

April 18, 2024 2023-MDT-6301

To: All Bidders of Record

Re: Addendum No. One (1)

Replacement of Existing Passenger Boarding Bridges, Phase II Harrisburg International Airport (MDT) SARAA Project No. 2023-006

Dear Bidders:

This Addendum is hereby made part of the Contract Documents for the above referenced Project. All other requirements of the original documents shall remain in effect in their respective order.

PROJECT MANUAL

- **1.01** Agreement, Page A-4, Article 6 Insurance, Section 6.1: **REMOVE** last two paragraphs regarding requirements for Environmental Pollution Liability Insurance in their entirety.
- **1.02** Page GC-8, Article 5 Insurance, Section 5.1 (d): REVISE the first sentence as follows:
 - **FROM:** A Hose Storage/Deployment System shall be mounted to the PBB and the POU unit or its associated routing of hoses, air ducts, etc., shall not hinder or restrict the boarding bridge from operating within its full designed operating range.
 - TO: A Hose Basket type Hose Storage/Deployment System shall be mounted to the PBB and the POU unit or its associated routing of hoses, air ducts, etc., shall not hinder or restrict the boarding bridge from operating within its full designed operating range. For Gates B5 and B6 a separate PCA Hose Reel for each bridge shall be provided and include 50 feet of additional hose and fittings compatible with the system.

CONSTRUCTION DRAWINGS

- **1.03 INSERT** Sheet S501, PBB FOUNDATION DETAILS, attached to this Addendum No. One (1), after Sheet 21 of 23.
- **1.04 INSERT** Sheet S502, EXISTING PBB FOUNDATION REPAIR DETAILS, attached to this Addendum No. One (1), after Sheet 22 of 23.

BIDDERS QUESTIONS

- Q1. 2.1.3 Structural Loads: (2) A retracted and stow wind load of 47 psf. (230kg/m) or an approximate wind velocity of 112 mph (193 kph) (ASCE 7-10 LRFD). TKAS Wind velocity is 95 mph. We kindly request acceptance of our standard?
- A1. Wind load of 95 mph is acceptable.
- Q2. 2.1.3 Structural Loads: (4) A roof load of 30 lb (122 kg/m). TKAS STD roof load is 25 lb. We kindly request acceptance of our standard?



- A2. Roof load of 25 lbs. is acceptable.
- Q3. 2.2.2 Telescoping Tunnels: (d) The telescoping tunnels shall equipped with an exterior electrical cable conveyance system mounted along the lower side of the PBB.TKAS Standard side trolley is on the upper right exterior side of the bridge, the functionality is the same as the specification, accessible to maintenance personal for inspection or cable addition at all PBB Positions and operating conditions. We kindly request acceptance of our standard?
- A3. A side trolley is an acceptable substitute.
- Q4. 2.2.6 Electrical Requirements, d. (7) PBB Camera System, (a) The PBB Cab shall be equipped with a color LCD monitor 8" x 10" minimum, mounted on an adjustable base and located at operator eye level on the left side Operator Station, not in the Operator Control Console face plate. LCD monitor shall display images from color cameras. Camera feed is viewable on the HMI, not a separate monitor. We kindly request that you accept our standard.
- A4. Camera feed integrated on the HMI is acceptable.
- **Q5.** 2.2.6 d.(9) (9) The Operator Control Console shall include an HMI touch screen that. Controls under this section are mechanical push buttons, TKAS does not offer GUI touch buttons. Please accept standard design.
- A5. HMI touch screen is an acceptable form of control.
- Q6. 2.2.11 a. Vertical Drive Electromechanical. Our vertical drive consists of two (2) extra capacity hydraulic rams. Each ram is independent of the other and capable of supporting the bridge under full design load. An adjustable flow control valve provides the required lift speed. The design includes internally mounted pilot operated check valves that prevent the bridge from descending in the event of fluid loss or other system failure. Mechanical stops in the cylinders prevent over travel and do not cause any damage should they be reached. A single hydraulic power unit prevents miss-calibration as seen on Ball Screw designs and it is mounted at the wheel cross-member for easy access for maintenance. No periodic maintenance is required on the PBB roof due to this. We have been using this system for the last 20 years successfully. They require much less maintenance and will last the life of the bridge without major overhaul, unlike ball screw assemblies that have to be torn-down and resurfaced near ten years of service. We kindly request that you accept our standard hydraulic vertical drive system.
- A6. If Ball Screw design cannot be provided, the standard hydraulic vertical drive system is acceptable.
- Q7. 2.2.12 Interior c. Aluminum corner molding shall be used to cover the ends of the ceiling panels and the top edge of the wall panels and shall be black to match the interior light fixtures. TKAS standard is unpainted brushed aluminum. We kindly request that you accept our standard.
- A7. Unpainted brushed aluminum is acceptable.
- **Q8.** 2.2.13 Interior Finishes. (2) Primer: One coat of Sherwin-Williams high build "Chromate Free" epoxy primer E65AC8/E65RC5 (or equivalent) shall be applied. The dry file thickness shall be 2-10 mils. Our standard HEMPEL paint system has a similar preparation and coating as the requested Sherwin-Williams system. We believe that this not only meets, but exceeds, the requested system, Our Hempel paint system also includes a 15 year warranty. Please accept our standard paint system and standard exterior Color RAL 9002.
- A8. The paint standard is acceptable.
- **Q9.** 2.2.9 Conditioning Requirements. D. Sates "A Hose storage/deployment system" Please clarify that what is requested is either a Hose Basket, Trolley, Reel, or a Boom Air@ Hose Retriever.
- A9. Hose Basket. The Technical Specification has been revised as part of this Addendum No. One (1).
- **Q10.** Drawing C101. The aircraft mix shows on C101 list 777-300 Aircraft services at gate B5 & B6. This size aircraft requires a 90 Ton PCA, which needs 300 AMP services. Please confirm this size PCA is required, and that the electrical necessary for this nit is available.



- A10. The preconditioned air requirement at gates B5 and B6 is 90 tons. The Contractor is responsible for accommodating that load from the external disconnect to the PC air equipment. Electrical provisions from the distribution equipment within the terminal to the external disconnect is by others.
- Q11. Drawing S501 PBB Foundation Details and S502 Existing PBB Foundation Repair Details are missing from the drawing set, please provide the missing drawings.
- A11. Sheet S501, PBB FOUNDATION DETAILS, and Sheet S502, EXISTING PBB FOUNDATION REPAIR DETAILS, are being issued and are attached as part of this Addendum No. One (1).
- **Q12.** Is the scope to provide NEW Passenger Boarding Bridges, or will the Airport Authority entertain refurbished or renewed PBB's?.
- A12. Due to Federal Funding requirements, the Owner will only entertain new equipment.
- Q13. SARAA General Conditions Article 10 Section 10.3 Construction Change Directives. Would SARAA be open to adding a provision or language that would provide for consent on the part of the contractor to accept any modifications to contract documents?
- A13. The language of the section will not be changed. We believe it clearly indicates both parties will agree to and be compensated for any changes in the scope of work.
- **Q14.** Would SARAA be open to providing a 3 week week written notice, rather than 7 days and the 90 day work suspension to 30 days.
- A14. General Condition Section 15.2.1.9, will remain as indicated in the Project Manual.
- Q15. And additionally, can contract language for compensation for suspension or termination of work be as follows: 6.2 Customer is entitled to terminate any confirmed Order by providing no less than twenty (20) calendar days' notice of termination in writing, with documented reason for the termination. Termination shall take effect on the expiry of such period. In such circumstances, Dabico shall be entitled to, and Customer shall pay (a) that pro rata proportion of the total Order Price which reflects the percentage of completed Works as at the date of termination together with (b) any costs incurred or committed by Dabico as a result of or in connection with such termination (including, without limitation, Dabico's suppliers cancellation fees if applicable), in each case as documented by Dabico.
- A15. No.
- Q16. Can SARAA please accept standard warranty terms and conditions as follow:
 - 12 Dabico's Warranty
 - 12.1 Dabico warrants that Products shall be manufactured and Services shall be performed with reasonable skill and care, and in accordance with the Specifications. Any other express or implied warranties or representations, including in particular any warranty or representation of merchantability, fit for purpose, or warranty regarding the interaction of Products and/or Services with equipment, software, or systems of third parties, are expressly excluded, unless otherwise mutually agreed by the Parties in writing.
 - 12.2 Dabico's liability in respect of any Products and Services, supplied under the Order shall be limited to a warranty period ("Warranty Period") of either (i) twelve (12) months after completion of the Works or (ii) eighteen (18) months after the date of delivery of the Products, whichever expires sooner.
 - 12.3 Any non-conformity discovered by Customer during the Warranty Period shall promptly be notified to Dabico in writing, with detailed supporting information and date of discovery. Subject to such notice, the non-conforming Products may be returned at Customer's cost to Dabico for Dabico's examination. If Dabico determines, in its sole discretion, that the relevant Products fall under the warranty pursuant to this Clause 12, Dabico will, at its choice and cost, replace or repair the Products, and return them to Customer.
 - 12.4 The Warranty Period for Products (and Services, if applicable) or portion thereof repaired hereunder shall be the remainder thereof from the time of repair and will be renewed for a period expiring twelve (12) months thereafter in the event of replacement.



- 12.5 In case of Services, Dabico's liability during the Warranty Period shall be limited to re-performance of said Services, subject to Dabico's assessment that the Services were not performed with professional skill and care. Customer shall have no other rights or remedies with respect to any defective Products and/or Services, whether under contract law, in tort or otherwise, and the warranty shall be limited in the aggregate to actual Order Price paid by Customer for the Works under the relevant Order, or the cost of repair or replacement of the Products (and/or performance of the Services, as applicable), whichever is the lower.
- 12.6 Customer's warranty rights are subject to Dabico's determination that (a) Dabico was promptly notified in writing of the defect within the Warranty Period; (b) Dabico's examination discloses to its reasonable satisfaction that Services, as applicable, were not performed with reasonable skill and care; (c) in case the Products are defective, that the defect was not caused by misuse, abuse, neglect, alteration, improper storage, transportation packaging, handling, accidents, unforeseeable external factor, force majeure, or acts which are not the fault of Dabico; (d) for the entire Warranty Period, the Products and/or underlying systems have been operated, tested, serviced and maintained in accordance with Dabico operation and maintenance manual; and (e) Customer has not attempted to repair the Products itself or to have them repaired by a third party.
- 12.7 The warranty shall not apply to consumable parts, normal wear and tear, scratches, surface rust or deterioration, or otherwise damage due to the normal ageing of the Products.
- 12.8 The warranty is not transferrable and applies only to Customer and to direct end users identified in the Order.
- 12.9 Dabico's warranty is also conditional on the equipment being connected to and regularly sharing data with Dabico's Industrial IoT platform Dabico Connect. Further, any on-site intervention by Dabico staff to solve issues that could have been diagnosed and resolved remotely, will be charged at normal service rates, and are expressly excluded from this warranty.
- 12.10 If the defect or damage is outside the scope of warranty, coverage, repair services may be available, but all costs associated with such out of warranty repairs will be Customer's responsibility.
- 12.11 Warranty extensions may be offered by Dabico at additional cost in the event of prolonged storage period prior to delivery of the Products or otherwise as part of a maintenance agreement contract (Service Level Agreement or SLA), subject to Dabico's policy and agreed terms in relation thereto.
- A16. Warranty shall be in accordance with Technical Specification Item 347713X-36, Section 3.4, General Provision 90-10, and other requirements regarding warranty. Standard manufacturers' warranties are in addition to these requirements.
- **Q17.** Would SARAA be agreeable to adding standard risk of loss provision as follows:
 - 7.1 Delivery of Products shall be made to the place of delivery indicated in Dabico's Order Confirmation. Unless otherwise agreed, deliveries shall be made Ex Works (Dabico premises) in accordance with Incoterms® 2020. Risk of loss or damage to the Products shall pass to Customer at the time of delivery.
- A17. No.
- **Q18.** Would SARAA please accept the following standard language for limitation of liability:
 - 13 Limitation of Liability
 - 13.1 Unless otherwise required under mandatory provisions of applicable law, Dabico's total liability under these Terms and Conditions, with respect to the Works, including but not limited to, for contract, tort (including negligence), strict liability, indemnities, warranties, or otherwise, shall be limited in the aggregate of the actual total Order Price paid by Customer under the relevant Order.
 - 13.2 Under no circumstances shall either Party be liable for any consequential or indirect damages, including but not limited to, loss of profits, loss of opportunity, loss of anticipated savings, loss of data, reputational harm, and costs of any regulatory fines or penalties, as well as punitive and exemplary damages.



- A18. No.
- Q19. Can SARAA please accept the following standard language regarding indirect and consequential costs:

 13.2 Under no circumstances shall either Party be liable for any consequential or indirect damages, including but not limited to, loss of profits, loss of opportunity, loss of anticipated savings, loss of data, reputational harm, and costs of any regulatory fines or penalties, as well as punitive and exemplary damages.
- A19. No.
- **Q20.** Would SARAA add a Force Majeure clause as follows and also strike Section 12.2.1 from the General Conditions (allowing for unusually severe weather as a Force Majeure Event).:
 - 18 Force Majeure
 - 18.1 Neither Party shall be liable for any delay or failure to perform any of its obligations if the delay or failure results from a Force Majeure Event.
 - 18.2 The Party affected by a potential Force Majeure Event shall notify the other Party no later than five (5) calendar days after information about the potential Force Majeure Event has become available and shall liaise with the other Party in order to determine adequate mitigation measures. In no event shall Customer's payment obligations be postponed or excused by a Force Majeure Event. Force Majeure does not apply to payment obligations.
 - A20. No.
 - **Q21.** Given the limited scope of the project for replacement of existing passenger boarding bridges, can SARAA please drop the requirement to Environmental Pollution Liability Insurance. There are ample General liability and umbrella coverages in place to provide protection for any eventualities.
 - A21. Yes. As indicated in this addendum one the requirement for Environmental Pollution Liability Insurance has been removed.
 - **Q22.** Would SARAA accept repair and replacement as the only remedy for defective work (and not purchase price reduction)?
 - A22. The mitigation of defective work is defined adequately in General Conditions 13.6 through 13.9. The terms described in these sections will not be changed.

MISCELLANEOUS

- **M1.** The Pre-Bid Meeting Minutes (attendees list included) and Pre-Bid Power Point are included with this Addendum.
- **M2.** The inclusion of this Addendum shall be noted on Page BF-2 of the Project Manual and the signature of the Bidder shall indicate full acceptance of the provisions herein.
- **M3.** This Addendum shall be signed and attached to the Form of Proposal for the referenced contract. This Addendum shall also become part of the Project Manual for this Contract.
- **M4.** All other provisions of these Specifications and Contract Documents shall remain unchanged and in full effect.

LIST OF ATTACHMENTS

- 1. Pre-Bid Meeting Minutes
- 2. Pre-Bid Power Point
- 3. Sheet S501, PBB FOUNDATION DETAILS
- 4. Sheet S502, EXISTING PBB FOUNDATION REPAIR DETAILS



- END OF ADDENDUM NO. ONE (1) -

If you should have any questions regarding this matter, please do not hesitate to contact our office.

Sincerely,

Ronald N. Morris, PE, CM Senior Engineering Manager

RNM/rnm

Cc: Louis J. Pirozzi, SARAA

HARRISBURG INTERNATIONAL AIRPORT PROJECT NO. 2023-006 – REPLACEMENT OF EXISTING PASSENGER BOARDING BRIDGES, PHASE II ADDENDUM NO. ONE (1)

ACKNOWLEDGEMENT OF RECEIPT

Please email Ronald M	lorris (<u>Rmorris@adci-corp.com</u>) a signed copy of this pag	je to acknowledge receipt	of this Addendum
Contractor Signed		_		
Dated		-		

HARRISBURG INTERNATIONAL AIRPORT PROJECT NO. 2023-006 – REPLACEMENT OF EXISTING PASSENGER BOARDING BRIDGES, PHASE II ADDENDUM NO. ONE (1)

ATTACHMENT NO. 1



Meeting Agenda

Airport: Harrisburg International Airport (MDT) Project No. 2023-006

Project: Replacement of Up to Six (6) Passenger Boarding Bridges, Phase II Meeting Date: 04/02/2024

Subject: Pre-Bid Meeting Meeting Time: 10:00 am

Meeting Location: Harrisburg International Airport Attendance: Please Sign-in or initial

One Terminal Drive, Suite 300 Meeting Attendance Record.

Middletown, PA 17057

A. OPENING AND INTRODUCTIONS

B. GENERAL PROJECT SCOPE

- 1. BASE BID
- 2. BID ALTERNATIVE No. 1
- 3. BID ALTERNATIVE NO.2

C. ANTICIPATED PROJECT SCHEDULE

- 1. CONTRACT TIME
- 2. ANTICIPATED SCHEDULE

D. PROJECT FUNDING/ESTIMATE

- 1. ANTICIPATED FUNDING
- 2. ENGINEER OPINION OF PROBABLE COST RANGE

E. BIDDING REQUIREMENTS

- 1. BIDS ACCEPTED UNTIL:
- 2. DATE, TIME AND LOCATION OF BID OPENING:
- 3. BIDS SECURITY:
- 4. BIDS MAY BE HELD:
- 5. PLANS AVAILABILITY:
- 6. BID QUESTIONS:

F. CONTRACT REQUIREMENTS

- 1. INFORMATION FOR BIDDERS
- 4. WAGE RATES
- 5. BIDDING REQUIREMENTS
- 6. BID PROPOSAL DOCUMENTS
- 7. BID BOND
- 8. CONTRACT FORMS
- 9. CONTRACT BONDS
- 10. STATUTES AND REGULATIONS
- 11. GENERAL CONDITIONS
- 12. SUPPLEMENTARY CONDITIONS
- 13. DIVISION 1 GENERAL REQUIREMENTS
- 14. FAA GENERAL PROVISIONS
- 15. DETAILED SPECIFICATIONS

G. OPERATIONAL SAFETY/PHASING

- 1. CONSTRUCTION SAFETY AND PHASING PLAN (CSSP)
- 2. SAFETY PLAN COMPLIANCE DOCUMENT (SPCD)
- 3. GENERAL OPERATIONAL SAFETY/PHASING REQUIREMENTS

H. CONSTRUCTION DRAWING REVIEW

- I. OPEN DISCUSSION AND QUESTIONS
- J. SITE VISIT



Airport: Harrisburg International Airport (MDT) Project No. 2023-006

Project: Replacement of Up to Six (6) Passenger Boarding Bridges, Phase II Meeting Date: 04/02/2024

Subject: Pre-Bid Meeting Time: 10:00 am

Discussion Action/Response

A. Opening and Introductions

ADCI advised that this meeting was being held and its agenda had been prepared to assist the Owner in compliance with the requirements of FAA AC 150/5370-12B - Quality Management for Federally Funded Airport Construction Projects as well as, Chapter 6 of the "FAA Eastern Region Airports Division Sponsor Guide".

1. See attached Meeting Attendance Record for a list of attendees.

B. General Project Scope

ADCI provided an overview of the general project scope as follows:

1. Base Bid

Work included in the Base Bid generally consists of the replacement of six (6) existing Passenger Boarding Bridges (PBBs) with new PBBs. Additionally, another six (6) gates will receive new PC Air & Power on the existing PBB. The construction scope of work includes but is not limited to removing the existing PBB per gate and legally disposing off site, repair of the existing pedestal on select gates and the installation of a new PBB on the specified gates.

2. Bid Alternative No. 1

For funding flexibility, Gate B2 has been given a bid alternative which will leave the existing PBB on Gate B2 and install new PC Air & Power on the existing PBB.

3. Bid Alternative No.2

For funding flexibility, Gate B3 has been given a bid alternative which will leave the existing PBB on Gate B3 and install new PC Air & Power on the existing PBB.

C. Anticipated Project Schedule

1. Contract Time

Base Bid: 219 Calendar Days

Bid Alt (Gates B2) 14 Deduct/Add Calendar Days
Bid Alt (Gates B3) 21 Deduct/ 14 Add Calendar Days

2. Anticipated Schedule

04/16/2024 - All Bidder Questions due.

04/25/2024 – 2:00 PM Bid Opening, Tabulation and Recommend Award.

04/30/2024 – Transmit Bid Tabulation to Owner, FAA and BOA.

Summer 2024 – Construction Award.





Airport: Harrisburg International Airport (MDT) Project No. 2023-006

Project: Replacement of Up to Six (6) Passenger Boarding Bridges, Phase II Meeting Date: 04/02/2024

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Discussion Action/Response

D. Project Funding/Estimate

1. Anticipated Funding

Federal Aviation Administration (FAA): 95% Susquehanna Area Regional Airport Authority (SARAA): 5%

2. Engineer Opinion of Probable Cost Range

Base Bid – \$7,000,000 - \$9,000,000 depending on alternates awarded.

E. Bidding Requirements

ADCI reviewed the bidding requirements for this project as follows:

1. Bids Accepted Until

Thursday, April 25, 2024; 2:00 PM

2. Date, Time and Location of Bid Opening:

Thursday, April 25, 2024; 2:00 PM Online at PennBid.net

3. Bids Security

A Bid Bond or Certified Check in the amount of 10% of the Contractor's Base Bid price must accompany the bid proposal.

4. Bids May Be Held

120 Calendar Days

5. Plans Availability

Plan Deposit Electronic: \$0.00

ADCI advised that plans are available in hard copy and electronic PDF format for those who choose to purchase the Contract Documents.

6. Bid Questions

Questions are accepted in writing only up until close of business on **Tuesday**, **April 16**, **2024**, **at 5:00 PM EST**. A final Addendum will be issued on **Thursday**, **April 18**, **2024**. All questions shall be posted on PennBid on the Project "Clarifications"





Airport: Harrisburg International Airport (MDT) Project No. 2023-006

Project: Replacement of Up to Six (6) Passenger Boarding Bridges, Phase II Meeting Date: 04/02/2024

Subject: Pre-Bid Meeting Time: 10:00 am

Discussion Action/Response

(From Vendors)" tab. Responses will be given in writing and included in an Addendum to all plan holders.

F. Contract Requirements

ADCI provided an overview of the contract requirements for this project that included:

1. Information for Bidders

a. Liquidated Damages: \$1,500 per Calendar Day by Work Area

and for overall Contract Duration.

b. Insurance coverage's:

Workmen's Compensation &

Employer's Liability Statutory

Employer's Protective

Liability

Each Accident \$500,000
Policy Limit \$1,000,000
Disease Each Employee \$500,000

General Liability

Aggregate \$5,000,000 Each Occurrence \$5,000,000

Automobile Liability

(Owned, non-owned & hired)

Bodily Injury per Person \$1,000,000 Bodily Injury per Accident \$3,000,000 Property Damage \$3,000,000

Environmental Pollution \$1,000,000

2. Wage Rates

- Engineer advised that a since the project was being funded in part by the FAA, Davis Bacon Wages Rates applied to all work performed on this project.
- b. Certified Payrolls shall be submitted to the Engineer weekly. Payrolls are required for the prime contractor and all subcontractors. Interviews will be conducted with the Contractor's Employees to verify the rates that are being shown on the Certified Payrolls.





Airport: Harrisburg International Airport (MDT) Project No. 2023-006

Project: Replacement of Up to Six (6) Passenger Boarding Bridges, Phase II Meeting Date: 04/02/2024

Subject: Pre-Bid Meeting Time: 10:00 am

Discussion Action/Response

3. Bidding Requirements

- a. It is the intent of the OWNER to award a Contract to the lowest responsible Bidder providing the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available. The OWNER shall have the right to waive informalities or irregularities in a Bid received and to accept the Bid which, in the OWNER's judgment, is in the OWNER's best interest.
- b. The OWNER shall have the right to accept Deduct Alternates, unless otherwise specifically provided in the Bidding Documents, and to determine the low Bidder on the basis of the sum of the Base Bid and any combination of Deduct Alternates accepted. ENGINEER advised that the contract would be awarded to a single contractor.

4. Bid Proposal Documents

- a. The Proposal form must be completed in its entirety. One (1) original and one (1) copy shall be submitted with the bid.
- b. All Addendums must be noted on the proposal.
- c. Contractor's Certification of Eligibility completed and signed.
- d. Non-Collusive Bidding Certification completed and signed.
- e. Certification of Bidder Regarding Equal Employment completed and signed.
- f. Equal Employment Opportunity Compliance Statement completed and signed.
 - The DBE goal has been established as **5.21%.** In order to count towards this goal, a business must be registered on Pennsylvania Unified Certification Program (PA UCP) website. If a Bidder is unable to meet this goal, a good faith effort must be made and documented.
- g. DBE Contact/Solicitation and Commitment Statement completed and signed documenting anticipated DBE Contracts and/or good faith efforts.
- DBE Participation for Federally Funded Airport Projects completed and signed by the DBE and Prime Contractor.
- Certificate of Buy American Compliance for Manufactured Products completed and signed.
- Affidavit Re Accepting Provisions of the Workmen's Compensation Act completed and signed.





Airport: Harrisburg International Airport (MDT) Project No. 2023-006

Project: Replacement of Up to Six (6) Passenger Boarding Bridges, Phase II Meeting Date: 04/02/2024

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Discussion Action/Response

k. Public Works Employment Verification Form – completed and signed.

 Statement of Bidders Qualifications – completed and signed. In lieu of completing certain sections of the form, attachments are acceptable.

5. Bid Bond

- a. Carefully read and comply with the requirements set forth in the General Instructions for Bid Bonds.
- b. Bid Bond shall be in the amount of Ten (10%) percent of the total Base Bid.

6. Contract Forms

- a. The successful Bidder will execute the Agreement contained in this section with the Owner and return it within 15 days of Notice of Award.
- b. The successful Bidder will utilize the Subcontract contained in this section to enter into agreements with his subcontractors and provide copies to the Owner
- c. The PennDOT Bureau of Aviation will check the Prime and all Subcontractors for debarment from work in Pennsylvania, and the Federal Aviation Administration will check the federal debarment list.

7. Contract Bonds

- a. The successful Bidder will execute the Performance Bond contained in this section with the Owner for an amount equal to 100% of the amount awarded for Performance. This Bond shall remain in effect for a period of two (2) years after the date of final payment.
- b. The Labor and Material Payment Bond shall also be executed for an amount equal to 100% of the amount awarded. This Bond shall remain in effect for a period of one (1) year after the date of final payment.

8. Statutes and Regulations

a. This section of the Project Manual contains information regarding acts/laws that are required by the federal/state/locality where the project is located.

9. General Conditions

 a. This section of the Project Manual contains information regarding definitions, preliminary and pre-construction requirements, physical conditions of the site, insurance and other site-specific clarifications to the FAA Standard General





Project:

Meeting Notes

04/02/2024

Meeting Date:

Airport: Harrisburg International Airport (MDT) Project No. 2023-006

Subject: Pre-Bid Meeting Meeting Time: 10:00 am

Discussion Action/Response

Replacement of Up to Six (6) Passenger Boarding Bridges, Phase II

Provisions.

10. Supplementary Conditions

a. This section of the Project Manual contains supplements to the General Conditions and information regarding DBE Participation and Wage Rates.

11. Division 1 - General Requirements

 This section of the Project Manual contains information regarding the Summary of Work, Project Closeout, Consent of Surety to Final Payment, Contractor's Affidavit of Completion Payment of Debts and Claims and Release of Liens.

12. FAA General Provisions

a. General Provisions

This section of the Project Manual contains the FAA Standard General Provisions required for all contracts on airports involving Airport Improvement Program (AIP) Funding.

b. Items for Consideration

- Contractor shall submit Catalog Cuts on all materials to Engineer.
- Time extensions must be justified and shutdowns for weather will be allowed with proper Stop Work Order/Start Work Order.
- Daily meeting will be held to discuss the planned work and any issues.
 The attendees of these daily meeting will be at a minimum the ADCl's Construction Manager and the Contractor's superintendents.
- Weekly Job conferences will be held to discuss the progress of work and any issues that may need to be addressed.
- Pay request shall be submitted to Engineer monthly on a form provided by the Engineer.
- Project Bulletin Board Posted in an area accessible by all workers on the Project containing wage rates, wage rate posters, EEO policies and other statutory postings.
- Contractor shall maintain As-Built Drawings that shall be provided to the Engineer at completion of the project. Retainage will not be released until the as-built drawings are received.

13. Detailed Specifications

a. Aviation Technical Specifications have been prepared in accordance with FAA Advisory Circular (AC) 150/5370-10H, Standards for Specifying Construction





Airport: Harrisburg International Airport (MDT) Project No. 2023-006

Project: Replacement of Up to Six (6) Passenger Boarding Bridges, Phase II Meeting Date: 04/02/2024

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Discussion Action/Response

of Airports and that other specifications were developed by the Engineer, if not otherwise available.

b. Availability of Advisory Circulars (AC's). Current copies of FAA ACs applicable to a project are available to prospective bidders, on the FAA Website at www.faa.gov.

G. Operational Safety/Phasing

1. Construction Safety and Phasing Plan (CSSP)

a. Engineer advised that the operational safety requirements included will be in accordance with FAA requirements (AC 150/5370-2G) and covered in Construction Safety and Phasing Plan contained in Attachment B that has been submitted to the FAA for approval.

2. Safety Plan Compliance Document (SPCD)

a. Engineer advised that, pursuant to the requirements set forth in Federal Aviation Administration (FAA) Advisory Circular 150/5370-2G, an SPCD for this project shall be submitted to the Owner, Engineer, FAA and PennDOT Bureau of Aviation (BOA) for review and approval. This should be submitted 14 days prior to the preconstruction conference. The notice-to-proceed cannot be issued without approval of this document.

3. General Operational Safety/Phasing Requirements

- a. Engineer provided a brief overview of the Airport Operational Safety and Phasing Plans.
- b. Engineer advised that Night Work is not prohibited by the Contract.
- c. Staging area identified on plans.
- d. Haul routes identified on plans and will be the existing vehicle service road around the terminal.
- e. Engineer advised that the Aircraft Operational Area (AOA) consists of all runway, taxiway, and apron pavement areas and associated safety areas. Contractor must attend a driver training class conducted by the airport operations to receive badges for access to the site. The OWNER reserves the right to revoke access to contractor personnel for any violation of airport safety.
- f. All vehicles and equipment entering the AOA shall be properly marked with flags <u>and</u> flashing amber lights during construction and shall require a vehicle permit.





2023-006

Airport: Harrisburg International Airport (MDT) Project No.

Project: Replacement of Up to Six (6) Passenger Boarding Bridges, Phase II Meeting Date: 04/02/2024

Subject: Pre-Bid Meeting Time: 10:00 am

Discussion Action/Response

H. Construction Drawing Review

Engineer presented the Construction Drawings and asked if there were any questions regarding the intent of the Plans and Specifications. Any questions asked are documented in the Open Discussion and Questions Section and it was advised that any answers provided are unofficial unless issued via an official Addendum to the Contract Documents.

I. Open Discussion and Questions

The following are questions asked during open discussion and the associated responses. Engineer advised that all questions received from Bidders and their responses discussed at the meeting were unofficial and that the Bidders were to submit all of their questions formally through PennBid and official responses would be included in Addendum No. One (1).

Question: Is there any potential issue with blocking the tug roads?

Answer: Tug roads will not be affected as the work area limits will be outside of

the road.

Question: What is the DBE percentage requirement for this project?

Answer: DBE requirement is 5.21%

Question: What is the DBE certifying agency?

Answer: The agency is Pennsylvania Unified Certification Program (PA UCP).

Question: Is Airport sales tax exempt?

Answer: Not all items are eligible for sales tax exemption. The contractor shall

include sales tax for the sake of bidding.

Question: Does the 219-day construction duration include procurement as well?

Answer: Physical construction is 219 consecutive calendar days (CCD). Procurement is 30 CCD. There will be an issuance of two Notice of Proceeds (NTP). One for administrative tasks and one for the actual construction. Procurement is included in the 30 day duration. The 219 CCD countdown will

begin on the second NTP.

J. Site Visit

At the conclusion of the meeting it was advised that anyone desiring a Site Visit
was to contact Louis J. Pirozzi, SARAA Deputy Director for Engineering and
Planning; 1 Terminal Drive Middletown PA, 17057 (717) 948-3900 ext. 4609
louis.pirozzi@saraa.org to schedule the visit.





Airport: Harrisburg International Airport (MDT) Project No. 2023-006

Project: Replacement of Up to Six (6) Passenger Boarding Bridges, Phase II Meeting Date: 04/02/2024

Subject: Pre-Bid Meeting Time: 10:00 am

These notes are prepared to express the facts and to summarize the accomplishments, other highlights, and specific actions to be takennot necessarily in the sequence in which each occurred. Any desiring additions or corrections to these notes should do so in writing within five (5) days of distribution.

Prepared By:

Name: Ronald N. Morris, P.E., C.M.
Title: Senior Engineering Manager

Company: ADCI

RNM/rnm

cc: All Attendees

P:\Airport\MDT\Projects\2023-6301\Non-CAD\9_Re-Bidding\Prebid_Conference\20240402 Pre-Bid Meeting - MDT Replace PBB Ph 2_Meeting Notes.docx





Meeting Attendance Record

Airport: Harrisburg International Airport (MDT)

Project: Replacement of Up to Six (6) Passenger Boarding Bridges, Phase II

Subject: Pre-Bid Meeting

Project No.	2023-006
Meeting Date:	04/02/2024
Meeting Time:	10:00 am

Name	Representing	Office/Mobile Phone	Email	Present
Louis J. Pirozzi, PE	SARAA – Engineering & Planning	717-948-3900 717-580-8576	Louis.Pirozzi@saraa.org	
James R Sides, CM	SARAA – Engineering & Planning	717-948-3900 717-525-1171	Jamie.Sides@saraa.org	☐ Virtual Attendance
Jessica Silcox	SARAA – Environmental Program Manager	717-948-3900	Jessicas@saraa.org	☐ Virtual Attendance
Jeannette Gumby	SARAA – Engineering & Planning	(717) 948-3900 x4605	Jeannetteg@saraa.org	☐ Virtual Attendance
Arielle K Lewis	SARAA – Engineering & Planning	(717) 948-3900 x4611	Arielle.lewis@saraa.org	
Arletta Metzger	SARAA – Property Manager	(717) 948-3900 x4633	Arletta.Metzger@saraa.org	☐ Virtual Attendance
Belinda Svirbely, A.A.E.	SARAA – Deputy Director, Operations, Security & Public Safety	717-948-3987	BelindaS@saraa.org	☐ Virtual Attendance
James Kunza, PE	Federal Aviation Administration – HADO Program Manger	717-730-2834	James.R.Kunza@faa.gov	☐ Virtual Attendance
Robert A. Betz Jr.	PennDOT, Bureau of Aviation Regional Engineer	717-705-1242	rbetz@pa.gov	☐ Virtual Attendance





Meeting Attendance Record

04/02/2024

Project No. 2023-006

Meeting Time: 10:00 am

Meeting Date:

Airport: Harrisburg International Airport (MDT)

Project: Replacement of Up to Six (6) Passenger Boarding Bridges, Phase II

Subject: Pre-Bid Meeting

Michael Richards

Name	Representing	Office/Mobile Phone	Email	Present
Keith M. Fritz, PE	Airport Design Consultants, Inc. Project Manager/Senior Engineer	410-465-9600 x303 410-300-4233	KFritz@adci-corp.com	☐ Virtual Attendance
Ronald Morris, PE, CM	Airport Design Consultants, Inc. Senior Engineer/Construction Manager	717-979-5465	RMorris@adci-corp.com	
Michael P. Pizza, PE	Airport Design Consultants, Inc. Project Manager	410-465-9600 717-517-1721	mpizza@adci-corp.com	
Rebecca McDonald, PE	Airport Design Consultants, Inc. Project Engineer	410-465-9600 978-471-9168	RMcDonald@adci-corp.com	
Andrew J. Daly, EIT	Airport Design Consultants, Inc. Design Engineer	410-465-9600 410-714-1941	adaly@adci-corp.com	☐ Virtual Attendance
Rodney King	SARAA – Airport Engineer		Rodney.King@saraa.org	
Mark Hake	SARAA – Building Maintenance	(717) 648-0438	MarkH@saraa.org	
Kevin Lidwin	VRH Estimator		k.lidwin@vrhcorp.com	

(304) 680-6329

mrichards@a-bridgellc.com



Virtual Attendance

A-Bridge



Meeting Attendance Record

Airport: Harrisburg International Airport (MDT)

Project: Replacement of Up to Six (6) Passenger Boarding Bridges, Phase II

Subject: Pre-Bid Meeting

Project No.	2023-006
Meeting Date:	04/02/2024
Meeting Time:	10:00 am

Name	Representing	Office/Mobile Phone	Email	Present
Anival (Val) Sanchez	TK Airport Solutions	(817) 739-2962	Anival.sanchez@tkelevator.com	∀irtual Attendance
Jeff Lotshaw	A-Bridge	(317) 362-1172	jlotshaw@a-bridgellc.com	∀ Virtual Attendance
Jason Summers	A-Bridge	(317) 250-9116	jsummers@a-bridgellc.com	∀ Virtual Attendance
Brian Leonard	VRH Construction		B.leonard@vrhcorp.com	∀ Virtual Attendance
Rob Brethauer	AeroBridge Works		Rob.brethauer@aerobridge	
Danielle Katterhenry	Twist Aero		Dkatterhenry@twistinc.com	∀ Virtual Attendance
Glenda Leake	TK Airport Solutions	(682) 201-5081	Glenda.leake@tkelevator.com	∀ Virtual Attendance
				☐ Virtual Attendance
				☐ Virtual Attendance



HARRISBURG INTERNATIONAL AIRPORT PROJECT NO. 2023-006 – REPLACEMENT OF EXISTING PASSENGER BOARDING BRIDGES, PHASE II ADDENDUM NO. ONE (1)

ATTACHMENT NO. 2





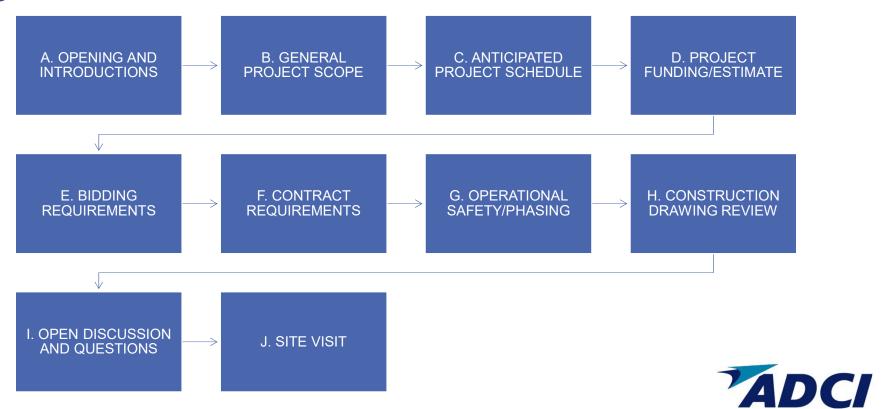
Harrisburg International Airport (MDT) Replacement of Passenger Boarding Bridges, Phase II **Pre-Bid Meeting** April 2, 2024







Agenda







A. OPENING AND INTRODUCTIONS



MEETING PURPOSE



INTRODUCTION OF MAIN CONTACTS







B. GENERAL PROJECT SCOPE



BASE BID

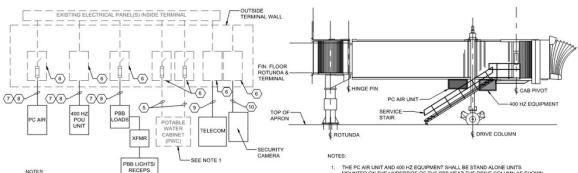
BID ALTERNATIVE NO. 1 BID ALTERNATIVE NO.2





SCOPE OF PROJECT

- > Installation of temporary construction items
- → Gates C3, C2, C1, A1, B3 & B2
 - → Remove Existing PBB
 - → Install New PBB
 - > Install PC Air and Power Equipment
 - → Repair Foundation (as necessary)
 - → Final Adjustment of PBB and Reopen Gate
- → Gate A2, A3, B1, B4, B5 & B6
 - > Install PC Air and Power Equipment
 - → Final Adjustment of PBB and Reopen Gate



CONTRACTOR MAY BE REQUIRED TO TEMPORARILY REMOVE PWC DURING PBB REMOVALINISTALLATION DUE TO THE PWC'S PROXIMITY TO THE ROTUNDA COLUMN. CONTRACTOR SHALL DISCONNECT ELECTRICAL CONNECTIONS AND PRESERVE CABLE/CONDUIT FOR RECONNECTION.

- MOUNTED ON THE UNDERSIDE OF THE PBB NEAR THE DRIVE COLUMN AS SHOWN





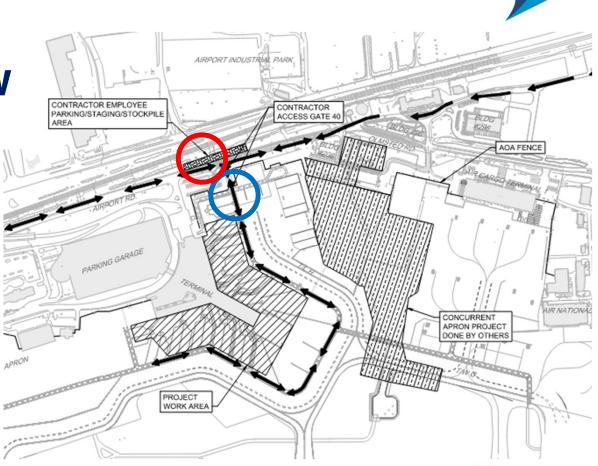




Project Overview

Red: Staging/Stockpile Areas

Blue: AOA Access Point (Gate 40)









C. ANTICIPATED PROJECT SCHEDULE





CONTRACT TIME

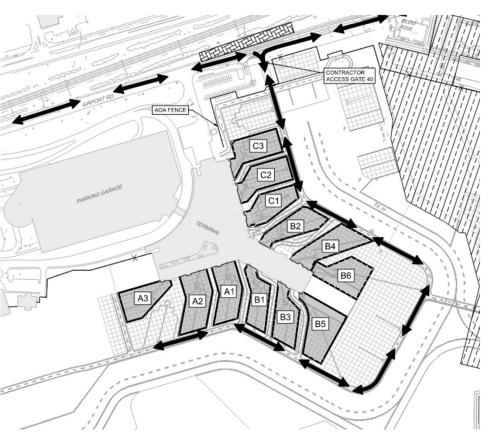
ANTICIPATED SCHEDULE







Overall Construction Phasing/Sequence



** DURATIONS	S WILL BE ADJUSTED TO MBER OF GATES AWARDED.	2024	15	30	45	60	75	90	105	120	135	150	165	180	0 189
	CONCEPTUAL CONSTRU	JCTION S	HEDL	JLE (BY	WORK	AREA) **								
WORK AREA	CALENDAR DAYS (CCD)		Т									\neg		Т	
A1	14		\top	\neg								\neg		\neg	
A2	14					\neg						\neg		\neg	
A3	14		\neg			$\neg \vdash$	\top				\neg	\neg	\neg	\neg	
B1	14							Т							
B2	14							\neg	\top					\neg	
B3	21*					\neg			$\neg \neg$	\Box				\neg	
B4	14		\neg	\neg					\neg	按.	\neg			\neg	
B5	14		\top			$\neg \vdash$	\neg					\neg			
B6	14											\neg	\neg		
C1	14		\top	\neg			\neg	\neg	\neg		\neg	\neg		\top	
C2	21*		\Box			_		\neg	\neg			\neg	\neg	\neg	
C3	21*					\neg			\neg		\neg	\neg	\neg	\neg	

All Phases.

PEDESTAL REPAIR, SEE SHEET \$500

→ Work Area shall be unrestricted (daytime between 7am and 6pm).







D. PROJECT FUNDING/ESTIMATE





ANTICIPATED FUNDING

ENGINEER OPINION OF PROBABLE COST RANGE







E. BIDDING REQUIREMENTS



BIDS ACCEPTED UNTIL



DATE, TIME AND LOCATION OF BID OPENING



BIDS SECURITY



BIDS MAY BE HELD



PLANS AVAILABILITY



BID QUESTIONS







F. CONTRACT REQUIREMENTS

- 1. INFORMATION FOR BIDDERS
- 2. WAGE RATES
- 3. BIDDING REQUIREMENTS
- 4. BID PROPOSAL DOCUMENTS
- 5. BID BOND
- 6. CONTRACT FORMS
- 7. CONTRACT BONDS
- 8. STATUTES AND REGULATIONS

- 9. GENERAL CONDITIONS
- 10. SUPPLEMENTARY CONDITIONS
- 11. DIVISION 1 GENERAL REQUIREMENTS
- 12. FAA GENERAL PROVISIONS
- 13. DETAILED SPECIFICATIONS







G. OPERATIONAL SAFETY/PHASING



CONSTRUCTION SAFETY AND PHASING PLAN (CSSP)



SAFETY PLAN COMPLIANCE DOCUMENT (SPCD)



GENERAL OPERATIONAL SAFETY/PHASING REQUIREMENTS







H. CONSTRUCTION DRAWING REVIEW









I. OPEN DISCUSSION AND QUESTIONS









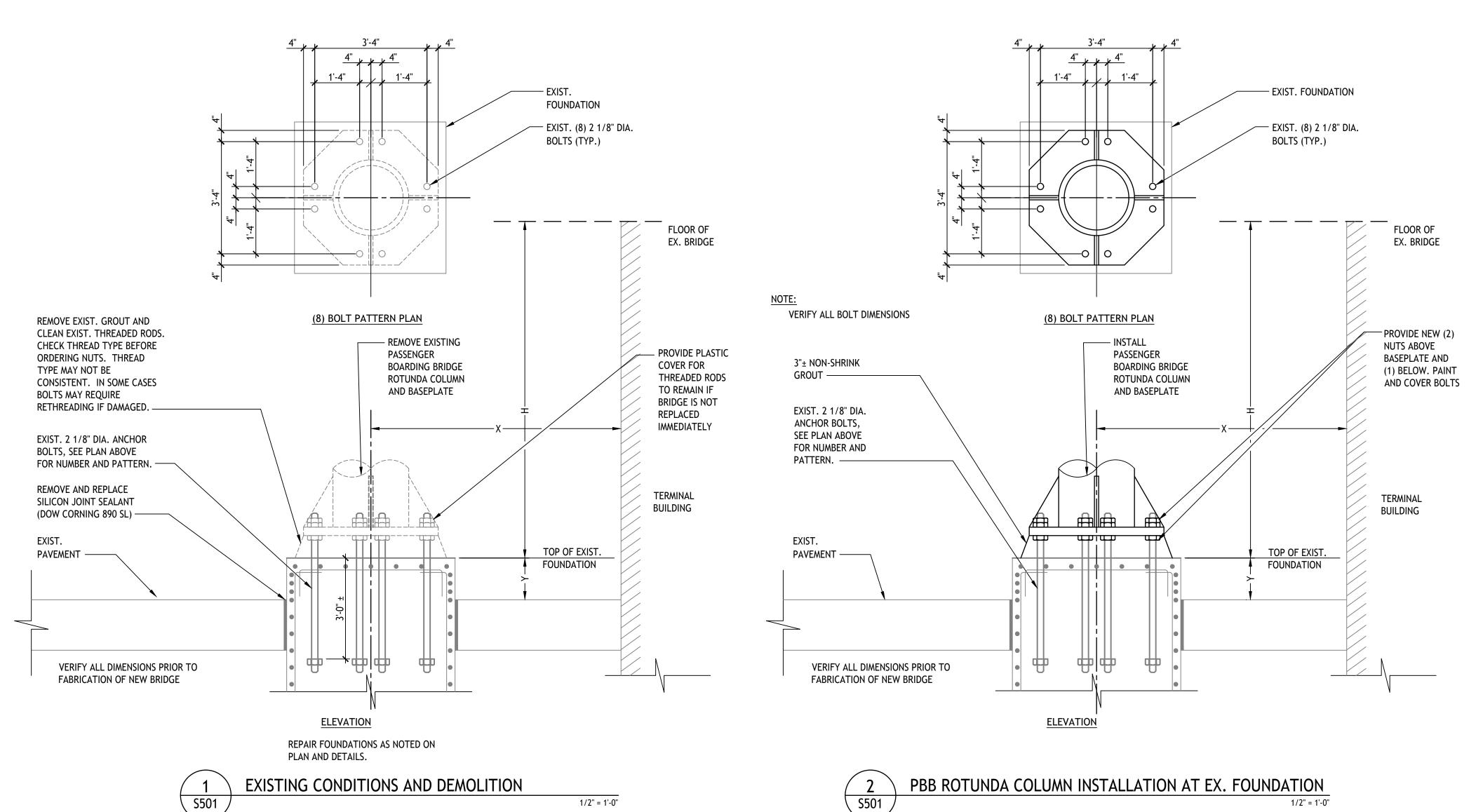
N. SITE VISITS

Anyone desiring a Site Visit is to contact Louis J. Pirozzi, SARAA Deputy Director for Engineering and Planning; 1 Terminal Drive Middletown PA, 17057 (717) 948-3900 ext. 4609 louis.pirozzi@saraa.org to schedule the visit.



HARRISBURG INTERNATIONAL AIRPORT PROJECT NO. 2023-006 – REPLACEMENT OF EXISTING PASSENGER BOARDING BRIDGES, PHASE II ADDENDUM NO. ONE (1)

ATTACHMENT NO. 3



1/2" = 1'-0"

NOTE: FOR GRAPHICAL REPRESENATIONS OF X, Y, AND H DIMENSIONS SEE DETAILS 1 & 2 ON S-101

GATE/FOUNDATION DIMENSIONS S501

GENERAL NOTES CODES

- 1. PENNSYLVANIA BUILDING CODE 2018. INTERNATIONAL BUILDING CODE 2018.
- 2. FAA AC150/5220-21C. CHAPTER 3, PASSENGER BOARDING BRIDGES.
- AMERICAN CONCRETE INSTITUTE (ACI), BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318). GUIDE TO CONCRETE REPAIR (ACI 546).
- 4. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC): AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS, AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.

DESIGN CRITERIA FOR NEW PASSENGER BOARDING BRIDGE LOADS

1.	LIVE LOAD	
	A. FLOOR	40 PSF
	R ROOF	30 DCE

2.	WIND LOAD: MAIN WIND FORCE RESISTANCE SYSTEM	
	A. BASIC WIND VELOCITY	112
	B. WIND DIRECTIONALITY FACTOR	0.85
	C. BUILDING CATEGORY	II
	D. IMPORTANCE FACTOR	1.0
	E. EXPOSURE CATEGORY	С
	F TOPOGRAPHIC FACTOR	1.0

F. TOPOGRAPHIC FACTOR	1.0
SEISMIC LOADING	
A. OCCUPANCY CATEGORY	II
B. IMPORTANCE FACTOR	1.0
C. SITE CLASS	D
D. SS	0.149
E. S1	0.044

NEW BRIDGES ON EXISTING FOUNDATIONS:

- 1. NON-SHRINK GROUT UNDER NEW BASEPLATES SHALL BE 5000 PSI
- 2. EXISTING PIERS AND ANCHOR BOLTS CAN SUPPORT THE INSTALLATION OF NEW PASSENGER BOARDING BRIDGES SO LONG AS THE NEW PASSENGER BOARDING BRIDGES DO NOT EXCEED THE EXISTING BRIDGE LENGTHS AND PROFILES. THE LOADS IMPOSED BY THE NEW PASSENGER BOARDING BRIDGES UNDER THESE CONDITIONS ARE LOWER THAN THE CURRENT BRIDGE LOAD RATING AT ALL GATES AND THUS THE EXISTING ANCHOR BOLT AND FOUNDATION ARE DEEMED ADEQUATE TO SUPPORT THE DESIGN BASIS BRIDGE.
- COMMON PBB ANCHOR BOLT LAYOUT COMPARES ALMOST IDENTICALLY TO WHAT IS CURRENTLY INSTALLED AT ALL GATES AND WILL ONLY REQUIRE MINOR MODIFICATION OF NEW BASEPLATES IF ANY. THESE MODIFICATIONS CAN BE COMPLETED PRIOR TO THE ROTUNDA COLUMN AND BASEPLATE ARRIVING ON

GATE No.	X (FEET)	Y (IN.)	H (FEET)	
A1	10.50±	6.50±		
В3	4.25±	6.25±		
B2	4.17±	7.00±		
C1	10.33±	6.75±		
C2	10.33±	6.75±		
C3	10.67±	6.75±		

CONSULTANT:



Tarantino Engineering 8115 Maple Lawn Blvd, www.tarantinoec.com



CERTIFICATION: 'I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF PENNSYLVANIA" LICENSE NO. PE080519 EXPIRATION DATE: 9/30/2025

DESCRIPTION NO. DATE DM CHECKED: APPROVED: BID SUBMISSION



PROJECT TITLE:	REPLACEMENT OF PASSENGER BOARDING BRIDGES, PHASE II	
SHEET TITLE:		

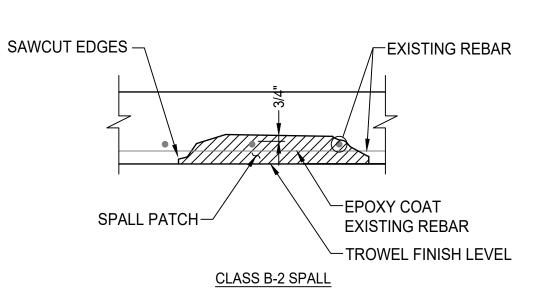
SCALE:

2023-006 PBB FOUNDATION DETAILS 22 of 23 **IDENTIFIER:** S501 **AS SHOWN** MARCH 20, 2024

CONTRACT NO.:

HARRISBURG INTERNATIONAL AIRPORT PROJECT NO. 2023-006 – REPLACEMENT OF EXISTING PASSENGER BOARDING BRIDGES, PHASE II ADDENDUM NO. ONE (1)

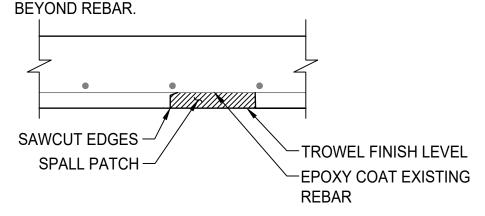
ATTACHMENT NO. 4



CONDITION DESCRIPTION

1. SPALLED SURFACE WITH REINFORCING EXPOSED OR DELAMINATION

OF CONCRETE AT LEVEL OF REINFORCING IS EVIDENT. 2. REINFORCING DETERIORATION IS MINOR WITH MORE THAN 85% OF THE FULL DIAMETER REMAINING BUT CONCRETE REMOVAL IS



CONDITION DESCRIPTION

TROWEL FINISH LEVEL

-EXISTING REBAR

 SURFACE SPALL; NO REINFORCEMENT EXPOSED AND UP TO 3/4" DEEP.

2. NO EVIDENCE OF CORROSION OF EXISTING REINFORCING.

SPALL PATCH-

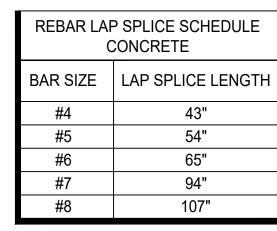
CLASS A SPALL

CONDITION DESCRIPTION

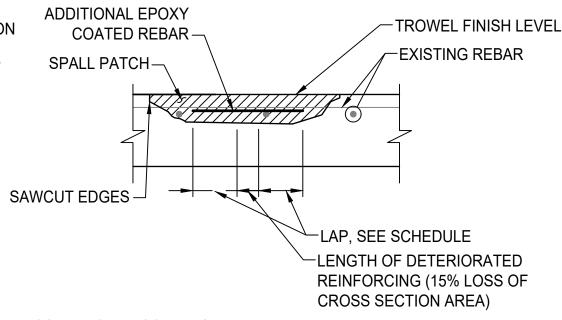
SPALLED SURFACE WITH REINFORCING EXPOSED

2. LESS THAN 1/2 OF THE BAR DIAMETER IS EXPOSED AND THE BOND BETWEEN THE REBAR AND CONCRETE IS SOUND.

CLASS B-1 SPALL



LAP SPLICE LENGTH SHOULD BE ADJUSTED PROPORTIONALLY PER THE TROWEL FINISH LEVEL PERCENTAGE OF EXISTING REBAR DEGRADATION. I.E. IF THE BAR IS 50% DETERIORATED, THE LAP SLICE MAY BE DECREASED BY 50%



CONDITION DESCRIPTION

- SPALLED SURFACE WITH REINFORCING EXPOSED OR DELAMINATION OF CONCRETE AT LEVEL OF REINFORCING IS EVIDENT AND REINFORCING IS HIGHLY DETERIORATED.
- REINFORCING DETERIORATION IS SEVERE WITH LESS THAN 85% OF THE FULL DIAMETER REMAINING. SUPPLEMENTAL OR REPLACEMENT OF REINFORCING REQUIRED

CLASS C SPALL

SPALL REPAIR NOTES

SAWCUT EDGES -

1. GENERAL NOTES

THE EXTERIOR SURFACE OF THE CONCRETE BEAMS AND COLUMNS ARE COVERED IN A THIN COATING THOUGHT TO BE A MEMBRANE OR CEMENTITIOUS COATING. CONTRACTOR TO REMOVE (SAND, HYDRO, OR SPONGE BLAST) EXISTING COATING ON CONCRETE BEAMS AND COLUMNS, ONLY AT REPAIR LOCATIONS NOTED BY TEC. TO EXPOSE THE CONCRETE STRUCTURAL SURFACE. DO NOT DAMAGE SURROUNDING BRICK INFILL PANELS. AFTER REPAIR IS COMPLETE, APPLY SIMILAR COATING IN COLOR AND CONSISTENCY TO MATCH

TEC HAS PROVIDED LOCATIONS OF SUSPECTED DAMAGE AND IDENTIFIED OTHER AREAS FOR THE CONTRACTOR TO SOUND (HAMMER TAPPING) EXTERIOR CONCRETE SURFACES TO IDENTIFY DAMAGE WITHIN THESE AREAS. DAMAGE SHOULD BE IDENTIFIED BY LOOSE. SPALLED OR DELAMINATED CONCRETE, SIGNS OF CORRODED REINFORCING OR CRACKING. THE CONTRACTOR PERFORMING THE WORK SHOULD HAVE, AND SUBMIT FOR EVALUATION, A RECORD OF 5 PROJECTS COMPLETED OVER THE LAST 5 YEARS OF SIMILARLY IDENTIFICATION AND REPAIR OF CONCRETE DAMAGE.

2. PRIMARY REMOVAL OF UNSOUND CONCRETE

REMOVE ALL UNSOUND CONCRETE WITH CHIPPING HAMMERS. 15 POUND HAMMER SHOULD BE USED UNLESS THE CONTRACTOR DEMONSTRATES TO THE INSPECTOR THAT THEY CAN OPERATE A 30 POUND HAMMER WITHOUT DEMOLISHING SOUND CONCRETE. 15 POUND HAMMER MUST BE USED WHEN WORKING AROUND REINFORCING. EXTEND REPAIR 3" MINIMUM BEYOND INTO SOUND EXISTING CONCRETE AND PROVIDE SAWCUT EDGES ON ALL SIDES (0.75 INCHES MINIMUM). TAKE CARE TO NOT CUT EXISTING REINFORCING.

EQUIPMENT USED SHALL BE SPECIFICALLY SUITABLE FOR THIS WORK WITHOUT CAUSING UNDUE SHOCK OR VIBRATION TO THE STRUCTURE.

WHERE PORTIONS OF THE EXISTING REINFORCING BARS ARE NOT SOUNDLY BONDED TO THE REMAINING CONCRETE, OR IF MORE THAN 1/2 OF THE REBAR DIAMETER / THICKNESS IS EXPOSED, THE CONTRACTOR SHALL REMOVE CONCRETE AROUND AND UNDER THE BAR. ALL FREELY EXPOSED BAR SHALL BE NO CLOSER THAT 3/4 INCHES FROM EXISTING CONCRETE.

3. SECONDARY REMOVAL METHOD

AFTER REMOVAL OF UNSOUND CONCRETE WITH CHIPPING HAMMERS, THE CONCRETE AND REINFORCING LEFT IN PLACE SHALL BE PREPARED FOR REPAIR BY A SECONDARY METHOD SUCH AS ABRASIVE BLASTING OR HIGH-PRESSURE WATER JETTING, TO REMOVE ANY REMAINING DAMAGED AND MICROCRACKED SURFACE MATERIAL. THE INSPECTOR SHOULD VERIFY THAT THE CONCRETE SURFACE IS SOUND PRIOR TO PLACING REPAIR MATERIAL. SURFACES WITH LOOSE CONCRETE, RUST, OIL, DUST, AND OTHER CONTAMINANTS IS NOT ACCEPTABLE. QUESTIONABLE SURFACE CAN BE VERIFIED BY TENSILE PULL-OFF TESTED OF TRIAL REPAIRS (ASTM C1583).

4. EXISTING REINFORCING

THE EOR SHALL BE ALERTED IF REINFORCING IS FOUND WITH LESS THAN 0.5" OF COVER.

WHEN EXISTING REINFORCING IS FOUND TO HAVE 15% OR MORE SECTION LOSS, SUPPLEMENTAL REINFORCING IS REQUIRED. IF EXISTING REINFORCING IS ABLE TO BE THOROUGHLY CLEANED BY SANDBLASTING TO REMOVE ALL RUST AND ATTACHED CONCRETE AND TO ACHIEVE A NEAR WHITE CONDITION, IT MAY REMAIN, OTHERWISE REMOVE REINFORCING USING A CUTTING WHEEL (DO NOT FLAME CUT). INSTALL EPOXY COATED (ASTM 615 GRADE B) SUPPLEMENTAL REBAR OF THE SAME SIZE AND SPACING AND IN THE SAME PLANE AND ORIENTATION AS THE BARS THAT HAVE BEEN REMOVED. LAP SUPPLEMENTAL BARS AS SCHEDULED.

EPOXY COAT ALL EXISTING REINFORCING TO REMAIN WITH SIKATOP ARMATEC 108. PLACE PAPER BETWEEN REBAR AND CONCRETE TO PREVENT ANY EPOXY COATING (MEANT FOR REBAR) DIRECTLY TO CONCRETE.

5. SURFACE PREPARATION, INSTALLATION AND CURING

FOR POLYMER MODIFIED PORTLAND CEMENT BASED REPAIR MORTAR: FOLLOW MANUFACTURERS INSTRUCTIONS.

FOR CONVENTIONAL CONCRETE: PREPARE SURFACE WITH AN EPOXY BONDING AGENT SUCH AS SIKADUR 32 HIMOD. MIX. TRANSPORT MIX AND PLACE CONCRETE, INCLUDING HOT AND COLD WEATHER APPLICATIONS, PER ACI 301, ACI 304, ACI 305 AND 306. WET CURE. CONCRETE SHALL BE PROTECTED AGAINST LOSS OF MOISTURE BY COVERING WITH AND IMPERVIOUS SHEET CURING MATERIAL CONFORMING TO ASTM C171

SPALL PATCH MATERIAL

FOR PATCH DEPTHS LESS THAN 2" USE A POLYMER MODIFIED PORTLAND CEMENT BASED REPAIR MORTAR SUCH AS SIKATOP 122 PLUS. MAXIMUM 0.05% SHRINKAGE OVER 28 DAYS AND 5,000 PSI 28 DAY COMPRESSIVE STRENGTH MINIMUM. ADD AGGREGATE AS REQUIRED BY MANUFACTURER FOR LIFTS OVER A CERTAIN THICKNESS.

FOR PATCH DEPTHS GREATER THAN 2", USE CONVENTIONAL CONCRETE, WITH A MAXIMUM 0.05% SHRINKAGE OVER 28 DAYS AND 5,000 PSI 28 DAY COMPRESSIVE STRENGTH MINIMUM, AND WATER CEMENT RATION OF 0.45 MAX. A BAG MIX OR READY MIX MIX DESIGN MEETING THESE SPECIFICATIONS MUST BE SUBMITTED THAT IS CERTIFIED BY A PROFESSIONAL ENGINEER.

7. PRICING

CONTRACTOR SHALL PROVIDE UNIT PRICES PER CUBIC FOOT OF REPAIR FOR CLASS A, CLASS B, OR CLASS C REPAIR WITH ESTIMATES OF VOLUME.

8. INSPECTION

OWNER TO RETAIN AN IBC QUALIFIED SPECIAL INSPECTOR UNDER THE SUPERVISION OF A PROFESSIONAL ENGINEER FOR TESTING, AND CONTINUOUS MONITORING OF EXPLORATION AND REPAIRS. DURING CONCRETE DAMAGE EXTENT EXPLORATION AND REPAIR, INSPECTOR FULL TIME DURING OPERATION TO MONITOR, DOCUMENT, AND APPROVE VOLUMES AND TYPE OF REPAIRS. SUBMIT DAILY REPORTING TO OWNER AND ENGINEER FOR REVIEW AND FINAL APPROVAL. THE AGENCY SHALL INSPECT THE FORMWORK AND REINFORCING STEEL PLACEMENT FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS AND SHOP DRAWINGS. THE AGENCY SHALL MONITOR ALL STRUCTURAL CONCRETE PLACEMENT FOR CONFORMANCE WITH APPLICABLE ACI REQUIREMENTS

- A. SAMPLE FRESH CONCRETE IN ACCORDANCE WITH ASTM C172. MOLD TEST CYLINDERS IN ACCORDANCE WITH ASTM C31.
- B. THE FOLLOWING NUMBER OF TEST CYLINDERS SHALL BE CAST FOR EACH DAY'S POUR OR EACH 50 CUBIC YARDS, WHICHEVER RESULTS IN MORE TEST CYLINDERS.
 - a. LAB CURED 2@7 DAYS, 2@28 DAYS FIELD CURED 2@7 DAYS, 2@28 DAYS
 - THE AGENCY WILL MAKE ADDITIONAL TESTS OF IN-PLACE CONCRETE AT THE CONTRACTOR'S EXPENSE WHEN THE TEST RESULTS INDICATE SPECIFIED CONCRETE STRENGTHS HAVE NOT BEEN ATTAINED, AS DIRECTED BY THE STRUCTURAL ENGINEER



REMOVE FOREIGN OBJECT SEE NOTE 1

GATE B-3

N.T.S.

1. CLASS A REPAR 2. ESTIMATED REPAIR VOLUME = 64 IN^3



GATE C-2

1. CLASS A REPAR

N.T.S.

N.T.S.

2. ESTIMATED REPAIR VOLUME = 24 IN³



GATE C-3

PROJECT TITLE:

1. CLASS A REPAR

2. ESTIMATED REPAIR VOLUME = 48 IN³

REPLACEMENT OF PASSENGER **BOARDING BRIDGES, PHASE II**

SHEET TITLE: EXISTING PBB FOUNDATION REPAIR DETAILS

SHEET NO.: 23 of 23 **IDENTIFIER:** S502

2023-006

CONTRACT NO.:

SCALE: **AS SHOWN** MARCH 20, 2024

ONSULTANT

Tarantino Engineering Consultants, PC 8115 Maple Lawn Blvd, Suite 350 Fulton, MD 20759 410-921-7678 www.tarantinoec.com TEC

BRIAN TARANTINO No. PE 080519

CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF PENNSYLVANIA" LICENSE NO. PE080519

EXPIRATION DATE: 9/30/2025

DESCRIPTION NO. DM HECKED: PPROVED BID SUBMISSION

EVISION | REVISION

