1 for cold-weather protection.

C. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete but before float finishing.

D. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.

E. Curing Methods: Cure concrete by:

1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:

a. Water.
b. Continuous water-fog spray.
c. Absorptive cover, water saturated and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.

3.9 PAVING TOLERANCES

A. Comply with tolerances in ACI 117 and as follows:

1. Elevation: ¾-inch.

2. Thickness: Plus 3/8-inch, minus 1/4 inch.
3. Surface: Gap below 10-feet-long; unleveled straightedge not to exceed 1/2 inch.
4. Joint Spacing: 3 inches.
5. Contraction Joint Depth: Plus 1/4 inch, no minus.
6. Joint Width: Plus 1/8 inch, no minus.

3.10 REPAIR AND PROTECTION

A. Remove and replace concrete paving that is broken, damaged, or defective or that does not comply with requirements in this Section. Remove work in complete sections from joint to joint unless otherwise approved by Architect.

B. Drill test cores, where directed by Architect, when necessary to determine magnitude of cracks or defective areas. Fill drilled core holes in satisfactory paving areas with portland cement concrete bonded to paving with epoxy adhesive.

C. Protect concrete paving from damage. Exclude traffic from paving for at least 14 days after placement. When construction traffic is permitted, maintain paving as clean as possible by removing surface stains and spilling materials as they occur.

D. Maintain concrete paving free of stains, discoloration, dirt, and other foreign material. Sweep paving not more than two days before date scheduled for Substantial Completion inspections.

END OF SECTION 321313

SECTION 321373 - CONCRETE PAVING JOINT SEALANTS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Cold-applied joint sealants.
2. Joint-sealant backer materials.
3. Primers.

B. Related Requirements:

1. Section 079200 "Joint Sealants" for sealing nontraffic and traffic joints in locations not specified in this Section.

1.2 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

A. Product Data:

1. Concrete pavement joint sealants.
2. Joint-sealant backer materials.

B. Samples for Initial Selection: Manufacturer's standard color sheets, showing full range of available colors for each type of joint sealant.

C. Samples for Verification: Actual sample of finished products for each kind and color of joint sealant required.

1. Size: Joint sealants in 1/2-inch-wide joints formed between two 6-inch-long strips of material matching the appearance of exposed surfaces adjacent to joint sealants.

1.4 QUALITY ASSURANCE

A. Qualifications:

1. Installers: Entity that employs installers and supervisors who are trained and approved by manufacturer.

1.5 PRECONSTRUCTION TESTING

A. Preconstruction Testing: Performed by a qualified testing agency.

1.6 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.
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.

PART 2 - PRODUCTS

2.1 SOURCE LIMITATIONS

A. Obtain joint sealants from single manufacturer.

2.2 JOINT SEALANTS, GENERAL

A. Compatibility: Provide joint sealants, backer materials, 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.

2.3 COLD-APPLIED JOINT SEALANTS

A. Single-Component, Self-Leveling, Silicone Joint Sealant: ASTM D5893/D5893M, Type SL.

1. Sikaflex

2.4 JOINT-SEALANT BACKER MATERIALS

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

B. Round Backer Rods for Cold- and Hot-Applied Joint Sealants: ASTM D5249, Type 1, of diameter and density required to control sealant depth and prevent bottom-side adhesion of sealant.

2.5 PRIMERS

A. Primers: Product recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine joints to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Surface Cleaning of Joints: Before installing joint sealants, clean out joints immediately to comply with joint-sealant manufacturer's written instructions.

1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.

B. Joint Priming: Prime joint substrates where indicated or where recommended in writing by joint-sealant manufacturer, based on 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.

3.3 INSTALLATION OF JOINT SEALANTS

A. Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated unless more stringent requirements apply.

B. Joint-Sealant Installation Standard: Comply with recommendations in ASTM C1193 for use of joint sealants as applicable to materials, applications, and conditions.

C. Install joint-sealant backers to support joint 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 joint-sealant backer materials.
2. Do not stretch, twist, puncture, or tear joint-sealant backer materials.
3. Remove absorbent joint-sealant backer materials that have become wet before sealant application and replace them with dry materials.

D. Install joint sealants immediately following backer material installation, using proven techniques that comply with the following:

1. Place joint sealants so they fully contact 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.

E. Tooling of Nonsag Joint Sealants: Immediately after joint-sealant application and before skinning or curing begins, tool sealants in accordance with the following requirements 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 joint sealant from surfaces adjacent to joints.
2. Use tooling agents that are approved in writing by joint-sealant manufacturer and that do not discolor sealants or adjacent surfaces.

F. Provide joint configuration to comply with joint-sealant manufacturer's written instructions unless otherwise indicated.

3.4 CLEANING AND PROTECTION

A. Clean off excess joint sealant as the Work progresses, by methods and with cleaning materials approved in writing by joint-sealant manufacturers.

B. 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 and remove damaged or deteriorated joint sealants immediately and replace with joint sealant so installations in repaired areas are indistinguishable from the original work.

3.5 PAVING-JOINT-SEALANT SCHEDULE

A. Joints within concrete paving:

1. Joint Location:

a. Expansion and isolation joints in concrete paving.
b. Contraction joints in concrete paving.

2. Joint Sealant: Sikaflex Self-Leveling Sealant
3. Joint-Sealant Color: Gray.

END OF SECTION 321373