

BID DOCUMENTS

FOR

CITY PARK TRAIN HUB LOCOMOTIVE
REFURBISHMENT & PAVILION REPLACEMENT

MSHA CONTRACT NO. WA061B51
F.A. PROJECT NO. AC-TAP-3(910)E

CITY OF HAGERSTOWN CONTRACT NO. 20-CPTH-33

DRAWING SERIES NO. 62-219

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ENGINEERING DEPARTMENT

2023

NOTICE TO CONTRACTORS

CARGO PREFERENCE ACT (CPA)

All Contractors and Sub-Contractors are to be in compliance with the requirements of 46 CFR Part 381 and incorporate by reference the recommended clauses in 46 CFR 381.7(a)-(b) - ("Contractor and Subcontractor Clauses. "Use of United States-flag vessels")

(a) Agreement Clauses. "Use of United States-flag vessels:

"(1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.

"(2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a)(1) of this section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590."

(b) Contractor and Subcontractor Clauses. "Use of United States-flag vessels: The contractor agrees-

"(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

"(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

"(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract".

Guidance documents for this requirement, including the 12/11/2015 policy memo, the 12/8/2015 legal opinion and a page of Q&A's are available on the CPA construction Program Guidance page:

<https://www.fhwa.dot.gov/construction/cqit/cargo.cfm>

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

NOTICE TO CONTRACTORS

eMaryland Marketplace Advantage.

eMaryland Marketplace Advantage (eMMA) is an electronic commerce system administered by the Maryland Department of General Services. All associated materials, the solicitation, the summary of pre-bid meetings, bidder's questions and the Procurement Officers responses, Addenda, and other solicitation related information will be provided via eMaryland Marketplace Advantage; <https://procurement.maryland.gov>.

Bidders must register, (registration is free) on eMMA, log-in and acknowledge all bid amendments and submit the Addendum Verifications to be Awarded a Contract. Should you have any questions regarding registration, please call the eMMA Help Desk at 410-767-1492.

Bid Opening and Requirements.

Bid Opening will be administered per the current bidding process through;

The City of Hagerstown, Maryland
Department of Engineering
1 East Franklin Street
Hagerstown, Maryland 21740

and per TC SECTION 2 BIDDING REQUIREMENTS AND CONDITIONS of the Standard Specifications for Construction and Materials.

Bidders are required to provide verifications for all Addenda and include with your sealed bids. "Sealed Bid" should be labeled on your envelope.

Electronic bids will NOT be accepted on this project.

**TABLE OF
CONTENTS**

INVITATION FOR BIDS
City Park Train Hub Locomotive
Refurbishment & Pavilion Replacement
City Contract No. 20-CPTH-33
MSHA Contract No. WA061B51 FAP Project No. AC-TAP-3(910)E
Table of Contents

	Latest Date	No. of Sheets	Page No.
Cargo Preference Act – Notice to Contractors.....	05-30-17	2	i - ii
eMaryland Marketplace Advantage – Notice to Contractors	09-05-19	1	iii
<u>TABLE OF CONTENTS</u>			1
Table of Contents.....		3	2 - 4
<u>GENERAL INFORMATION:.....</u>			5
Brief Summary.....		2	6-7
Invitation for Bids.....		1	8
Instructions to Bidders.....		4	9-12
<u>GENERAL CONDITIONS, BONDS & CONTRACT AGREEMENT.....</u>			13
General Conditions.....		16	14-29
Performance Bond.....		3	30-32
Labor & Materials Payment Bond.....		3	33-35
Contract Agreement.....		2	36-37
Specifications & Standards, Contract Documents, References, General Notes, Contingent Items & quantities, Insurance and Bonds.....		4	38-41
<u>MSHA CONTRACT PROVISIONS.....</u>			42
CP-Contractor Registration Requirements.....	09-30-20	1	43
CP-Manual on Uniform Traffic Control Devices (MdMUTCD) Requirements.....	05-30-17	1	44
CP- (NCHRP)Report 350 and MASH Compliance.....	10-04-19	2	45-46
CP-Occupying Wetlands.....	05-30-17	1	47
CP-Form FHWA 1273	10-23-23	14	48-60A
CP-Affirmative Action Requirements Utilization of Disadvantaged Business Enterprises for Federal Aid Contracts	04-11-22	11	61-71
CP-Notice to Contractors DBE Goal.....	04/11/22	1	72
CP-DBE Compliance Field Meeting.....	11-01-21	1	73
CP-Traffic Control Plan Certification.....	12-10-18	1	74
CP-Prevailing Wage Instructions for the Contractor	05-30-17	4	75-78
Wage Rate Determination No. MD20230056	09-08-23	9	79-87
CP-Notice of Actions Required for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246)..	05-30-17	8	88-95
CP-Training Provisions.....	06-15-20	4	96-99

INVITATION FOR BIDS
City Park Train Hub Locomotive
Refurbishment & Pavilion Replacement
City Contract No. 20-CPTH-33
MSHA Contract No. WA061B51 FAP Project No. AC-TAP-3(910)E
Table of Contents

	Latest Date	No. of Sheets	Page No.
CP-High Visibility Safety Apparel Policy.....	06-24-19	2	100-101
<u>MSHA SPECIAL PROVISIONS</u>.....			102
SP-PROJECT DESCRIPTION, SPECIFICATIONS, EMPLOYMENT AGENCY.....	07-01-22	1	103
SP-NOTICE TO CONTRACTOR FOR FEDERAL CONTRACTS – Request for Information, etc.-----	07-01-22	5	104-108
SP-RIGHT-OF-WAY STATUS (Certification).....	09-22-21	1	109
SP-NOTICE TO CONTRACTOR – Early Submissions	05-30-17	1	110
<u>MSHA GENERAL PROVISIONS</u>.....			111
SP-GP Section 2 Bidding Requirements and Conditions	05-30-17	10	112-121
SP-GP-5.13 Acceptance for Maintenance.....	02-01-23	2	122-123
<u>MSHA TERMS AND CONDITIONS</u>.....			124
SP-TC -1.03 Definitions.....	10-04-22	1	125
SP-TC Section 2 Bidding Requirements and Conditions	05-30-17	5	126-130
SP-TC-4.02 Failure to Maintain Project.....	05-30-17	1	131
SP-TC-7.02 Payment Allowances for Stored Materials	02-01-23	1	132
SP-TC-7.05 Progress payments	04-18-23	3	133-135
<u>MSHA SUPPLEMENTAL PROVISIONS</u>.....			136
SP-Section 104-Maintenance of Traffic			
104.01 Traffic Control Plan (TCP)	11-03-22	5	137-143
SHA District 6 letter of Approval of TCP.....	09-24-21	1	144
SP-Section 203-Borrow Excavation	05-30-17	3	145-147
SP-Section 603 – Sidewalks.....	07-19-22	2	148-149
SP-Section 705-Turfgrass Establishment	02-01-23	1	150
SP-Section 706-Shrub Seeding Establishment	02-01-23	1	151
SP-Section 709-Soil Stabilization Matting	02-01-23	1	152
Utility Statement.....	06-08-23	5	153-157
Utility Coordination Certification	09-21-23	2	158-159
<u>ARCHITECTURAL SPECIFICATIONS</u>.....			160

INVITATION FOR BIDS
City Park Train Hub Locomotive
Refurbishment & Pavilion Replacement
City Contract No. 20-CPTH-33
MSHA Contract No. WA061B51 FAP Project No. AC-TAP-3(910)E
Table of Contents

	Latest Date	No. of Sheets	Page No.
Project directory & List of Drawings.....	09-06-22	3	161-163
Section 01 11 – Summary of work.....	09-6-22	21	164-184
Section 01 31 – Project Management and coordination.....	09-6-22	4	185-188
Section 01 32 – Construction Progress Documentation.....	09-6-22	3	189-191
Section 01 33 – Submittal procedures.....	09-6-22	7	192-198
Section 01 45 – Quality Control.....	09-6-22	7	199-205
Section 01 73 – Cutting and patching.....	09-6-22	3	206-208
Section 01 74 – Cleaning.....	09-6-22	4	209-212
Section 01 78 – Closeout procedures and O&M data.....	09-6-22	14	213-226
Section 02 11 – Hazardous Material Removal & Report.....	09-6-22	27	227-253
Section 00 21 – Selective Demolition.....	09-6-22	3	254-256
Section 03 30 – Cast in Place Concrete.....	09-6-22	9	257-265
Section 05 12 – Structural Steel.....	09-6-22	4	266-269
Section 05 50 - Metal Fabrications.....	09-6-22	4	270-273
Section 06 10 – Rough Carpentry.....	09-6-22	3	274-276
Section 07 61 – Prefinished Metal Roof.....	09-6-22	8	277-284
Section 07 72 – Roof Accessories and Specialties.....	09-6-22	2	285-286
Section 07 92 – Joint Sealers.....	09-6-22	4	287-290
Section 08 80 – Glazing.....	09-6-22	3	291-293
Section 09 90 – Coatings.....	09-6-22	3	294-296
Section 31 00 – Earthwork & Subsurface Report.....	09-6-22	15	297-311
Section 32 14 – Asphalt Concrete Paving.....	09-6-22	8	312-319
Section 32 16 – Concrete Sidewalk.....	09-6-22	4	320-323
Section 32 92 – Seeding.....	09-6-22	7	324-330
DESCRIPTION OF BID ITEMS.....			331
Item 1001 Mobilization.....		1	332
Item 1002 Temporary Orange Fence.....		1	333
Items 4001-4050 Locomotive 202 Refurbishment.....		2	334-335
Items 4501-4538 Locomotive Pavilion.....		2	336-337
LOCOMOTIVE QUALIFICATION REQUIREMENTS : ENVELOPE A.....			338
Requirements for “Pre-Qualification Envelop” A.....		1	339
Request for qualifications and Scope of Work.....		4	340-343
Review Process.....		1	344
Contractor’s Certification.....		1	345
Pre-qualification Questionnaire.....		7	346-351
PROPOSAL FORM PACKET : ENVELOPE B.....			352
Bidders Affidavit.....		2	353-354
Contract Affidavit.....		4	355-358
Bidder Certification of Work Capacity.....		1	359
Certification by contractor/subcontractor for Equal Employment Opportunity.....		1	360
Subcontractors listing (include pre-qualified).....		1	361
CP-eMM Addendum Receipt Verification Form.....	05-30-17	1	362
CP-eMM Bid Submittal Instructions.....	05-30-17	1	363
(Included in all project IFB’s)			
CP-Proposal Form Packet (Federal) Cover and quantities.....	09-05-23	8	364-371
CP-Proposal Form Packet (Federal).....	09-05-23	42	372-413

**GENERAL
INFORMATION**

**CITY PARK TRAIN HUB LOCOMOTIVE
REFURBISHMENT & PAVILION REPLACEMENT
CONTRACT NO. 20-CPTH-33**

BRIEF SUMMARY

THIS IS ONLY A BRIEF SUMMARY OF INFORMATION. IT SHALL BE THE BIDDER'S RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE ENTIRE CONTRACT DOCUMENTS AND TO FREQUENTLY CHECK THE CITY OF HAGERSTOWN WEBSITE FOR ADDENDA AND UPDATES UNTIL THE BID OPENING.

SCOPE OF WORK:

This project entails the cosmetic refurbishment of historic locomotive #202 at City Park in Hagerstown, MD; partial (first bay) removal of existing cover over locomotive; construction of a new pavilion over the locomotive; various site work and all labor, materials, time and appurtenances required to complete the work in accordance with the Contract Documents prepared by Proffitt & Associates, Fox & Associates and the City of Hagerstown, MD.

DESIGNER:

Contract documents and plans as prepared by Proffitt & Associate Architects, Fox & Associates and the City of Hagerstown Department of Engineering, which includes Drawings No. 62-219-001 through 62-219-022 a part of these contract documents.

COST OF BID DOCUMENTS:

Digital copies of the contract drawings and bid documents may be obtained at no cost from the City of Hagerstown by calling 301-739-8577, ext 125 OR hard copies may be obtained at a cost of \$75.00 if picked up at City Hall or \$100.00 if mailed (make check payable to the City of Hagerstown).

PRE-BID CONFERENCE:

There will be a NON-MANDATORY pre-bid conference on Tuesday, October 24, 2023 at 1:00 pm on-site @ 730 City Park Drive (weather permitting) in case of inclement weather the conference will be in the Engineering Department Conference Room, third floor, City Hall.

LENGTH OF CONTRACT:

One hundred and fifty (150) WORKING DAYS is the length of the contract.

LIQUIDATED DAMAGES:

Liquidated damages are assessed at \$ 300.00 per day.

FUNDING:

Funding for this project is provided by an 80% TAP Grant through the State of Maryland with a 20% match from the City of Hagerstown, Maryland. Davis Bacon wage rates will apply.

MDE/DBE:

Bidders are advised that this contract does include Minority Business Enterprise requirements and a Disadvantaged Business Enterprise goal of 27 %

BID OPENING:

Bids must be submitted in two separate envelopes on the same day and **both envelopes will be accepted no later than Tuesday, November 7, 2023, at 11:00 am** in the office of the City Clerk, 2nd Floor, City Hall. On that date the Qualification envelope A will be opened and read.

To allow time to verify qualifications, the Price Proposal envelopes will be opened two weeks later **Tuesday, November 21, 2023, at 11:00 am** in the City Clerk's office, but only for those bidders who have shown that they meet the qualifications to perform the locomotive refurbishment. Proposal envelopes for those bidders who do not meet the qualifications to complete the locomotive

refurbishment will be returned to the bidder unopened and marked as “non-responsive”.

Electronic Bids will NOT be accepted on this project.

ENVELOPE 'A' : PRE-QUALIFICATION : The bidder must be qualified to perform the locomotive refurbishment portion of this contract or utilize a subcontractor who is qualified to perform that work. Bidders may use one of the following qualified contractors to complete this work:

Steam Operations Corp. – Birmingham, AL
Steam Services of America – Sylva, N.C.
FMW Solutions – Duluth, MN
Diversified Services – Ringgold, GA

This Pre-Qualification envelope A must include a letter from the General contractor stating which of the above pre-approved contractors will perform the locomotive refurbishment.

Or, if the bidder wishes to use a different contractor to complete the locomotive refurbishment, then this Pre-Qualification envelope A must include the information requested on pages 338-351 to show that firm is qualified.

ENVELOPE 'B': PRICE PROPOSAL: The Price Proposal Envelope B will include the completed Bid Booklet with all executed documents and complete cost proposal.

BID SURETY: 5% Bid Bond, Cashier's Check or Certified Check to be submitted with the Sealed Proposal envelope.

CONTRACT BONDS: The successful Bidder shall submit a 100% Performance Bond and a Labor & Materials Payment Bond upon award of contract.

ESTIMATED START: Notice to Proceed will be issued in Spring 2024, on condition of State approval.

QUESTIONS BEFORE BID OPEN: Written questions will be accepted until the end of business day on Tuesday, October 31, 2023, and sent to:

City of Hagerstown
Jim Bender, City Engineer
1 East Franklin Street
Hagerstown, Maryland 21740



CITY OF HAGERSTOWN, MARYLAND

Engineering Department

INVITATION FOR BIDS **CITY PARK TRAIN HUB LOCOMOTIVE** **REFURBISHMENT & PAVILION REPLACEMENT**

CONTRACT NO. 20-CPTH-33

The City of Hagerstown will accept sealed proposals in the office of the City Clerk, 2nd floor, City Hall, until **11:00 a.m. on Tuesday, November 7, 2023**, for the cosmetic refurbishment of historic locomotive #202; removal of existing cover over locomotive; construction of pavilion over existing locomotive train and proposed elevated viewing platform; various site work and all labor, materials, time and appurtenances required to complete the work in accordance with the Contract Documents prepared by Proffitt & Associates, Fox & Associates and the City of Hagerstown, MD.

Copies of the Contract Documents are on file and may be obtained by the Bidder from the Department of Engineering, 3rd floor, City Hall, Hagerstown, MD 21740 (Phone: 301-739-8577 extension 125) for a NON-REFUNDABLE fee of \$ 75.00 per set if picked up, or \$ 100.00 per set if mailed. Make check payable to: The City of Hagerstown.

Information for this project will be posted on the City of Hagerstown website www.hagerstownmd.org and on eMaryland Marketplace at <https://ebidmarketplace.com>. E-Maryland Marketplace is an internet-based procurement system managed by the Maryland Department of General Services; vendors may register free to obtain information on projects exceeding \$25,000 and will receive automatic publication notice for invitations to bid for the category in which your firm registers.

All proposals shall be made on forms furnished in the Bid Booklet. Each bid will include two separate envelopes. **Envelope A** will include a letter to indicate the contractor or subcontractor who will perform the locomotive refurbishment and shall include that contractor's qualifications. This envelope is to be labeled "QUALIFICATION TO COMPLETE CITY PARK TRAIN HUB LOCOMOTIVE REFURBISHMENT, CONTRACT NO. 20-CPTH-33. This envelope will be opened on the day bids are received.

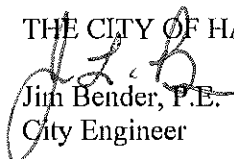
Envelope B should include the cost proposal and contain the bid booklet and shall be marked with the words, "SEALED PROPOSAL, CITY PARK TRAIN HUB LOCOMOTIVE REFURBISHMENT & PAVILION REPLACEMENT, CONTRACT NO. 20-CPTH-33", Name and address of bidder shall be written on the outside of the envelope. This envelope will be opened two weeks after the date bids are received for bidders who are approved based on envelope A.

A pre-bid conference will be held at **1:00 p.m. on Tuesday, October 24, 2023**, on-site @ 730 City Park Drive (weather permitting) in case of inclement weather conference will be in the Engineering Department, Conference Room, 3rd floor, City Hall.

Proposals shall be accompanied by a Bid Bond, Cashier's Check or a Certified Check in an amount of not less than 5% of the total of the bid as guarantee of providing a 100% Performance Bond and Labor and Materials Payment Bond upon successful bidding. No bid may be withdrawn until after 90 days from opening date.

The City of Hagerstown reserves the right to reject or accept any or all bids submitted, either in whole or in part for any reason within its absolute discretion and to re-advertise if it deems necessary. The City further reserves the right to waive any informalities.

THE CITY OF HAGERSTOWN


Jim Bender, P.E.
City Engineer

Engineering Department

1 East Franklin Street • Hagerstown, MD 21740-4817

Ph: 301.739.8577 Ext. 125

8

INSTRUCTIONS TO BIDDERS
ON CONTRACT FOR
CITY PARK TRAIN HUB LOCOMOTIVE
REFURBISHMENT & PAVILION REPLACEMENT
CONTRACT NO. 20-CPTH-33

1 of 4

- 1) All proposals must be made on the forms provided in the Bid Booklet hereto attached. All proposals must be legibly written in ink, with all prices given in figures, and the written words shall govern. No alterations in proposals or in the printed forms will be permitted by erasures or interlineations. Each proposal will include two separate sealed envelopes, the first to show qualification to refurbish the locomotive and the second envelope shall include the bid booklet in its bound form as furnished by the City shall be enclosed in a SEALED ENVELOPE, addressed to: OFFICE OF CITY CLERK, 2ND FLOOR, CITY HALL, 1 EAST FRANKLIN STREET, HAGERSTOWN, MARYLAND 21740, and endorsed on the outside with the Bidder's Name and Address and with the words: "SEALED PROPOSAL – CITY PARK TRAIN HUB LOCOMOTIVE REFURBISHMENT & PAVILION REPLACEMENT, CONTRACT NO. 20-CPTH-33. File at the office of the City Clerk prior to the hour set for the opening of the bids.

- 2) BIDDER DISQUALIFICATION: The City of Hagerstown reserves the right to refuse to issue a proposal form to a prospective bidder or may disqualify a bid for any of the following reasons:
 - a) Failure to utilize a qualified contractor to complete the locomotive refurbishment.
 - b) Failure to pay, or satisfactorily settle all bills due for labor and materials on former contracts in force (with the City of Hagerstown) at the time the City of Hagerstown issues the proposal to a prospective bidder.
 - b) Contractor default under previous contracts with the City of Hagerstown.
 - c) Unsatisfactory work on previous contracts with the City of Hagerstown.

- 3) Proposals carrying riders or qualifications of the bids as submitted may be rejected. The proposal shall be based on the Contractor furnishing all of the necessary labor, tools, materials and equipment to fully construct the work in accordance with the detailed plans and specifications covering the work.

- 4) PROPOSAL GUARANTEE: Each proposal of this contract shall, as a guarantee of good faith on the part of the Bidder, be accompanied by either a Bid Bond, Cashier's Check, or a Certified Check, drawn on a solvent bank of Maryland, in an amount of not less than five percent (5%) of the total of the base bid.

The proposal guarantee shall be made payable without conditions, to the City of Hagerstown, and the check will be retained by and forfeited to the said Owner, if such proposal is accepted and the contract awarded and the Bidder fails to enter into the prescribed contract and furnish the specified bonds within ten (10) days after the award is made by the Owner.

- 5) SIGNATURE OF BIDDERS: Each proposal must be signed in ink by the Bidder with the full name and with his full address. In the case of a firm, the name and residence of each member must be inserted, and in case the proposal is submitted by, or on behalf of a corporation, it must be signed in the name of such Corporation by an official authorized to bind the bidder.

- 6) **ONLY ONE PROPOSAL ACCEPTED:** No Bidder may submit more than one proposal. Two or more proposals under different names will not be received from one firm or association.
- 7) **ADDENDUM & INTERPRETATION:** If any person contemplating submitting a bid for the proposed contract is in doubt as to the true meaning of any part of the specifications, or other proposed contract documents, he may submit to the Engineer a written request for interpretation thereof and the reply will be made to all prospective bidders. No interpretations of the meaning of the Plans, Specifications or other bid documents will be made to any bidder orally.
- 8) **MODIFICATION OF BIDS:** Once submitted, bids may only be modified if a written request is submitted to and approved by the City of Hagerstown prior to the hour set for opening. The written request must be signed by an officer of the company that has submitted the bid. The City, at its sole discretion, may accept electronic or facsimile copies of the modification request, provided that these copies contain the required signature. Once the modification request has been approved by the City, the City Clerk will relinquish the original sealed proposal to the bidder. It shall be the bidder's responsibility to make any desired modifications to the proposal, seal and label the proposal in accordance with the "Instructions to Bidders", and submit the modified proposal to the City Clerk prior to the hour of the bid opening. Failure to resubmit the modified proposal prior to the hour of the opening shall cause that bid to be considered late, and that bid shall not be opened or considered.
- 9) **BOUND COPY OF CONTRACT DOCUMENTS:** No Bidder shall remove any pages from the bound Bid Documents prior to submitting their bid. A Bid Booklet is provided for the convenience of the Bidder. The Bidder shall submit only the completed Bid Booklet, proof of receipt of addenda, and any required sureties or certificates in their sealed proposal; all other Bid Documents shall be retained by the Bidder.
- 10) **BID OPENING TIME:** Entire bids (both envelopes) must be submitted on the same day. Contract bid proposals will be opened at 11:00 am SHARP!! Before any bid opening procedure, time will be confirmed. After the confirmed time of 11:00 a.m. NO bid will be accepted. The Pre-qualification envelopes will be opened on bid submittal date. The cost proposal envelopes will be opened two weeks later, but ONLY for those contractors who are approved to complete the locomotive refurbishment in accordance with Envelope A.

Also, all bid proposals must be accompanied with the required Bid bond, Cashier's check, or Certified Check, in an amount not less than five percent (5%) of the total of the bid as a guarantee of the bidder entering into a contract for the construction of the work and furnishing of a 100% Performance Bond and Labor & Materials Payment Bond.
- 11) **WITHDRAWAL OF BID:** No bidder may withdraw a bid for a period of ninety (90) days after the date and hour set for opening. A bidder may withdraw his proposal at any time prior to the expiration of the period during which proposals may be submitted, by written request of the Bidder, which request must be signed in the same manner and by the same person who signed the proposal.

- 12) **REJECTION OF BIDS:** The City of Hagerstown reserves the right to reject or accept any or all bids submitted, either in whole or in part, for any reason within its absolute discretion, including use of a non pre-qualified subcontractor to refurbish the locomotive. The City of Hagerstown reserves the right to award the work to person(s) or firms(s) that will best serve the interest of and be most advantageous to the City of Hagerstown.
- 13) **RETURN OF THE BID SURETY:** The bid surety of the three low bidders may be retained for a period not to exceed ninety (90) days, pending the approval of award of contract by the City of Hagerstown. All other bidders' sureties will be returned immediately after the bids have been tabulated and the three low bids have been determined. Sureties which have been retained will be returned when the Bidder, to whom the contract has been awarded, has furnished and filed the necessary number of signed contracts and bonds with the City of Hagerstown, and when the executed contracts and bonds have been approved by the City of Hagerstown as to final execution.
- 14) **CONTRACT BONDS REQUIRED:** The Contractor, to whom the work is awarded, will be required to give a Bond to the City, executed by a reliable and accredited Surety Institution authorized to do business in the State of Maryland, acceptable to the City Attorney, signed by an "Attorney in Fact" of residence in Maryland and in an amount equal to the total of the contract, as a guarantee of the full performance and completion of the contract and payment of all labor and all material bills.
- 15) **QUALIFICATION OF BIDDER:** The City of Hagerstown may make such investigations as it deems necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the City of Hagerstown all such information and data for this purpose as the City of Hagerstown may request. The City of Hagerstown reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the City of Hagerstown that such bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein. Cost Proposal Bids will be considered ONLY from those contractors who are approved as being qualified to complete the refurbishment of the locomotive. Conditional bids will not be accepted.
- 16) **COPIES OF CONTRACT:** Three (3) copies of the executed Contract shall be submitted by the successful bidder within ten days after the award by the City of Hagerstown. Upon occasion, four (4) copies of an executed contract may be required, if the project is Federal or State funded.
- 17) **CONTRACT AWARD:** No contract documents shall be executed until the contract has been awarded by the City of Hagerstown.
- 18) **TIME OF COMPLETION:** The time of completion of the work is of vital importance and the Contractor will be required to complete the work within the stipulated time.
- 19) **EXAMINATION OF PROJECT SITE:** The Contractor shall make careful examination of the project site, the soil and water conditions to be encountered, improvements and private property to be protected, and methods of ingress and egress, and methods of handling traffic during construction.

- 20) **CONDITIONS OF WORK:** At the time of the opening of bids, each bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the Plans and Contract documents (including addenda). The failure or omission of any bidder to examine any form, instrument, or document shall in no way relieve any bidder from any obligation with respect to his/her bid.

- 21) **EQUAL EMPLOYMENT OPPORTUNITY:** During the performance of this contract, the contractor agrees as follows:
 - a) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure the applicants are employed, and the employees are treated, during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not limited to the following: employment, upgrading, demotion, or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

 - b) The contractor agrees to post in conspicuous places available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this non-discrimination clause.

 - c) The contractor will, in all solicitations or advertisement for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

**GENERAL
CONDITIONS**

GENERAL CONDITIONS

1. **CONTRACT AND CONTRACT DOCUMENTS:**

The plans, specifications, and addenda shall form a part of the contract and the provisions thereof shall be as binding upon the parties hereto as if they were herein fully set forth. The table of contents, titles, headings, running headlines and marginal notes contained herein and in said documents are solely to facilitate reference to various provisions of the contract documents and in no way affect, limit or cast light on the interpretation of the provisions to which they refer.

2. **DEFINITIONS:**

The following terms as used in these General Conditions are respectively defined as follows:

OWNER: The Owner shall be understood to mean the City of Hagerstown, Maryland.

ENGINEER: Wherever reference is made to the Engineer, it shall be understood to mean the City Engineer of the City of Hagerstown, Maryland, or his designated representative.

3. **CONFLICTING CONDITIONS:**

Any provision in any of the contract documents which may be in conflict or inconsistent with any of the paragraphs in these General Conditions shall be voided to the extent of such conflicts or inconsistency.

4. **REQUIRED PROVISIONS DEEMED INSERTED:**

Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and the contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party, the contract shall forthwith be physically amended to make such insertion or correction.

5. **ASSIGNMENTS:**

The Contractor shall not assign the whole or any part of this contract or any monies due or to become due hereunder without written consent of the Owner. In case the Contractor assigns all or any part of any monies due or to become due under this contract, the instrument and assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee to any monies due or to become due to the Contractor shall subject the prior claims of all persons, firms, and corporations for services rendered or materials supplied for the performance of the work called for in the contract.

6. **OTHER PROHIBITED INTERESTS:**

No official of the Owner who is authorized in such capacity and on behalf of the Owner to negotiate, make, accept or approve, or to take part in negotiating, making, accepting, or approving any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with the construction of the project, shall become directly or indirectly interested personally in this contract or in any part hereof. No officer, employee, architect, attorney, engineer or inspector of or for the Owner who is authorized in such capacity shall act on behalf of the Owner to exercise any legislative, executive, or supervisory or other similar function in construction of the project, shall become directly or indirectly interested personally in this contract or in any part thereof, any material supply contract, subcontract, insurance contract or any other contract pertaining to the project.

7. PERMITS AND REGULATIONS:

The Contractor shall procure and pay for all permits, license and approvals necessary for the execution of his contract. The Contractor shall comply with all laws, ordinances, rules, orders, and regulations relating to the performance of the work, the protection of adjacent property, and the maintenance of passageways, guard fences or other protective facilities.

The bidder's attention is directed to the provisions of Article 25, Section 25 and 50 of the Annotated Code of Maryland. The City of Hagerstown Mayor and Council have authorized the City Engineer to establish such load limits and appropriate speed limits on City streets as may be necessary to preserve the streets and provide adequately for public safety.

The bidder is advised to consult with the City Engineer in order to ascertain the extent of any restrictions applicable to City Streets which he proposes to use in connection with the construction of this contract.

8. SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION:

In order to protect the lives and health of his employees under the contract, the Contractor shall comply with all pertinent provisions of the Contract Work Hours and Safety Standards Act, as amended (commonly known as the Construction Safety Act) as pertains to health and safety standards; and shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the contract.

The Contractor alone shall be responsible for the safety, efficiency, and adequacy of his plan, appliances and methods, and for any damage which may result from their failure or their improper construction, maintenance, or operation.

9. WAGE RATES:

Federally funded projects will have pre-determined wage rates included in the contract documents.

10. EQUAL EMPLOYMENT OPPORTUNITY:

During the performance of this contract, the Contractor agrees as follows:

- A) The Contractor will not discriminate against any employee or applicant for employment because of race, color religion, sex or national origin. The Contractor will take affirmative action to ensure the applicants are employed, and the employees are treated during employment, without regard to their race color, religion, sex or national origin. Such action shall include but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensations, and selection for training, including apprenticeship.
- B) The Contractor agrees to post in conspicuous places available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this non-discrimination clause.
- C) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.

11. **INSURANCE REQUIREMENTS FOR CONTRACTORS:**

The Contractor shall procure and maintain at his sole expense and until final acceptance of work by the City, insurance as hereinafter enumerated in policies written by insurance companies admitted in the State of Maryland, have an A.M. Best Company rating of A- or better or its equivalent, and acceptable to the City.

A.) **Workers Compensation:**

The Contractor agrees to comply with Workers Compensation laws of the State of Maryland and to maintain a Workers Compensation and Employers Liability Policy.

Minimum Limits Required:

Workers Compensation	-	Statutory
Employers Liability	-	\$100,000 (Each Accident)
	-	\$500,000 (Disease - Policy Limit)
	-	\$100,000 (Disease - Each Employee)

B.) **Comprehensive General Liability Insurance:**

The Contractor shall provide Comprehensive General Liability including Products and Completed Operations.

Minimum Limits Required:

Occurrence Form.

\$1,000,000 Each Occurrence.

\$1,000,000 General Aggregate.

Such insurance shall protect the City, its agents, elected and appointed officials, board members and employees against liability, loss or expense due to damaged property (including loss of use), injury to or death of any person or persons and for care and loss of services arising in any way out of or in connection with or resulting from the work or service performed on behalf of the City of Hagerstown, Maryland.

The Contractor is ultimately responsible that Subcontractors, if subcontracting is authorized, procure and maintain at their sole expense and until final acceptance of the work by the City, insurance as hereinafter enumerated in policies written by insurance companies admitted in the State of Maryland, have an A.M. Best Company rating of A- or better or its equivalent, and acceptable to the City.

C.) **Business Automobile Liability:**

The Contractor shall provide Business Auto Liability including coverage for all leased, owned, non-owned and hired vehicles.

Minimum Limits Required:

\$1,000,000 combined single limit for bodily Injury or Property damage.

D.) Certificate(s) of Insurance:

The Contractor shall provide certificates of insurance requiring a 30 day notice of cancellation to the City of Hagerstown, Maryland, prior to the start of the applicable project.

The City of Hagerstown shall be named as an additional Insured.

Approval of the insurance by the City shall not in any way relieve or decrease the liability of the Contractor. It is expressly understood that the City does not in any way represent that the specified limits of liability or coverage or policy forms are sufficient or adequate to protect the interest or liabilities of the Contractor.

E.) Deductibles or Self Insured Retention:

All responsibility for payment of any sums resulting from any deductible provisions or self-insured retention conditions of the policy or policies shall remain with the Contractor.

F.) General Indemnity:

The Contractor shall indemnify, defend and save harmless the City of Hagerstown, its appointed or elected officials, board members, employees and agents for any and all suits, actions legal or administrative proceeding, claims, demands, damages, liabilities, interest, attorneys' fees, costs and expenses of whatsoever kind of nature, whether arising before or after final acceptance and in any manner directly or indirectly caused, occasioned or contributed to in whole or in part by reason of any act, error or omission fault or negligence whether active or passive by the Contractor, or any one acting under its direction, control of its behalf in connection with or incident to its performance of the Contract.

12. CONTRACT BONDS:

The successful bidder shall furnish a Performance Bond in an amount at least equal to one hundred percent (100%) of the contract price as security for the faithful performance of this contract and also a Payment Bond in the amount equal to one hundred percent (100%) of the contract price or in a penal sum not less than prescribed by State, territorial or local law, as security for the payment of all persons performing labor on the project under this contract and furnishing materials in connection with this contract. The Performance Bond and Payment Bond may be in one or in separate instruments in accordance with local law. Before final acceptance, each bond must be approved by the Owner.

13. ADDITIONAL OR SUBSTITUTE BOND:

If at any time the Owner, for justifiable cause, shall be or become dissatisfied with the surety or sureties for the Performance and/or Payment Bonds, the Contractor shall within five (5) days after notice from the Owner to do so, substitute an acceptable bond (or bonds) in such form and amount and signed by such other surety or sureties as may be satisfactory to the Owner. The premium on such bond shall be paid by the Contractor. No further payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished such an acceptable bond to the owner.

14. TIME FOR COMPLETION AND LIQUIDATED DAMAGES:

It is hereby understood and mutually agreed, by and between the Contractor and owner, that the date of beginning and the time for completion as specified in the contract of work to be done hereunder are ESSENTIAL CONDITIONS of this contract; and it is further mutually understood and agreed that the work embraced in this contract shall be commenced on a date to be specified in the Notice to Proceed.

The Contractor agrees that said work shall be prosecuted regularly, diligently, and uninterruptedly at such rate of progress as will insure full completion thereof within the time specified. It is expressly understood and agreed, by and between the Contractor and the Owner, that the time for the completion of the work described herein is a reasonable time for the completion of the same, taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.

If the said Contractor shall neglect, fail or refuse to complete the work within the time herein specified, or any proper extension thereof granted by the Owner, then the Contractor does hereby agree, as a part consideration for the awarding of this contract, to pay the Owner the amount specified in the contract, not as a penalty but as liquidated damages for such breach of contract as hereinafter set forth, for each and every working day that the Contractor shall be in default after the time stipulated in the contract for completing the work.

The said amount is fixed and agreed upon by and between the Contractor and the Owner because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event sustain, and said amount is agreed to be the amount of damages which the Owner would sustain and said amount shall be retained from time to time by the Owner from current periodical estimates.

It is further agreed that time is of the essence of each and every portion of this contract and of the specifications wherein a definite and certain length of time is fixed for the performance of any act whatsoever; and where under the contract an additional time is allowed for the completion of any work, the new time limit fixed by such extension shall be the essence of this contract. PROVIDED that the Contractor shall not be charged with liquidated damages or any excess cost when the owner determines that the Contractor is without fault and the Contractor's reasons for the time extension are acceptable to the Owner; PROVIDED FURTHER, that the Contractor is without fault and the Contractor's reasons for the time extension are acceptable to the Owner; PROVIDED FURTHER that the Contractor shall not be charged with liquidated damages or any excess cost when the delay in completion of the work is due:

- A) To any preference, priority or allocation order duly issued by the Government;
- B) To unforeseeable cause beyond the control and without the fault or negligence of the Contractor, including but not restricted to acts of God, or the public enemy, acts of the Owner, acts of another contractor in the performance of a contract with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and severe weather; and

- C) To any delays of subcontractors or suppliers occasioned by any of the causes specified in subsection a. and b. of this article; PROVIDED FURTHER, that the Contractor shall, within ten (10) days from the beginning of such delay, unless the owner shall grant a further period of time prior to the date of final settlement of the contract, notify the Owner, in writing, of the cause of delay, who shall ascertain the facts and extent of the delay and notify the Contractor within a reasonable time of its decision in the matter.

Special attention is also directed to requirements of Section 8, GP-8.09, of the MDSHA "2017 Standard Specifications for Construction and Materials," relative to Failure to Complete Work on Time. Liquidated damages will be assessed as stated in the BRIEF SUMMARY, PROPOSAL FORM, AND CONTRACT AGREEMENT.

15. **QUANTITIES OF ESTIMATE:**

Wherever the estimated quantities of work to be done and materials to be furnished on a unit price basis under this contract are shown in any of the documents including the proposal, they are given for use in comparing bids, and the right is expressly reserved, except as herein otherwise specifically limited, to increase or diminish them as many be deemed reasonably necessary or desirable by the owner to complete the work contemplated by this contract, and as such increase or diminution shall in no way vitiate this contract, nor shall any such increase or diminution give cause for claims or liability for damages.

Contractor shall notify the City within ten (10) working days of receiving the Notice to Proceed if any estimated quantities are more than 25% from the Contractor's estimate. Failure to do so may preclude the Contractor from receiving any adjustment to the contract unit price if the quantities differ by more than 25% from the actual quantity.

16. **SUBSURFACE CONDITIONS FOUND DIFFERENT:**

Should the Contractor encounter subsurface and/or latent conditions at the site materially differing from those shown on the Plans or indicated in the Specifications, he shall immediately give notice to the Engineer of such conditions before they are disturbed. The Engineer will thereupon promptly investigate the conditions, and if he finds that they materially differ from those shown on the Plans or indicated in the Specifications, he will at once make such changes in the Plans and/or specifications as he may find necessary, and any increase or decrease of cost resulting from such changes to be adjusted in the manner provided in Paragraph 38 of the General Conditions.

The Contractor's attention is called to the requirements of the Dept. of Transportation, State Highway Administration's Specifications entitled "Standard Specifications for Construction and Materials, July 2022", under Section 4, GP-4.05; Section 5, GP-5.05; Section 7, GP-7.17.

Water mains, storm drains, sanitary sewers, gas mains, underground cables, overhead wires and poles and other utilities are shown on the drawings in accordance with the best information available, and are intended to be used for informational purposes only. The Engineer assumes no responsibility for accuracy or completeness of the information shown. Existing utilities and services shall be carefully protected and any damage to them caused by work shall be immediately repaired to the satisfaction of the Engineer.

17. **"OR EQUAL" CLAUSE:**

Whenever a material, article or piece of equipment is identified on the Plans or in the Specifications by reference to manufacturers' or vendors' names, trade names, catalogue numbers, etc., it is intended merely to establish a standard; and, any material, article, or equipment of other manufacturers and vendors which will perform adequately the duties imposed by the general design will be considered equally acceptable provided the material, article, or equipment so proposed is, in the opinion of the Engineer, of equal substance and function. It shall not be purchased or installed by the Contractor without the Engineer's written approval.

18. **PATENTS:**

The Contractor shall hold and save the Owner and its officers, agents, servants, and employees harmless from liability of any nature or kind, including cost and expenses for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the contract, including its use by the Owner, unless otherwise specifically stipulated in the contracts documents.

19. **CONTRACTOR'S OBLIGATIONS:**

The Contractor shall and will, in good workmanlike manner, do and perform all work and furnish all supplies and materials, machinery, equipment, facilities and means, except as herein otherwise expressly specified, necessary or proper to perform and complete all the work required by this contract, within the time herein specified, in accordance with the plans and drawings covered by this contract and any and all supplemental plans and drawings, and in accordance with the directions of the Engineer as given from time to time during the progress of the work. He shall furnish, erect, maintain and remove such construction plan and such temporary works as may be required. The Contractor shall observe, comply with, and be subject to all terms, conditions, requirements, and limitations of the contract and specifications, and shall do, carry on, and complete the entire work to the satisfaction of the Engineer and the Owner.

20. **SUPERINTENDENCE BY CONTRACTOR:**

At the site of work, the Contractor shall employ a construction superintendent or foreman who shall have full authority to act for the Contractor. It is understood that such representative shall be acceptable to the Engineer. The Contractor's attention is called to the requirements of the Dept. of Transportation, State Highway Administration's Specifications entitled "Standard Specifications for Construction and Materials, July 2022", under Section 5, GP-5.04.

21. **SUBCONTRACTING:**

The General contractor to whom a Contract is awarded shall perform with its own organization and with the assistance of workmen under the General Contractor's immediate supervision, work of a value not less than 50.1 percent of the total original value of the contract. Reference GP-Section 8.01 Subcontracting of the MDSHA "Standard Specifications for construction and Materials, dated July 2022".

The Contractor may utilize the services of specialty subcontractors on those parts of the work which, under normal contracting practices, are performed by specialty subcontractors. All work to refurbish the locomotive shall be completed by a sub-contractor who has been pre-qualified by the City of Hagerstown.

The Contractor shall not award any work to any subcontractor without prior written approval of the Owner, which approval will not be given until the Contractor submits to the Owner a written statement concerning the proposed award to the subcontractor, which statement will contain such information as the Owner may require.

The Contractor shall be as fully responsible to the Owner for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by the subcontractors, as he is for the acts and omissions of persons directly employed by him.

The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the Contractor by the terms of the general Conditions and other contract documents insofar as applicable to the work of subcontractors and to give the Contractor the same power as regards terminating any subcontract that the Owner may exercise over the Contractor under any provisions of the contract documents.

Nothing contained in this contract shall create any contractual relation between any subcontractor and the Owner.

22. **COORDINATION WITH OTHER CONTRACTORS:**

The Contractor shall coordinate his operations with those of other Contractors. Cooperation will be required on the arrangement for the storage of materials and in the detailed execution of the work. The Contractor, including his subcontractors, shall keep informed of the progress and the detail work of other contractors and shall notify the Engineer immediately of lack of progress or defective workmanship on the part of other contractors. If the Contractor fails to notify the City Engineer and the other contractors of lack of progress or defective workmanship, it shall be construed as acceptance of satisfactory coordination by him with the other contractors.

23. **MUTUAL RESPONSIBILITY OF CONTRACTOR:**

If through acts of neglect on the part of the Contractor, any other contractors or any subcontractor shall suffer loss or damage of work, the Contractor agrees to settle with such other contractor or subcontractor by agreement or arbitration if such other contractor or subcontractor will so settle. If such other contractor or subcontractor shall assert any claim against the Owner on account of any damage alleged to have been sustained, the Owner shall notify the Contractor, who shall indemnify and save harmless the Owner against any such claim.

24. **ENGINEER AUTHORITY:**

The Engineer shall give all orders and directions contemplated under this contract and specifications relative to the execution of the work. The Engineer shall determine the amount, quality, acceptability, and fitness of the several kinds of work and materials which are to be paid for under this contract and shall decide all questions which may arise in relation to said work and the construction thereof. The Engineer's estimates and decisions shall be final and conclusive, except as herein otherwise expressly provided. In case any questions shall arise between the parties hereto relative to said contract or specifications, the determination or decision of the Engineer shall be a condition precedent to the right of the Contractor to receive any money or payment for work under this contract affected in any manner or to any extent by such question.

The Engineer shall decide the meaning and intent of any portion of the specifications and of any plan or drawings where the same may be found obscure or be in dispute. Any differences or conflicts in regard to their work which may arise between the Contractor under this contract and

other contractors performing work for the Owner shall be adjusted and determined by the Engineer.

25. **LEGAL NOTICE AND SERVICE THEREOF:**

Any legal notice to any contractor from the Owner relative to any part of this contract shall be in writing and considered delivered and the service thereof completed, when said legal notice is posted, by certified or registered mail, to the said contractor at his last given address, or delivered in person to said contractor or his additional representative on the work.

26. **INSPECTION AND INSPECTOR AUTHORITY:**

The authorized representatives and agents of the owner shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and relevant data and records. Inspectors, employed by the Engineer, shall be authorized to inspect all work done and materials furnished. Such inspection may extend to all or any part of the work and to the preparation or manufacture of the materials to be used. An inspector or inspectors will be stationed on the project to report to the Engineer as to the progress of the work and the manner in which it is being performed; to report whenever it appears that the materials furnished and work performed by the Contractor fail to fulfill the requirements of the specifications and contract; and to call to the attention of the Contractor any such failure or other default. No inspection nor any failure to inspect shall relieve the Contractor from any obligation to perform all of the work strictly in accordance with the requirements of the specifications. In case of any dispute arising between the Contractor and any inspector as to materials furnished or the manner of performing the work, the inspector shall have the authority to reject materials or suspend the work until the question at issue can be referred to and decided by the Engineer.

The inspectors shall not be authorized to revoke, alter, enlarge, relax, or release any requirements of these specifications, nor to approve or accept any portion of work, nor to issue instructions contrary to the plans and specifications, nor to approve accept any portion of work, nor to issue instructions contrary to the plans and specifications. Inspectors shall in no case act as foreman to perform other duties for the Contractor, nor interfere with the management of the work by the latter. Any instructions which the inspectors may give the Contractor shall in no way be constructed as binding the Engineer or the Owner in any way, nor releasing the Contractor from fulfillment of the terms of the Contract.

27. **INSPECTION AND TESTING OF MATERIALS:**

All materials and equipment used in the construction of the project shall be subject to adequate inspection and testing in accordance with accepted standards. The laboratory or inspection agency shall be approved by the Owner and compensated by the Owner.

Materials of construction, particularly those upon which the strength and durability of the structure may depend, shall be subject to inspection and testing to establish conformance with specifications and suitability for uses intended.

28. MATERIALS, SERVICES AND FACILITIES:

It is understood that, except as otherwise specifically stated in the contract documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, superintendence, temporary construction of every nature, and all other services and facilities of every nature whatsoever necessary to execute, complete, and deliver the work within the specified time.

29. CONTRACTOR'S TITLE TO MATERIAL:

The Contractor warrants that he and his subcontractors have good title to all materials and supplies used by him/them in the work, free from all liens, claims, or encumbrances.

30. CONSTRUCTION SCHEDULE AND SEQUENCE OF OPERATIONS:

It shall be the Contractor's responsibility to submit a schedule of operation sequences to the Engineer and obtain his approval before any work is done under the contract. This schedule shall be prepared in a manner that will insure the satisfactory completion of the project within the time allowed for the project.

31. REPORTS, RECORDS AND DATA:

The Contractor shall submit to the Owner such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data as the Owner may request concerning work performed or to be performed under this contract.

32. SHOP DRAWINGS AND SUBMITTALS:

As first order of work, the Contractor shall prepare and submit to the Department of Engineering a schedule for the submission of working drawings. The schedule shall include each type of working drawings (e.g. form plans, structural steel, etc.). Approximate number of drawings to be reviewed, estimated date of first submission, and estimated rate of submission of drawings (e.g. 5 weeks). Where possible, the most crucial drawings shall be submitted first with enough time for review so as to minimize delays during construction.

All shop plans, working drawings and materials for the subject structure shall be entered into the State of Maryland "Materials Management System" for approval. To set up an account contact Kris Wells at 301-842-2406 or KWells1@mdot.maryland.gov

With copies sent to
CITY OF HAGERSTOWN DEPARTMENT OF ENGINEERING
3RD FLOOR, CITY HALL
1 EAST FRANKLIN STREET
HAGERSTOWN, MD. 21740

To expedite the checking and distribution of working drawings, fabricators or suppliers may send prints directly to the above address with copies of all correspondence to the Contractor. If the Contractor requests that all plans be routed through his office, then the establishment of that procedure should be the first order of work as to avoid possible misunderstanding as to the processing. The Engineer shall not be responsible for any delays caused by this plan of action, inadequate coordination, preparation of submittal, and time required for review by the Engineer and/or regulatory agencies and as such, will not be cause for time extensions to the Contract. The Contractor, fabricator or supplier shall furnish to the above address two (2) prints each of all

working drawings, etc. for primary review. After review by the Engineer and the return thereof, the Contractor shall make such corrections to the drawings as have been indicated. The Contractor shall submit six (6) revised/corrected copies of stamping and distribution. Of the six (6) copies submitted, two (2) will be retained by the Department of Engineering, one to the City Inspector and three (3) returned to the Contractor. If the Contractor requires additional copies, the additional copies shall be submitted after primary review is complete.

All shop plans and working drawings for the subject structures will not be considered approved until they bear the approval stamp of the City Engineer.

33. **LAND AND RIGHTS OF WAY:**

The necessary rights-of-way and easements for the area occupied by the proposed improvements have been obtained by the City of Hagerstown. Any additional rights-of-way or easements required by the Contractor for plant operations, equipment, storage of materials, disposal area, etc., must be obtained and paid for by the Contractor.

34. **USE OF PREMISES AND REMOVAL OF DEBRIS:**

The Contractor expressly undertakes at his own expense:

- A) To take every precaution against injuries to persons or damage to property.
- B) To store his apparatus, materials, supplies and equipment in a location approved by the Engineer and in such orderly fashion at the site of work as will not interfere with the progress of his work or the work of any other contractors.
- C) To frequently clean up all refuse, rubbish, scrap materials, and debris caused by his operation, that the work site shall be neat and orderly at all times.
- D) To remove all surplus materials, false work, temporary structures, including foundations thereof, and debris of every nature resulting from his operations, and to put the site in a neat, orderly condition before final payment is made by the City of Hagerstown.

35. **PUBLIC CONVENIENCE AND SAFETY:**

In addition to the requirements of Section 7, GP-7.06, of the MDSHA "Standard Specifications for Construction and Materials", July 2022, add the following provisions:

- A) Dust control by sprinkling water or the use of chemicals shall be performed by the Contractor to the satisfaction of the Engineer.
- B) The condition of the work at all times shall be such that sudden storms or prolonged rainfall will not cause such damage to property in the vicinity of the work that could in any way be attributed to the performance of the work.
- C) If, in the opinion of the Engineer, the public has been unreasonably inconvenienced to a great extent, or that certain conditions provide a threat to public safety, or that work performed by the Contractor has caused damage to property in the area of the work, which has not been remedied quickly and satisfactorily, the Engineer shall have the authority to order all operations to cease until such time as such conditions are remedied

to his satisfaction, and any delay caused thereby shall not be considered just cause for any extension of time in the completion of the contract. Upon refusal of the Contractor to promptly comply with corrective measures, the Engineer will immediately proceed with correcting the deficiencies in the same manner as specified in the MDSHA "Standard Specifications for Construction and Materials," July 2022, Section GP-5.12.

36. **PROTECTION OF WORK AND PROPERTY - EMERGENCY:**

The Contractor shall at all times safely guard the Owner's property from injury or loss in connection with this contract. He shall at all times safely guard and protect his own work and materials, and that of adjacent property from damage. The Contractor shall replace or make good any such damage, loss or injury unless such be caused directly by error contained in the contract or by the Owner, or his duly authorized representative.

In the event of temporary suspension of work, or during inclement weather, or whenever the Engineer shall direct, the Contractor and his subcontractors will cause to protect carefully his and their work and materials against damage or injury from the weather. If, in the opinion of the Engineer, any work or materials shall have been damaged or injured by reason of failure on the part of the Contractor or any of his subcontractors to so protect his work, such materials shall be removed and replaced at the expense of the Contractor.

In case of an emergency which threatens loss or injury of property and/or safety of life, the Contractor will be allowed to act without previous instruction from the Engineer in a diligent manner. He shall notify the Engineer immediately thereafter. Any claim or compensation by the Contractor due to such extra work shall be promptly submitted to the Engineer for approval.

Where the Contractor has not taken action, but has notified the Engineer of an emergency threatening injury to persons or damage to the work, or any adjoining property, he shall act as instructed or authorized by the Engineer.

The amount of reimbursement claimed by the Contractor on account of an emergency action shall be determined in the manner provided in paragraph 38 of the GENERAL CONDITIONS.

37. **COST OVERRUNS:**

The Contractor and the Inspector shall continually monitor unit price items that could result in appreciable overruns. The Contractor shall immediately notify the Engineer as soon as it appears as though an overrun may result. The Contractor will estimate the final extent of the extra costs and the necessary authorizations for same and submit to the Engineer for authorization. This authorization will require at least seven (7) calendar days to obtain. In the interim, the Engineer shall be the sole judge as to whether or not the plan quantities can be exceeded.

There will be instances where overruns are unavoidable and the work on the project will be jeopardized if construction is stopped until the needed authorization is obtained. The instances are considered to be the exception, not the rule. However, in the event of such occurrences, the Engineer will personally authorize the work verbally and again in writing within forty-eight (48) hours of such verbal approval. All verbal approvals given by the Engineer are to be entered in the appropriate records of the inspector and are to be initialed by the Contractor's superintendent.

It shall be the responsibility of the Contractor to acquaint his employees, subcontractors, and other representatives with this policy, and any costs incurred by the Contractor on quantity overruns without the prior approval of the Engineer and/or the Mayor and Council of the City of Hagerstown shall be at the risk of the Contractor.

38. **EXTRA WORK:**

Without invalidating the contract, the Owner may order extra work of the kind bid upon or make changes by altering, adding to or deducting from the work, the contract sum being adjusted accordingly, and consent of the Surety being first obtained where necessary or desirable. All the work of the kind bid upon shall be paid for at the price stipulated in the proposal, and no claims for any extra work or materials shall be allowed unless the work is ordered in writing by the Owner or its Engineer, acting officially for the Owner, and the price is stated in the order.

Charges or credits for the work covered by the approved change shall be determined by one or more, or a combination of the following:

- A) Unit bid prices previously approved.
- B) An agreed lump sum.
- C) The actual cost of:
 - (1) Labor, including foreman;
 - (2) Materials entering permanently into the work;
 - (3) The ownership or rental cost of construction plant and equipment during the time of use on the extra work;
 - (4) Power and consumable supplies for the operation of power equipment;
 - (5) Insurance;
 - (6) Social security and old age unemployment contributions

To the cost under (b) and (c) above, there shall be added a fixed fee to be agreed upon but not to exceed fifteen percent (15%) of the estimated cost of the work. The fee shall be compensation to cover the cost of supervision, overhead, bond, profit, and any other general expenses. When work is performed under the terms of (c) above, the Contractor shall furnish satisfactory bills, payrolls, and vouchers covering all items of cost and, when requested by the Owner, give the Owner access to accounts relating thereto.

39. **SUSPENSION OF WORK DUE TO LITIGATION:**

Should the Owner be prevented or enjoined from proceeding with work or from authorizing its prosecution, by reason of any litigation, the Contractor shall not be entitled to make or assert claim for damage due to the delay. Time for completion of the work will be extended to such reasonable time as determined by the Owner in writing.

40. **CORRECTION OF WORK:**

All work and materials (whether incorporated in the work or not), all processes of manufacture, and all methods of construction shall be subject to the inspection of the Engineer, who shall be the final judge of the quality of the work, materials, processes of manufacture, and methods of construction for the purposes for which they are used.

Any defective work, whether the result of poor workmanship, use of defective materials, damage through carelessness or any other cause found to exist shall be removed and replaced by work and materials which shall conform to the specifications or shall be remedied otherwise in an acceptable manner authorized by the Engineer.

Upon failure on the part of the Contractor to comply promptly with any order of the Engineer, made under the provisions of these General Provisions, the Engineer shall have authority to cause defective work to be remedied or removed and replaced, unauthorized work to be removed, and to deduct the cost from any monies due or to become due the Contractor under this contract.

41. **PAYMENT TO THE CONTRACTOR:**

The Owner shall make a progress payment to the Contractor on the basis of a duly certified and approved estimate of the work performed during the preceding calendar month under the contract. To insure proper performance of the contract, the Owner shall retain five percent (5%) of the amount of each estimate until final completion and acceptance of all work covered by the contract, unless otherwise stated.

In preparing estimates, the material delivered on the site and preparatory work done may be taken into consideration in accordance with the MDSHA Terms and "Standard Specifications for Construction and Materials", July 2022 section TC – 7.02.

All material and work covered by partial payments made shall hereupon become the sole property of the Owner, but this provision shall not be construed as relieving the Contractor from the sole responsibility for (A) the care and protection of materials, (B) repair to previously approved and paid for work that has been subsequently damaged, or restoration of any, (C) as a waiver of the right of the Owner to require fulfillment of all the terms of the contract.

The Contractor agrees that he will indemnify and save the Owner harmless from all claims growing out of the lawful demands of: subcontractors, laborers, workmen, mechanics, material, men, furnishers of machinery (and equipment, power tools, and all supplies), including commissary, incurred in the performance of this contract. The Contractor shall, at the Owner's request, furnish satisfactory evidence that all obligations of the nature hereinabove designated have been paid, discharged, or waived. If the Contractor fails to do so, then the Owner may, after having given written notice to the said Contractor, pay unpaid bills, of which the Owner has written notice, by withholding 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. Payment to the Contractor shall then be resumed, in accordance with the terms of this contract, but in no event shall the provisions of this sentence be construed to impose any obligations upon the Owner to either the Contractor or his Surety.

In paying any unpaid bills of the Contractor, the Owner shall be deemed the agent of the Contractor, and any payment so made by the Owner, shall be considered as a payment made under the contract by the Owner to the Contractor, and the Owner shall not be liable to the Contractor for any such payment made in good faith.

42. **ACCEPTANCE OF FINAL PAYMENT AS RELEASE:**

The acceptance by the Contractor of final payment shall be and shall operate as a release to the Owner of all claims and all liability from the Contractor for all things done or furnished in connection with this work and for every act and neglect of the Owner and others relating to or arising out of this work. No final or partial payment, shall operate to release the Contractor or his Sureties from any obligation under this contract or the Performance and Payment Bond.

43. **GENERAL GUARANTY:**

Neither the final payment, nor any provision on the contract documents, nor partial, or entire occupancy of the premises by the Owner shall constitute an acceptance of work not done in accordance with the contract documents, or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall remedy any defects in the work and pay for any damage to other work resulting therefrom, which shall appear within a period of one year from the date of final acceptance of work unless a shorter period is specified. The Owner will give notice of observed defects within 30 days of the one year anniversary of final acceptance.

44. **RIGHT OF THE OWNER TO TERMINATE CONTRACT:**

In the event that any of the provisions of this contract are violated by the Contractor, or by any of his subcontractors, the Owner may serve written notice upon the Contractor and the Surety of its intention to terminate contract. Such notices shall contain the reasons for such intention to terminate the contract, and unless within ten (10) days after the serving of such notice upon the Contractor, such violations or delay shall cease and satisfactory arrangements or correction be made, the contract shall, upon the expiration of said ten (10) days cease and terminate.

In the event of any such termination, the Owner shall immediately serve notice thereof upon the Surety and Contractor, and the Surety shall have the right to take over and perform the contract; provided, however, that if the Surety does not commence performance thereof within ten (10) days from the date of the mailing to such Surety of Notice of Termination, the Owner may take over the work and prosecute the same to completion by contract or by force account at the expense of the Contractor. The Contractor and his Surety shall be liable to the Owner for any excess cost occasioned by the Owner thereby, and in such event the Owner may take possession of and utilize in completing the work, such materials, appliances, equipment, and plans as may be on the site of the work and necessary therefore.

45. **DRAWINGS AND SPECIFICATIONS FURNISHED TO CONTRACTOR:**

The City will furnish free of charge to the successful Contractor four (4) hard copies of the contract documents and one (1) digital copy of the construction plans for the project. Any additional copies requested shall be at the expense of the Contractor.

46. **AS BUILT REQUIREMENTS:**

The Contractor shall submit complete red-lined "as-builts" on the project's contract drawings prior to issuance of the final payment by the City. Emphasis shall be placed on actual locations and elevations of hidden items not readily obtainable by subsequent field surveys. As-built information shall be furnished to the City in digital AutoCAD format and hard copy drawings.

47. **RELEASE OF LIENS:**

The Contractor shall submit to the City a complete "Release of Liens" from all subcontractors and the general Contractor prior to the issuance of final payment by the City.

48. **OPERATIONS AND MAINTENANCE MANUAL:**

The general Contractor shall submit to the City two complete sets of any "Operations and Maintenance" manuals for all equipment provided in the project by the Contractor.

49. **FINAL WALK THRU AND INSPECTION:**

The final walk thru inspection shall be performed by all parties involved at the project completion. The Contractor shall inform the Engineer, in writing, the substantial completion date of the project. The Contractor will be notified by the Engineer within ten (10) working days of any incomplete and/or defective work. The Contractor shall immediately take such measures as necessary to remedy such deficiencies and shall notify the Engineer at completion. A second inspection shall be performed as required.

(To be completed by selected contractor)

PERFORMANCE BOND

**CITY OF HAGERSTOWN, MARYLAND
CITY PARK TRAIN HUB LOCOMOTIVE
REFURBISHMENT & PAVILION REPLACEMENT**

CONTRACT 20-CPTH-33

Date of Contract _____

PRINCIPAL _____ (Insert Contractor's name, business address, zip code)

SURETY _____ (Insert Surety name, business address, zip code)

This Surety is a corporation of the State of _____ and authorized to do business in the State of Maryland.

OBLIGEE is the CITY OF HAGERSTOWN, MARYLAND by and through the ENGINEERING DEPARTMENT.

Penal Sum of Bond _____ (Express in words and in figures)

Bond Number _____ Date Bond Executed _____

KNOW ALL MEN BY THESE PRESENTS, That we, the Principal named above and Surety named above, are held and firmly bound unto the Obligee named above in the Penal Sum of this Performance Bond stated above, for the payment of which Penal Sum we bind ourselves, our heirs, executors, administrators, personal representatives, successors, and assigns, jointly and severally, firmly by these presents. However, where Surety is composed of corporations acting as co-sureties, we the co-sureties, bind ourselves, our successors and assigns, in such Penal Sum jointly and severally as well as severally only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each co-surety binds itself, jointly and severally with the Principal, for the payment of such sum as appears above its name below, but if no limit of liability is indicated, the limit of such liability shall be the full amount of the Penal Sum.

WHEREAS, Principal has entered into or will enter into a contract with the City of Hagerstown by and through the Department of Parks and Engineering acting for the City of Hagerstown, which contract is described and dated as shown above, and incorporated herein by reference. The contract and all items incorporated into the contract, together with any and all changes, extensions of time, alterations, modifications, or additions to the contract or to the work to be performed thereunder or to the Plans, Specifications, and Special Provisions, or any of them, or to any other items incorporated into the contract shall hereinafter be referred as the "Contract."

WHEREAS, it is one of the conditions precedent to the final award of the Contract that these presents be executed.

In Presence of:

_____ as to By: _____ (SEAL)
Witness Co-Partnership Principal (Name of Co-Partnership)

_____ as to By: _____ (SEAL)

_____ as to By: _____ (SEAL)

_____ as to By: _____ (SEAL)

.....

Corporate Principal (Name of Corporation)

Attest:

AFFIX
CORPORATE
SEAL

_____ as to By: _____
Corporate Secretary President

.....

Surety

Business Address of Surety

Attest:

(SEAL)

By: _____ (SEAL)

_____ Title: _____
Signature

Local Bonding Agent's Name: _____

Local Bonding Agent's Business Address: _____

(To be completed by selected contractor)

PAYMENT BOND

CITY OF HAGERSTOWN, MARYLAND
CITY PARK TRAIN HUB LOCOMOTIVE
REFURBISHMENT & PAVILION REPLACEMENT

CONTRACT 20-CPTH-33

Date of Contract _____

PRINCIPAL

(Insert Contractor's name, business address, zip code)

SURETY

(Insert Surety name, business address, zip code)

This Surety is a corporation of the State of _____ and authorized to do business in the State of Maryland.

OBLIGEE is the CITY OF HAGERSTOWN, MARYLAND by and through the ENGINEERING DEPARTMENT.

Penal Sum of Bond

(Express in words and in figures)

Bond Number _____

Date Bond Executed _____

KNOW ALL MEN BY THESE PRESENTS, That we, the Principal named above and Surety named above, being authorized to do business in Maryland, and having business address as shown above, are held and firmly bound unto the Obligee named above, for the use and benefit of claimants as hereinafter defined, in the Penal Sum of this Payment Bond stated above, for the payment of which Penal Sum we bind ourselves, our heirs, executors, administrators, personal representatives, successors, and assigns, jointly and severally, firmly by these co-sureties, bind ourselves, our successors and assigns, in such Penal Sum jointly and severally as well as severally only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each co-surety binds itself, jointly and severally with the Principal, for the payment of such sum as appears above its name below, but if no limit of liability is indicated, the limit of such liability shall be the full amount of the Penal Sum.

WHEREAS, Principal has entered into or will enter into a contract with the City of Hagerstown by and through the Department of Engineering acting for the City of Hagerstown, which contract is described and dated as shown above, and incorporated herein by reference. The contract and all items incorporated into the contract, together with any and all changes, extensions of time, alterations, modifications, or additions to the contract or to the work to be performed thereunder or to the Plans, Specifications, and Special Provisions, or any of them, or to any other items incorporated into the contract shall hereinafter be referred as the "Contract."

WHEREAS, it is one of the conditions precedent to the final award of the Contract that these presents be executed.

NOW, THEREFORE, the condition of this obligation is such that if the Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and materials furnished, supplied and reasonably required for use in the performance of the Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect, subject to the following conditions:

1. A claimant is defined to be any and all of those persons supplying labor and materials (including lessors of the equipment to the extent of the fair market value thereof) to the Principal or its subcontractors and subcontractors in the prosecution of the work provided for in the Contract, entitled to the protection provided by Section 9-113 of the Real Property Article of the Annotated Code of Maryland, as from time to time amended.
2. The above named Principal and Surety hereby jointly and severally agree with the Obligee that every claimant as herein defined, who has not been in full may, pursuant to and when in compliance with the provisions of the aforesaid Section 9-113, sue on this Bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant and have execution thereon. The Obligee shall not be liable for the payment of any costs or expenses of any such suit.

The Surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the Specifications accompanying the same shall in any way affect its obligation on this Payment Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the Specifications.

This Payment Bond shall be governed by and construed in accordance with the laws of the State of Maryland and any reference herein to Principal or Surety in the singular shall include all entities in the plural who or which are signatories under the Principal or Surety heading below.

IN WITNESS WHEREOF, Principal and Surety have set their hands and seals to this Payment Bond. If any individual is a signatory under the Principal heading below, then each such individual has signed below on his or her own behalf, has set forth below the name of the firm, if any, in whose name he or she is doing business, and has set forth below his or her title as a sole proprietor. If any partnership or joint venture is a signatory under the Principal heading below, then all members of each such partnership or joint venture have signed below, each member has set forth below the name of the partnership or joint venture, and each member has set forth below his or her title as a general partner, limited partner, or member of joint venture, whichever is applicable. If any corporation is a signatory under the Principal or Surety heading below, then each such corporation has caused the following: the corporation's name to be set forth below, a duly authorized representative of the corporation to affix below the corporation's seal and to attach hereto a notarized corporate resolution of power of attorney authorizing such action, and each such duly authorized representative to sign below and set forth below his or her title as a representative of the corporation. If any individual acts as a witness to any signature below, then each such individual has signed below and has set forth below his or her title as a witness. All of the above has been done as of the Date of Bond shown above.

In Presence of:

_____ as to _____ (SEAL)
 Witness Individual Principal

In Presence of:

_____ as to _____ (SEAL)
Witness Co-Partnership Principal (Name of Co-Partnership)

_____ as to By: _____ (SEAL)

_____ as to By: _____ (SEAL)

_____ as to By: _____ (SEAL)

.....

Corporate Principal (Name of Corporation)

Attest: _____ AFFIX
as to _____ By: _____ CORPORATE
Corporate Secretary President SEAL

.....

Surety

Business Address of Surety

Attest: _____ (SEAL) By: _____ AFFIX
CORPORATE
SEAL

_____ Title: _____
Signature

Local Bonding Agent's Name: _____

Local Bonding Agent's Business Address: _____

**UNIT RATE
CONTRACT AGREEMENT**

1 of 2

**CITY PARK TRAIN HUB LOCOMOTIVE
REFURBISHMENT & PAVILION REPLACEMENT**

CONTRACT 20-CPTH-33

THIS AGREEMENT, made this _____ day of _____, 2023, by and between the CITY OF HAGERSTOWN, MARYLAND, Party of the First Part, hereinafter called the "OWNER", and _____ Party of the Second Part, hereinafter called the "CONTRACTOR".

WITNESSETH: In consideration of the payments and agreements mentioned, to be made and performed by the owner, the Contractor hereby agrees with the Owner to commence and complete the construction described as follows: City Park Train Hub Locomotive Refurbishment & Pavilion Replacement, Contract 20-CPTH-33 hereinafter called the PROJECT, for the **TOTAL AMOUNT** of: _____ and all extra work in connection therewith, under the terms as stated in the Contract Documents. The Contractor further agrees to complete all work and at his (its or their) own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance and other accessories and services necessary to complete the said project in accordance with the conditions and prices stated in the Contract Documents as prepared by the City of Hagerstown Department of Engineering, all of which are made a part hereof and collectively constitute the Contract Agreement.

ARTICLE I - TIME OF COMPLETION AND LIQUIDATED DAMAGES:

The Contractor hereby agrees to commence work under this contract on or before a date specified in the Notice to Proceed and to fully complete the project within one hundred fifty (150) WORKING DAYS. Liquidated damages are assessed at \$300 per day for each CALENDAR DAY that any work shall remain incomplete beyond the time specified.

Contractor agrees to guarantee all of the work performed under this contract to be done in accordance with the Contract Documents in a workmanlike manner and to replace any work which may be deemed unacceptable by the City Engineer [up to ONE (1) Calendar year from the completion and acceptance of the work] due to defective materials or workmanship.

ARTICLE II - RIGHT OF THE OWNER TO TERMINATE CONTRACT:

In the event that any of the provisions of this contract are violated by the Contractor, or any of his subcontractors, the Owner may serve written notice to the Contractor of its intention to terminate the Contract. Such notice shall contain the reasons for such termination of the Contract, and the Contract shall terminate at the end of ten (10) calendar days from the date of the written notice, unless satisfactory arrangements or corrections are made by the Contractor.

The City may take over the work and prosecute the same to completion, by contract or otherwise. The City may also take possession of the Contractor's materials that may be on the site of the work and utilize said materials in completing the work. Whether or not the Contractor's right to proceed with the work is terminated, he shall be liable for any damage to the City resulting from his refusal or failure to complete the work within the specified time.

The rights and remedies of the City provided in this contract are in addition to any other rights and remedies provided by law or under this contract.

If the City terminates the contractor's right to continue with the work, the resulting damages that the Contractor shall be responsible for are both the above liquidated damages (added daily as may be required for final completion of the work) and any increased costs incurred by the City in completing the work.

ARTICLE III - PAYMENT:

The "TOTAL AMOUNT" shall be defined as the sum of all the products of each estimated quantity provided by the City and the applicable unit rate bid by the Contractor. The "TOTAL AMOUNT" indicated in this Contract does not constitute an obligation by the City to pay the Contractor this amount in its entirety under the current terms and conditions of this Contract. The City shall pay the Contractor for only that quantity of work actually executed to the satisfaction of the City Engineer complete in place. The Contractor shall review all field measurements and quantities in cooperation with the City Engineer's duly authorized representative for the project as work is completed and then submit an invoice for payment on a monthly basis along with the City estimate. The City shall review the invoice within five (5) business days of receipt and either approve payment (less applicable retainage) or reject the invoice and contact the Contractor immediately with the explanation of rejection.

WITNESS: CITY OF HAGERSTOWN, MD

Donna K. Spickler,
City Clerk

Tekesha A. Martinez
Mayor

Witness

BY: _____
COMPANY

Name and Title

Address

City and State

Business Phone

GENERAL PROVISIONS

I. SPECIFICATIONS AND STANDARDS

The documents, specifications, and standards listed below, (latest revision, additions, or edition) including the addenda, amendments, and errata form a part of these General Provisions to the extent required by the reference thereto.

- A. The specifications for this Contract shall be the Maryland State Highway Administration “STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, July 2022”, the latest revisions thereof and additions thereto and subsequently shall be referred to as the **Specifications**.
- B. The State of Maryland Department of Transportation State Highway Administration “BOOK OF STANDARDS HIGHWAY AND INCIDENTAL STRUCTURES” shall hereafter be referred to as the **Book of Incidental Structures**.
- C. The Maryland State Highway Administration shall hereafter be referred to as **MSHA**.
- D. The City of Hagerstown, MD “PUBLIC WAYS Construction Standards & Engineering Guidelines” shall hereafter be referred to as the **Public Ways Construction Standards**.
- E. The “CODE OF THE CITY OF HAGERSTOWN, MARYLAND” shall hereafter be referred to as the **City Code**.
- F. The Maryland Department of the Environment, Water Management Administration, in association with SOIL CONSERVATION SERVICE and STATE SOIL CONSERVATION COMMITTEE “2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL” shall hereafter be referred to as the **SCS Manual**.
- G. The U.S. Department of Transportation Federal Highway Administration “MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES for Streets and Highways” 2012 edition, shall hereafter be referred to as the **MUTCD**.
- H. The Maryland Department of the Environment “2009 MARYLAND STORMWATER DESIGN MANUAL” Volumes 1 & 2, shall hereafter be referred to as **Stormwater Design Manual**.

GENERAL PROVISIONS

- I. The Maryland Department of Transportation State Highway Administration “HIGHWAY DRAINAGE MANUAL” shall hereafter be referred to as the **Highway Drainage Manual**.
- J. The American Association of State Highway and Transportation Officials shall hereafter be referred to as **AASHTO**.
- K. The American Society for Testing and Materials shall hereafter be referred to as **ASTM**.

II. CONTRACT DOCUMENTS

- A. Contract Documents shall be as defined in the Specifications section GP-1.05.
- B. The Contract Documents shall also include the Specifications, Contract drawings, soils boring reports, environmental assessments, wetland reports, addenda, change orders, requests for information, preconstruction minutes, pre-bid minutes, the General Provisions, the Special Provisions, and the General Conditions, to the extent required by the reference thereto.
- C. In the case of a conflict between the Specifications and the Special Provisions, the Special Provisions shall govern.
- D. In the case of a conflict between the Book of Incidental Structures and the Public Ways Construction Standards, the Public Ways Construction Standards shall govern.
- E. In the case of a conflict between the Contract drawings and the Special Provisions, the Special Provisions shall govern.
- F. In the case of a conflict between the Proposal Form and the Special Provisions, the Special Provisions shall govern.

III. REFERENCES

- A. All references to the State of Maryland, State, S.R.C., State Roads Commission, State Highway Administration, or Commission in the Special Provisions, the Specifications, or the Book of Incidental Structures shall be construed to refer to the City of Hagerstown, MD.
- B. All references to officials of Maryland State Government, or the Maryland State Highway Administration in the Special Provisions, the Specifications, or the Book

GENERAL PROVISIONS

of Incidental Structures shall be interpreted to refer to the appropriate official in the City of Hagerstown, MD Government or the City of Hagerstown, MD Engineering Department.

- C. All references to the City shall be interpreted to refer to the City of Hagerstown, MD.
- D. All references to the Engineer shall be interpreted to refer to the City Engineer, Hagerstown, MD or his designated representatives.
- E. All references to the Contractor shall be interpreted to refer to the Business Enterprise that has signed a contract with the City of Hagerstown, Maryland to perform the work described in the Contract Documents.

IV. CONTINGENT ITEMS AND QUANTITIES

- A. Construction items identified in the Proposal Form as being Contingent are provided in the contract for use when and as directed by the City Engineer. The quantities for these items shown on the contract drawings and/or on the "Proposal Form" are established for the purpose of obtaining a bid price. The quantities for these Contingent items may be increased or decreased without any adjustment to the Contract unit price bid, or the Contingent item(s) may be deleted entirely from the Contract by the City Engineer without negotiation. The Contractor will not be allowed to submit a claim against the City for any adjustment to the Contract unit price bid, should the Contingent item(s) be increased, decreased, or eliminated entirely.
- B. Payment for any Contingent item(s) used will be made on the basis of the quantities as actually measured. Materials, construction requirements, and basis of payment shall be as specified elsewhere in the contract drawings, Specifications, Special Provisions, Interim Specifications, or Addenda.
- C. The Specifications section GP-4.04 shall not apply to construction items or quantities designated in the Contract Documents as "Contingent".

V. GENERAL NOTES

- A. The Contractor shall follow all safety guidelines of the City of Hagerstown, MD "CONTRACTOR SAFETY PROGRAM" as well as all requirements of OSHA and MOSH.

GENERAL PROVISIONS

- B. The Contractor shall provide water trucks as needed to properly control dust levels, and shall also provide equipment to remove and sweep mud and dirt to keep the site clean, as directed by the City Engineer. This work shall conform to the City Code chapter 216 sections 216.6 and 216.7. The provisions of such equipment for dust, mud, and dirt control operations is considered incidental to the cost of the project and no separate pay item shall be provided. This includes all areas within the scope of work or limits of disturbance as well as all affected public rights of way, haul roads, stockpiling areas, and staging areas.
- C. The Contractor shall be responsible for any work, labor, equipment, and all associated costs required for temporary utility service necessary to complete the work described in the Contract Documents, unless a separate pay item exists specifically for this work.
- D. It shall be the Contractor's responsibility to completely restore all disturbed areas as a result of his operation to a condition that existed prior to the commencement of the project. The cost of these operations may not be measured for payment, but shall be considered incidental to various pay items contained in the Contract and items specifically referred to in the Special Provisions. Disturbance outside the limit of work by the Contractor will be immediately restored to the previous condition or better at no expense to the City.
- E. Upon completion of the work and before final acceptance and final payment is made, the Contractor shall clean and remove from the project site all surplus and discarded materials, rubbish, and temporary structures, and restore all property both public and private which had been disturbed and shall leave these improvements in a neat and presentable condition acceptable to the City Engineer.
- F. The Contractor shall be responsible for contacting Railroad Officials when work is within Railroad rights of way.

VI. INSURANCE AND BONDS

- A. The cost of Insurance and the cost of Bonds will not be measured but will be incidental to the Contract lump sum for Mobilization. If an item for Mobilization is not provided, the cost of the Insurance and the cost of the Bonds will be incidental to the other items in the Contract Documents.

**MARYLAND SHA
CONTRACT
PROVISIONS**

CONTRACT PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

CONTRACTOR REGISTRATION REQUIREMENTS

1 of 1

CONTRACTOR REGISTRATION REQUIREMENTS

Register in the System for Award Management (SAM) online at <https://www.sam.gov> prior to the time an offer is submitted for all Federal-Aid funded Contracts. The System for Award Management (SAM) is the Official U.S. Government system that consolidated the capabilities of CCR/FedReg, ORCA, and EPLS. There is no fee to register for this site. User guides and webinars are available under the Help tab. Allow up to 12 to 15 business days after you submit before your registration is active in SAM.

CONTRACT PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
(MdMUTCD) REQUIREMENTS

1 of 1

NOTICE TO ALL HOLDERS OF THIS CONTRACT DOCUMENT

**MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL
DEVICES (MdMUTCD) REQUIREMENTS**

The 2011 Maryland Manual on Uniform Traffic Control Devices (MdMUTCD) is the legal State standard for traffic control devices. All traffic control devices (temporary or permanent) utilized on Administration projects shall be in conformance with the requirements provided in the 2011 Edition of the Administration's MdMUTCD for Streets and Highways.

CONTRACT PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

(NCHRP) REPORT 350 AND MASH COMPLIANCE

1 of 2

NOTICE TO ALL HOLDERS OF THIS CONTRACT DOCUMENT

**NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM (NCHRP)
REPORT 350 AND THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH)
COMPLIANCE FOR DEVICES USED IN THE MAINTENANCE OF TRAFFIC AND
TRAFFIC CONTROL**

Except as otherwise specified in this section, all temporary and permanent highway safety features, including longitudinal barriers, transitions, end terminals, crash cushions, breakaway/yielding supports, truck-mounted attenuators, and work zone traffic control devices, shall meet values recommended when applicable tests are performed for evaluation criteria for the respective evaluation factors, as defined in NCHRP Report 350, or the MASH 2016, as noted herein. When conformance with NCHRP Report 350 or MASH 2016 is required, provide the Engineer with the manufacturers' certifications that the devices comply with the specified criteria. All temporary and permanent highway safety features shall comply with MASH 2016 criteria by the relevant dates noted below.

TEMPORARY INSTALLATIONS FOR MAINTENANCE OF TRAFFIC

The implementation dates below apply to temporary work zone roadside safety hardware and devices.

Temporary work zone devices, including Category 1, 2, 3 and 4 devices manufactured after 12/31/2019, when applicable, must be successfully tested to the 2016 edition of MASH. Relevant devices manufactured on or before 12/31/2019, and successfully tested to NCHRP 350, the 2009 edition of MASH, or otherwise authorized, may continue to be used.

Unless specifically waived in the Contract Documents, only devices approved on Qualified Product List by the Administration may be used.

Category 1 Devices

These devices include cones, tubular markers, flexible delineator posts, and drums, none of which have any accessories or attachments, and are used for channelization and/or delineation.

Category 2 Devices

These devices include Type I, II, and III barricades, portable sign supports with signs, intrusion alarms, and vertical panels. Category 1 devices, such as drums or cones, that are modified with accessories or attachments shall be considered Category 2 devices.

Category 3 Devices

- (a) Truck Mounted Attenuators (TMAs) and Trailer Truck Mounted Attenuators (TTMAs).
- (b) Temporary Barrier.
 - (1) Concrete Barrier.

CONTRACT PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

(NCHRP) REPORT 350 AND MASH COMPLIANCE

2 of 2

- (2) Traffic Barrier W-Beam and Water Filled Barrier.
- (3) Steel/Aluminum Barrier.
- (c) Temporary End Treatments.

Category 4 Devices

These devices include area lighting supports, arrow panels, and portable variable message signs that may be portable or trailer-mounted.

Use of Category 4 devices shall comply with the provisions of Part 6 of the MD MUTCD.

PERMANENT ROADSIDE HARDWARE INSTALLATION

The implementation dates below apply to both new and replacement installations of roadside safety hardware on National Highway System (NHS) roadways except when a waiver is approved by FHWA

December 31, 2017: Contracts with bid openings after this date shall meet MASH 2016 testing criteria for all installations and replacements of W-beam barriers and cast-in-place concrete barriers as specified in Contract Documents.

June 30, 2018: Contracts with bid openings after this date shall meet MASH 2016 testing criteria for all installations and replacements of W-beam tangent terminals as specified in Contract Documents.

December 31, 2018: Contracts with bid openings after this date shall meet MASH 2016 testing criteria for all installations and replacements of crash cushions.

December 31, 2019: Contracts with bid openings after this date shall meet testing criteria as defined in MASH 2016 guidelines for all new permanent installations and full replacements of bridge rail, transitions, all other longitudinal barrier (including portable barriers installed permanently), other W-beam terminals (such as double-sided or median terminals, flared terminals, and terminals installed on a flare), sign supports, cable barrier, cable barrier terminals, all other terminals, and all other breakaway hardware as specified in Contract Documents.

CONTRACT PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

1 of 1

OCCUPYING WETLANDS

The Contractor is hereby alerted to the importance of preserving wetland areas. The Administration, in conjunction with the various environmental agencies, has developed these Contract Documents so as to minimize or eliminate disturbance and damage to existing wetland areas. In order to accomplish this, the following must be rigidly adhered to:

- (a) Prior to performing any work on the project, the areas of wetland will be identified and marked as directed by the Administration. All personnel of the Contractor or sub-contractors shall be alerted to these designated areas.
- (b) The Contractor or sub-contractors shall not impact any wetland or waterway, whether it be permanently or temporarily unless otherwise stipulated in the permit application and approved as an authorized action by the appropriate regulatory agency. No fill shall be placed in these areas without a permit.
- (c) If a Contractor or sub-contractor has to impact a wetland or waterway that is not covered by an existing wetland permit, they shall immediately notify the Engineer. The Engineer will notify the Environmental Programs Division to determine the extent of any permit modification. At that time the Environmental Programs Division will request a permit modification or submit a permit application.
- (d) If the Contractor impacts any wetland or waterway for which they do not have a wetland permit, they shall be responsible for restoring the wetland areas and possibly mitigating the wetland impacts to the full satisfaction of the environmental agencies, which could include monetary compensation.
- (e) The cost of restoration and mitigation of the impacted areas shall be at no additional cost to the Administration.

The importance of not abusing the wetland areas cannot be overemphasized. Abuse of wetland areas could jeopardize the operation of the total Contract and could be cause for a shut-down. If a shut-down occurs because of the Contractor's failure to secure the required permits (i.e. the Contractor's method of work includes impacts not approved by previously acquired permits), the Contractor's negligence or operations, all costs and damages to the Contractor and to the State will be at no additional cost to the Administration. Noncompliance with these requirements will not be considered for an extension of Contract time.

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualified minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.* Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901-3907.

3. Records and certified payrolls (29 CFR 5.5)

a. *Basic record requirements (1) Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) *Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) *Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) *Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. *Certified payroll requirements (1) Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) *Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) *Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) *Use of Optional Form WH-347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access (1) Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices (1) Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV, 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001.

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or

mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901-3907.

4. **Subcontracts.** The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. **Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

- a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;
- b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;
- c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or
- d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect properly in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and

health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more -- as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov>). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contractor). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or

cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)
This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

GOA

CONTRACT PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

DBE FOR FEDERAL-AID CONTRACTS

1 of 11

**AFFIRMATIVE ACTION REQUIREMENTS
UTILIZATION OF DISADVANTAGE BUSINESS ENTERPRISES
FOR FEDERAL-AID CONTRACTS**

CONTRACT GOALS

FOR THE PURPOSE OF THIS CONTRACT, A GOAL OF TWENTY-SEVEN PERCENT (27%) HAS BEEN ESTABLISHED FOR SOCIALLY AND ECONOMICALLY DISADVANTAGED BUSINESSES THAT ARE OWNED AND CONTROLLED BY THOSE INDIVIDUALS WHO ARE BLACK AMERICANS, HISPANIC AMERICANS, ASIAN-PACIFIC AMERICANS, SUBCONTINENT ASIAN AMERICANS, NATIVE AMERICANS, OR WOMEN PURSUANT TO THE MARYLAND DEPARTMENT OF TRANSPORTATION (MDOT) MINORITY BUSINESS ENTERPRISE PROGRAM:

It is the policy of the Maryland Department of Transportation that Disadvantaged Business Enterprises as defined in 49 CFR Part 26 and the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) shall have an equal opportunity to participate in the performance of the contracts financed in whole or in part with Federal funds under these agreements. Consequently, the Disadvantaged Business Enterprise requirements of 49 CFR Part 26 and SAFETEA-LU apply to this agreement.

The bidder agrees to ensure that Disadvantaged Business Enterprises as defined in 49 CFR Part 26 and SAFETEA-LU have an equal opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with Federal funds provided under this agreement. In this regard, all bidders shall take all necessary and reasonable steps in accordance with 49 CFR Part 26 and SAFETEA-LU to ensure that Disadvantaged Business Enterprises have an equal opportunity to compete for and perform on Federally funded contracts.

The Maryland State Highway Administration, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any Contract entered into pursuant to this advertisement, Disadvantaged Business Enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

A. GENERAL

For the purpose of these requirements, the following terms as defined below shall apply:

Administration Representative – A DBE Officer or employee of an Administration who enforces the laws and regulations pertaining to disadvantaged and minority business enterprise and contract compliance.

Affirmative Actions – Specific steps taken to eliminate discrimination and its effects, to ensure nondiscriminatory results and practices in the future, and to involve disadvantaged and minority business enterprises fully in contracts and programs.

CONTRACT PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

DBE FOR FEDERAL-AID CONTRACTS

2 of 11

Business Enterprises – Any legal entity which is organized in any form other than as a joint venture (e.g., sole proprietorship, partnership, corporation, etc.) to engage in lawful commercial transactions.

Certified Business – A business which, by order of the Chair/MBE Advisory Council or his/her designee, has been certified as a bona fide DBE. MDOT certification does not equate to a pre-qualification status.

DBE – Disadvantaged Business Enterprise – (Reference 49 CFR Part 26, Subpart A) A small business concern: (1) which is at least 51 percent owned by one or more socially and economically disadvantaged individuals. Where stock ownership is involved, the disadvantaged owner(s) shall own at least 51 percent of each class of voting stock and at least 51 percent of the aggregate of all classes of stock that have been issued (also applies to publicly owned businesses); and (2) whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who have ownership.

DBE Directory – A compilation of businesses certified by MDOT as disadvantaged, minority, or socially and economically disadvantaged businesses. The directory will be published annually with quarterly supplements. It will also be provided in automated format and on the Internet to be updated as changes are made.

DBE Participation Packet – The documents submitted by the bidder or proposer pursuant to the appropriate special bid provisions. The DBE Participation Packet consists of the Certified DBE Utilization and Fair Solicitation Affidavit and the DBE Participation Schedule, both of which must be submitted with your bid or initial price proposal. The DBE Participation Packet also includes the following documents, which shall be submitted after bids or proposals are opened: Outreach Efforts Compliance Statement, DBE Subcontractor Project Participation Affidavit, MDOT Joint Venture Disclosure Affidavit, and Minority Contractor Unavailability Certificate. See all bid proposal documents at <https://www.mdot.maryland.gov/tso/pages/Index.aspx?PageId=39>. Under Federally Funded DBE Bid/Proposal Forms as listed below:

Form A MDOT-OP 016-2/ MDOT DBE FEDERALLY FUNDED CONTRACTS
CERTIFIED DBE UTILIZATION AND FAIR SOLICITATION AFFIDAVIT

Form B MDOT-OP 017-1/ MDOT DBE FEDERALLY FUNDED CONTRACTS
DBE PARTICIPATION SCHEDULE PART 1- INSTRUCTIONS FOR DBE
PARTICIPATION SCHEDULE

Form C MDOT-OP 018-1/ MDOT DBE FEDERALLY FUNDED CONTRACTS
OUTREACH EFFORTS COMPLIANCE STATEMENT

Form D MDOT -OP 019-2/ MDOT DBE FEDERALLY FUNDED CONTRACTS
DBE SUBCONTRACTOR PROJECT PARTICIPATION AFFIDAVIT

Form E MDOT MBE/DBE GOOD FAITH EFFORTS GUIDANCE AND
DOCUMENTATION; PART 1- GUIDANCE FOR DEMONSTRATING GOOD FAITH
EFFORTS TO MEET MBE/DBE PARTICIPATION GOALS

CONTRACT PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

DBE FOR FEDERAL-AID CONTRACTS

3 of 11

Form E MDOT MBE/DBE GOOD FAITH EFFORTS GUIDANCE AND DOCUMENTATION; PART 2- CERTIFICATION REGARDING GOOD FAITH EFFORTS DOCUMENTATION

DBE Program – A program developed by MDOT to implement the requirements of Title 14, Subtitle 3, of the State Finance and Procurement Article, Annotated Code of Maryland; Title 10, Subtitle 3, of the State Finance and Procurement Article, Annotated Code of Maryland, for Leases of State-Owned Property; and 49 CFR Part 26, Subparts A and C for all Federal Department of Transportation Financial Assistance Programs.

Director, Office of Equal Opportunity – The individual designated for the Administration’s overall DBE compliance.

Joint Venture – An association of a DBE firm and one or more other firms to carry out a single, for-profit business enterprise, for which the parties combine their property, capital, efforts, skills, and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks, and profits of the joint venture are commensurate with its ownership interest.

Small Business Administration (SBA) 8(a) Certification – The SBA 8(a) Certification Program is a Federal Program which establishes firms as disadvantaged and eligible for participation in the Federal SBA Program.

Socially and Economically Disadvantaged Individual Pursuant to 49 CFR Part 26 – Those individuals who are citizens of the United States (or lawfully admitted permanent residents). For convenience, these individuals and groups are referred to as “minorities” in this document and who are:

1. Found by the MDOT to be socially and economically disadvantaged on a case-by-case basis;
2. Any individual in the following groups, members of which are rebuttably presumed to be socially and economically disadvantaged;
 - a. “Black Americans,” which includes persons having origins in any of the Black racial groups of Africa;
 - b. “Hispanic Americans,” which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;
 - c. “Native Americans,” which includes persons who are American Indian, Eskimos, Aleuts, or Native Hawaiians;
 - d. “Asian-Pacific Americans,” which included persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Commonwealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kirbati, Juvalu, Nauru, Federated States of Micronesia, or Hong Kong;

CONTRACT PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

DBE FOR FEDERAL-AID CONTRACTS

4 of 11

- e. "Subcontinent Asian American," which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka;
 - f. Women;
3. Only those persons whose personal net worth does not exceed \$750,000 may be found to be economically disadvantaged.

B. DBE and Good Faith Effort Requirements

1. This contract includes a DBE participation goal for subcontracting and/or procurement of materials and/or services. Bidders (or offerors) must make a good faith effort to meet the DBE participation goal **before bids or proposals are due**, including outreach efforts. A bid or initial proposal must include both a completed and executed Certified DBE Utilization and Fair Solicitation Affidavit and DBE Participation Schedule. The failure of a bidder to complete and submit these documents shall result in a determination that the bid is not responsive. The failure of an offeror to complete and submit these documents shall result in a determination that the proposal is not susceptible of being selected for award.
2. In making a good faith effort to achieve the DBE goal, prior to completing the Certified DBE Utilization and Fair Solicitation Affidavit and the DBE Participation Schedule and prior to submitting a bid or initial proposal the bidders (or offerors) including those bidders or offerors that are certified DBEs must:
 - a. Identify specific work categories within the scope of the procurement appropriate for subcontracting and/or procurement of materials and/or services;
 - b. **Solicit DBEs in writing at least 10 days before bids or initial proposals are due**, describing the identified work categories and providing instructions on how to bid on the subcontracts and/or procurement of materials and/or services;
 - c. Attempt to make personal contact with the DBEs solicited and to document these attempts;
 - d. Assist DBEs to fulfill, or to seek waiver of, bonding requirements; and
 - e. Attend prebid or other meetings the procurement agency schedules to publicize contracting opportunities to DBEs.
3. All firms bidding on a Federal-Aid Contract shall submit the name and address of all subcontractors, service providers, and suppliers that submitted quotes on the Contract. All subcontractors, service providers, and suppliers shall complete and submit to the Administration the form titled Contractor Information.
4. The bidder shall seek commitments from disadvantaged business enterprises by subcontracting and/or procurement of materials and/or services, the combined value of which equals or exceeds the appropriate percent (goal) of the total value of the prime contract. A bidder may count toward its DBE goals expenditures for materials and supplies obtained from DBE regular dealers and/or manufacturers provided that the DBEs assume the actual and contractual responsibility for the provision of the materials and supplies. The bidder may count its entire expenditure to a DBE manufacturer (i.e., a supplier that produces goods from raw materials or substantially alters them before

CONTRACT PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

DBE FOR FEDERAL-AID CONTRACTS

5 of 11

resale). The bidder may count 60 percent of its expenditures to a DBE regular dealer that is not a manufacturer, provided that the DBE supplier performs a commercially useful function in the supply process. The apparent low bidder shall submit to the Administration, within 10 business days after notification that it is the apparent low bidder, an acceptable Affirmative Action Plan for the utilization of Disadvantaged Business Enterprises in this Contract. The Contract will not be awarded without the Bidder's AAP being approved by the Administration.

The Affirmative Action Plan shall include as a minimum:

- a. The name of an employee designated as the bidder's liaison officer for minority affairs.
 - b. A complete DBE Subcontractor Project Participation Affidavit , using contractors whose names appear in the DBE directory or who are otherwise certified by MDOT as being a disadvantaged business enterprise. Except as permitted by law and approved by the Administration, this affidavit shall include all DBE firms identified on the DBE Participation Schedule with a percentage of participation that meets or exceeds the percentage of participation indicated in the bid or initial proposal.
 - c. A completed Outreach Efforts Compliance Statement .
5. When a bidder intends to attain the appropriate goal for disadvantaged business enterprise participation by use of a joint venture, the bidder shall submit a Joint Venture Disclosure Affidavit showing the extent of disadvantaged business participation. If a bidder intends to use a joint venture as a subcontractor to meet its goal, the affidavit shall be submitted through the bidder by the proposed subcontractor and be signed by all parties. A DBE, even in a joint venture arrangement shall be certified as a DBE by MDOT prior to being included in the Affirmative Action Plan.
6. Where the proposed DBE participation does not meet the DBE contract goals, sufficient evidence to demonstrate that the bidder has taken all necessary and reasonable steps to make a good faith effort to meet these goals shall be required.
- 7. Determination of Bid Responsiveness for Federal-Aid Contracts**

If the bidder is unable to secure from DBEs by subcontracting and/or by procurement of materials and/or services, commitments which at least equal the appropriate percent (goal) of the values of the prime Contract at the time of bid, he shall request, in writing, a waiver of the unmet portion of the goal. This request must be initiated by checking the appropriate box on the Certified DBE Utilization and Fair Solicitation Affidavit submitted with the bid or initial proposal.

The waiver may be granted by the Administrator. To obtain approval of a waiver, the bidder shall submit the following information:

- a. A detailed statement of efforts made prior to bid to contact and negotiate with DBEs including: (i) the dates, names, addresses, and telephone numbers of DBEs who were contacted; (ii) a description of the information provided to DBEs requesting the plans, specifications, and anticipated time schedule for portions of the work to be performed and (iii) a detailed statement of the reasons why additional prospective agreements with DBEs were not reached;

CONTRACT PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

DBE FOR FEDERAL-AID CONTRACTS

6 of 11

- b. A detailed statement of the efforts made to select portions of the work proposed to be performed by DBEs in order to increase the likelihood of achieving the stated goals;
 - c. For each DBE that the Contractor considers not qualified, but from which a bid has been received, a detailed statement of the reasons for the bidder's conclusion; and
 - d. For each DBE contacted but unavailable, (i) a Minority Contractor Unavailability Certificate signed by the disadvantaged business enterprise, or (ii) a statement from the bidder shall be submitted that states that the DBE refused to sign the Certificate.
- 8. Guidance concerning good faith efforts.** The following is a list of the types of actions and factors that will be used to determine the bidder's or offeror's good faith efforts to obtain DBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.
- a. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of certified DBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBEs to respond to the solicitation. The bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.
 - b. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the bidder or offeror might otherwise prefer to perform these work items with its own forces.
 - c. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
 - d. (1) Negotiating in good faith with interested DBEs. It is the bidder's or offeror's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation.

(2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders and offerors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.

CONTRACT PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

DBE FOR FEDERAL-AID CONTRACTS

7 of 11

- e. Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the contractor's efforts to meet the project goal.
- f. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.
- g. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
- h. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.
- i. In determining whether a bidder or offeror has made good faith efforts, the Administration may take into account the performance of other bidders or offerors in meeting the contract goal. For example, when the apparent successful bidder or offeror fails to meet the contract goal, but others meet it, the Administration may reasonably raise the question of whether, with additional reasonable efforts, the apparent successful bidder or offeror could have met the goal. If the apparent successful bidder or offeror fails to meet the goal, but meets or exceeds the average DBE participation obtained by other bidders or offerors, the Administration may view this, in conjunction with other factors, as evidence of the apparent successful bidder or offeror having made good faith efforts.

9. Bidder Use of DBE Special Services

The bidder shall consider, whenever possible, utilizing the services of minority-owned banks. Most minority banks are full-service corporations that can provide an array of financial services such as Treasury and Tax Loan fund accounts, time and demand deposit accounts, payroll services, and if needed, organization investment counseling.

10. Bidder Records

The bidder shall maintain records showing actions which have been taken to comply with procedures set forth herein.

11. Bidder Cooperation

The bidder shall cooperate with the Administration Representative in any reviews of the Contractor's procedures and practices, with respect to DBEs, which the Administration Representative may, from time to time, conduct.

CONTRACT PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
8 of 11

DBE FOR FEDERAL-AID CONTRACTS

12. Bidder DBE Modifications

During the life of the Contract, all plans to modify the approved DBE participation program will require the approval of the Administrator or his authorized representative. This shall include any changes to the items of work to be sublet or materials and services to be obtained which differ for those in the original DBE participation program. Any such request for revisions shall be directed to the appropriate District Engineer for their disposition.

C. RECORDS AND REPORTS

1. The Contractor shall keep such records as are necessary to determine compliance with its Disadvantaged Business Enterprise utilization obligations. The records kept by the Contractor shall be designed to indicate:
 - a. The name of disadvantaged and non-disadvantaged subcontractors and suppliers, the type of work materials or services being performed on or incorporated in this project, and the monetary value of such work materials or services.
 - b. Documentation of all correspondence, contacts, telephone calls, etc., to obtain the services of disadvantaged business enterprises on this project.
 - c. The progress and efforts made in seeking out disadvantaged contractor organizations and individual disadvantaged contractors for work on this project.
2. Information required to be submitted for Federally Assisted contracts in accordance with 49 CFR Part 26:
 - a. All bidders (not only the apparent successful bidder) shall provide the following information:
 - (1) The age of the bidding firm; and
 - (2) The annual gross receipts of the bidding firm.
 - b. All bidders (not only the apparent successful bidder) shall provide the following information for each firm quoting or considered as subcontractors:
 - (1) The name of firm; and
 - (2) The address of firm.
 - c. The Administration will contact each of the firms quoting or considered as subcontractors to obtain:
 - (1) The age of the firm; and
 - (2) The annual gross receipts of the firm.

If this information already has been gathered by the Administration on a firm and it is current, it will not be requested.

CONTRACT PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

DBE FOR FEDERAL-AID CONTRACTS

9 of 11

3. The Contractor shall submit reports on a monthly basis of those contracts and other business transactions executed with disadvantaged business enterprises with respect to the records referred to in Subparagraph 1.a above, in such form, manner, and content as prescribed by the Administration. The reports shall be due monthly on the 15th calendar day of each month. If the Contractor cannot submit their report on time, they shall notify the Administration's Representative and request additional time to submit the report. Failure of the Contractor to report in a timely manner may result in a finding of noncompliance. Additional reports may be required by the Administration upon written request.
4. To ensure compliance with the certified DBE contract participation goals, the Contractor shall:
 - a. Submit monthly, a report listing unpaid invoices over 30 days from all certified DBE subcontractors and the reason payment has not been made;
 - b. Include in its agreement with certified DBE subcontractors a requirement that DBE subcontractors are to submit monthly to the Administration a report identifying the prime Contractor and listing the following:
 - (1) Payment received from the Contractor in the preceding 30 days; and
 - (2) Invoices for which the subcontractor has not been paid.
5. All such records shall be retained for a period of three years following acceptance of final payment and shall be available for inspection by the U.S. Department of Transportation, MDOT, and the Administration.

D. ADMINISTRATIVE PROCEDURES FOR ENFORCEMENT

1. Whenever the Administration believes the prime Contractor or any subcontractor may not be operating in compliance with the terms of these provisions, the Administration Representative will conduct an investigation. If the Administration representative finds the prime Contractor or any subcontractor is not in compliance with these provisions, the representative will make a report of noncompliance and notify such Contractor in writing of the steps that will, in the judgment of the Administration, bring the Contractor into compliance. If the Contractor fails or refuses to comply fully with such steps, the Administration's representative will make a final report of noncompliance to the Administrator, who may direct the imposition of one or more of the sanctions listed below:
 - a. Suspension of work on a project, pending correction;
 - b. Withholding payment or a percentage thereof, pending correction;
 - c. Referral of DBE to the MDOT Office of MBE for review for decertification or minority business fraud investigation;
 - d. Referral to MDOT Office of MBE for review/referral to the Attorney General's Office for review for initiation of debarment;
 - e. Referral to the Attorney General's Office for review for debarment or for criminal prosecution through the MDOT Office of General Counsel; or

CONTRACT PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
10 of 11

DBE FOR FEDERAL-AID CONTRACTS

- f. Any other action as appropriate.

The Administrator will determine which sanction(s) should be imposed in order to promote the purpose of the MDOT DBE Program.

- 2. If the documents used to determine the status of a DBE contain false, misleading, or misrepresenting information, the matter may be referred to the MDOT Office of MBE for appropriate action.
- 3. Loss of DBE Certification
 - a. When a prime Contractor has made a commitment to use a DBE who has lost its certification but the subcontract has not been executed prior to the notice of loss of certification, the prime Contractor is required to obtain an eligible, certified DBE for the Contract or demonstrate to MDOT that it has made a good faith effort to do so.
 - b. When a prime Contractor has executed a contract with a DBE subcontractor before the notice of loss of certification, the prime Contractor may continue to use the firm on the Contract and may continue to receive credit towards its DBE goal, i.e., contract goal, for the work of that subcontractor.
 - c. The work carried out by a DBE Prime Contractor would be counted by MDOT up to the loss of certification. The work performed after the loss of certification would not be considered DBE participation.
 - d. When a DBE subcontractor has lost its certification, MDOT may not continue to count the DBE participation which takes place after the loss of certification as DBE work when counting participation towards the overall goal of the modal administration or the Department.
 - e. If a DBEs loss of certification is the result of exceeding the size standards while performing on a contract, the DBE participation may be counted for both the Contract goal and the overall goal.
- 4. Each Contract that the Administrator signs with a Prime contractor (and each subcontract the Prime contractor signs with a subcontractor) must include the following assurance: The contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this Contract, which may result in the termination of this Contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:
 - a. Withholding monthly progress payments;
 - b. Assessing sanctions;
 - c. Liquidated damages; and/or
 - d. Disqualifying the contractor from future bidding as non-responsible.

CONTRACT PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
11 of 11

DBE FOR FEDERAL-AID CONTRACTS
E. SUBCONTRACTING.

Subcontracting by the Prime Contractor. Form B Request for Approval of Subcontractor shall be used by the Prime Contractor to request approval of a Subcontractor and also to ensure that a formal Subcontract has been or will be written and kept on file by the Prime Contractor. Completion and submittal of the form by the Prime Contractor acknowledges that the Administration's Contracting Officer may require the submission of the written Subcontract for review by the Administration and/or FHWA.

Lower Tier Subcontracting by an Approved Subcontractor. Form B Subcontractor's Request for Approval of Lower Tier Subcontractor shall be used by an Approved Subcontractor to request approval of a Lower Tier Subcontractor and also to ensure that a formal Subcontract has been or will be written and kept on file by the Subcontractor. Completion and submittal of the form by the Subcontractor acknowledges that the Administration's Contracting Officer may require the submission of the written Subcontract for review by the Administration and/or FHWA.

Form Acquisitions. Maryland State Highway Administration Form B may be acquired through the Administration's Contracts Award Team or District Office. All questions should be directed to the Office of Construction, Contracts Award Team.

It is the Administration's intention to randomly select during each calendar quarter a representative sample of written Subcontracts for review. This review will be conducted by the Office of Construction's Contracts Award Team.

CONTRACT PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

NOTICE TO CONTRACTORS DBE GOAL

1 of 1

NOTICE TO CONTRACTORS

CONCERNING THE DBE GOAL ON THIS CONTRACT

The Maryland Department of Transportation is committed to providing the maximum amount of contracting opportunities to certified Disadvantaged Business Enterprises (DBEs). The previously established policy excluded consideration of the cost of supplying structural steel for DBE participation since there were no structural steel manufacturers certified by MDOT. This exemption is no longer applicable since DBE firms have been certified under this category.

The Administration reserves the right to verify the accuracy of the dollar value included on the Contractor's Affirmative Action Plan, including the value associated with the manufacture, supply, and installation of structural steel.

CONTRACT PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

DBE COMPLIANCE FIELD MEETING

1 of 1

DBE COMPLIANCE FIELD MEETING

A DBE compliance Field Meeting will be conducted to review the responsibilities of the Administration and the Contractor's personnel relative to DBE Compliance and documentation. The meeting will be held within two weeks after starting work on the project.

The Construction Project Engineer, who will notify the following of the date, time and location, will arrange the meeting. At least one week advanced notice will be required.

(a) Administrative Representatives.

- (1) Director, Office of Equal Opportunity or Designee
- (2) District Equal Opportunity Officer
- (3) Regional Constructional Engineer
- (4) Construction Project Engineer
- (5) Construction Inspection Division Inspector

(b) Contract Representatives.

- (1) Superintendent - Prime Contractor
- (2) Equal Opportunity Officer - Prime Contractor
- (3) Owner/Superintendent/Foreman DBE - Subcontractor

The Construction Project Engineer and Equal Opportunity Representative will jointly conduct the meeting. The Contractor shall notify the appropriate subcontractors and ensure their attendance.

CONTRACT PROVISIONS

TRAFFIC CONTROL PLAN CERTIFICATION

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

1 of 1

TRAFFIC CONTROL PLAN CERTIFICATION

PRIOR TO THE COMMENCEMENT OF WORK ON THIS PROJECT, THE SUCCESSFUL BIDDER WILL BE REQUIRED TO COMPLETE A TRAFFIC CONTROL PLAN CERTIFICATION CONTAINING THE INFORMATION SHOWN BELOW. THE CERTIFICATION FORM WILL BE PROVIDED TO THE SUCCESSFUL BIDDER UPON AWARD OF THE CONTRACT.

The Administration's Traffic Control Plan (TCP) has been reviewed and the following course of action shall be followed:

Option 1 _____

The TCP is accepted and shall be used on this project.

Option 2 _____

The TCP is accepted; however, revisions and/or additions shall be submitted for approval in conformance with the Administration's Specifications 104.01 and TC-2.10. It is understood that no additional sum of money is payable to the Contractor if the Administration accepts Option 2.

Option 3 _____

The TCP is not accepted and revision shall be submitted for approval in accordance with the Administration's Specifications 104.01 and TC-2.10. It is understood that no additional sum of money is payable to the Contractor if the Administration accepts Option 3.

It is understood that the effective implementation of the approved TCP is the responsibility of the Contractor. Minor modifications may be made by the Traffic Manager if field conditions warrant and prior concurrence is obtained from the Engineer. Significant changes to the TCP shall be submitted to the Engineer in writing, for approval, in conformance with the Administration's Specifications 104.01.

(DATE)

(SIGNATURE)

(PRINT SIGNATURE)

(TITLE)

**CONTRACT PROVISIONS
PREVAILING WAGE INSTRUCTIONS FOR THE CONTRACTOR
THE CONTRACTOR**

City Contract No. 20-CPTH-30
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

1 of 4

PREVAILING WAGE INSTRUCTIONS FOR THE CONTRACTOR

PAYROLLS.

Non-Federally Funded Contracts. The Division of Labor and Industry, Prevailing Wage Unit is requiring that all certified payroll records be submitted electronically. For instructions on how to register and submit go online to www.dlir.state.md.us/prevwage and follow the instructions for registering. The regulation addressing this change can be found at COMAR 21.11.11.02. For Non-Federally funded projects, which include prevailing wage rates, the prime Contractor and each subcontractor, shall submit the certified payroll electronically and provide one hard copy to the Project Engineer. All wages shall be paid in conformance with the State Finance and Procurement Article, Section 17-201-17-226 of the Annotated Code of Maryland and the Fair Labor Standards Amendments of 1974 (P.L. 93259). If the award amount of a Non-Federally funded job is less than \$250,000, the project will be exempt from prevailing wage requirements.

A review has been made of the wage conditions in the locality and, based on the information available, the wage rates and fringe payments listed are determined by the Commissioner of the Department of Labor and Industry to be prevailing for the Contract for the described classes of labor in conformance with the law. It shall be the responsibility of the Contractor to fully comply with the law and to contact the Office of the Commissioner of Labor and Industry for interpretation of the provisions of the law.

Federally Funded Contracts. For Federally funded projects, the prime Contractor and each subcontractor shall submit one copy of the certified payroll to the Project Engineer.

General Requirements for Federally and Non-Federally Funded Contracts. All payrolls are subject to the following requirements:

- (a) All payrolls shall be numbered, beginning at No. 1, and consecutively numbered through the end of the Contract.
- (b) Contract and FAP numbers shall be shown on all payrolls (as applicable).
- (c) All payroll submissions shall include:
 - (1) Federally Funded – employees’ full name, classification, and Individual Identifying Number (IIN) e.g. (last four digits of social security number). Refer to FHWA 1273 (IV),(3),(b)1 for further requirements related to weekly payrolls.
 - (2) Non-Federally Funded – employees’ full name, classification, address and social security number.

**CONTRACT PROVISIONS
PREVAILING WAGE INSTRUCTIONS FOR THE CONTRACTOR
THE CONTRACTOR**

City Contract No. 20-CPTH-30
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

2 of 4

- (d) All payrolls shall show the employee's basic hourly wage rate, overtime rate (if applicable), and the number of hours worked (tabulated both daily and weekly).
- (e) When fringe benefits are required, indicate separately the amount of employer contributions to fringe benefit funds and/or programs. The fringe benefits shall be individually identified but may be tabulated on a separate sheet. When required fringe benefits are paid in cash, add the required fringe benefit amount to the basic hourly rate to obtain the total prevailing wage rate for the employee.
- (f) The employee's net pay and the itemized deductions shall be included in all payrolls.
- (g) A Contractor may make deductions that are required by law or required by a collective bargaining agreement (between the Contractor and a bona fide labor organization). Deductions are also permitted if they are identified in a written agreement between the employee and employer that was made at the beginning of employment, provided that the Contractor presents the agreement to the Administration before the employee begins working on the Contract. Each payroll shall also include the U.S. Department of Labor and Hour Public Contracts Division Statement of Compliance Form WH-347 (or its equivalent), signed by an appropriate official of the Contractor/subcontractor. The Contractor's name, address, and telephone number shall also be shown.
- (h) On Non-Federally funded projects, all apprentices shall be registered with the Maryland Apprenticeship and Training Council.
- (i) Contractors employing a classification of worker for which a wage rate was not included on the original wage decision, shall submit to either the Wage and Hour Team (Federally Funded) or Department of Labor and Licensing (DLLR), (Non-Federally Funded), a request for an additional classification and rate prior to the employee's employment at the project.
- (j) Payrolls for Non-Federally Funded projects shall be submitted within 14 calendar days after the end of each payroll period.
- (k) Payrolls for Federally Funded projects shall be submitted within 7 calendar days after the end of each payroll period.
- (l) Contractors and Subcontractors are required to maintain complete social security numbers and home addresses for employees. Government agencies are entitled to request or review all relevant payroll information, including social security numbers and addresses of employees. Contractors and Subcontractors are required to provide such information upon request.

**CONTRACT PROVISIONS
PREVAILING WAGE INSTRUCTIONS FOR THE CONTRACTOR
THE CONTRACTOR**

City Contract No. 20-CPTH-30
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

3 of 4

OVERTIME.

Non-Federally Funded Contracts. Overtime rates shall be paid by the prime Contractors and subcontractors under their Contracts and agreements with their employees, which in no event shall be less than time and a half the prevailing hourly rate of wages for all hours worked in excess of ten hours in any one calendar day or forty hours in any one calendar week and work performed on Sundays and legal holidays.

Fringe benefits shall be paid for all hours worked, including the overtime hours. However, the fringe benefit amounts may be excluded from the half time premium due as overtime compensation.

Federally Funded Contracts. Overtime rates shall be paid as specified in Form FHWA 1273. Fringe benefits shall be paid for all hours worked, including the overtime hours. However, the fringe benefit amounts may be excluded from the half time premium due as overtime compensation.

PENALTIES.

Non-Federally Funded Contracts. When the Contractor is delinquent in submitting payroll records, processing of partial payment estimates will be held in abeyance, pending receipt of the records. The Contractor shall be liable to the Administration for liquidated damages in the amount of \$10.00 for each calendar day the records are late.

The Contractor shall be liable to the Administration for liquidated damages in the amount of \$20.00 for each day that an employee is paid less than the prevailing wage.

Federally Funded Contracts. When the Contractor is delinquent in submitting payroll records, processing of partial payment estimates will be held in abeyance pending receipt of the records.

ADDITIONAL CLASSIFICATIONS.

Federally Funded Contracts. If the wage determination lacks a necessary classification the Prime Contractor is responsible to submit the request for the additional classification, with a proposed rate, to the State Highway Administration's Wage and Hour Team. The request is to include a copy of the projects wage determination.

Non-Federally Funded Contracts. If the wage determination lacks a necessary classification the Prime Contractor is responsible to submit the request for the additional classification, with a proposed rate, to the Department of Labor and Licensing (DLLR).

**CONTRACT PROVISIONS
PREVAILING WAGE INSTRUCTIONS FOR THE CONTRACTOR
THE CONTRACTOR**

City Contract No. 20-CPTH-30
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

4 of 4

INQUIRIES.

Request for information or questions shall be addressed to:

Maryland State Highway Administration
Office of Construction
Wage and Hour Team
7450 Traffic Drive, Building #4
Hanover, MD 21076
or
Email: wageandhourteam@sha.state.md.us

"General Decision Number: MD20230056 09/08/2023

State: Maryland

Construction Type: Building

County: Washington County in Maryland.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none">• Executive Order 14026 generally applies to the contract.• The contractor must pay all covered workers at least \$16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none">• Executive Order 13658 generally applies to the contract.• The contractor must pay all covered workers at least \$12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours performing on that contract in 2023.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	09/01/2023
1	09/08/2023

ASBE0024-004 04/01/2022

	Rates	Fringes
INSULATOR - MECHANICAL (Duct, Pipe & Mechanical System Insulation).....	\$ 39.27	19.17

BRDC0001-003 04/30/2023

	Rates	Fringes
STONE FINISHER.....	\$ 27.68	11.63

BRDC0001-004 04/30/2023

	Rates	Fringes
TILE FINISHER.....	\$ 27.68	11.63

BRDC0001-006 04/30/2023

	Rates	Fringes
TILE SETTER.....	\$ 33.41	12.67

BRMD0001-002 04/30/2023

	Rates	Fringes
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BRICKLAYER.....\$ 36.50 13.47

CARP0423-001 05/01/2022

Rates Fringes

CARPENTER.....\$ 29.40 20.25

* ELEC0307-002 05/29/2023

Rates Fringes

ELECTRICIAN.....\$ 37.30 19.24

ENGI0037-001 06/01/2022

Rates Fringes

POWER EQUIPMENT OPERATOR

Bobcat/Skid Steer/Skid

Loader.....\$ 27.99 12.60

Bulldozer.....\$ 30.95 12.60

Crane.....\$ 32.95 16.40

Loader.....\$ 30.95 12.60

Paver (Asphalt, Aggregate
and Concrete).....\$ 30.05 12.60

Roller.....\$ 30.05 12.60

IRON0568-001 05/01/2023

Rates Fringes

IRONWORKER, REINFORCING.....\$ 29.91 23.65

LABO0616-001 05/01/2023

Rates Fringes

LABORER (Pipelayer).....\$ 23.24 22.10

LABO0616-002 05/01/2023

Rates Fringes

LABORER (Common or General).....\$ 23.06 22.10

LAB00710-001 04/01/2022

	Rates	Fringes
LABORER (Mason Tender - Brick)...	\$ 21.06	6.06

PAIN0051-006 06/01/2022

	Rates	Fringes
PAINTER.....	\$ 26.61	11.41

PLUM0489-002 11/01/2021

	Rates	Fringes
PIPEFITTER (Includes HVAC Pipe and Unit Installation).....	\$ 34.03	17.78
PLUMBER.....	\$ 36.03	17.78

ROOF0030-003 07/01/2022

	Rates	Fringes
ROOFER.....	\$ 32.26	14.71

TEAM0639-002 06/01/2023

	Rates	Fringes
TRUCK DRIVER (DUMP TRUCK).....	\$ 29.25	6.30

* UAVG-MD-0001 06/12/2023

	Rates	Fringes
IRONWORKER, ORNAMENTAL.....	\$ 30.29	24.06

* UAVG-MD-0002 06/12/2023

	Rates	Fringes
IRONWORKER, STRUCTURAL.....	\$ 30.16	23.90

* UAVG-MD-0003 06/12/2023

	Rates	Fringes
SHEET METAL WORKER.....	\$ 33.59	23.15

 * UAVG-MD-0004 06/12/2023

	Rates	Fringes
SHEET METAL WORKER (HVAC Duct Installation Only).....	\$ 37.89	22.51

 SUMD2023-013 05/30/2023

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 26.12	8.33
LABORER: Mason Tender - Cement/Concrete.....	\$ 19.35	8.70
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 28.36	11.83
OPERATOR: Forklift.....	\$ 25.22	5.47

 WELDERS - Receive rate prescribed for craft performing
 operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information

on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and

the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter

* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISIO"

CONTRACT PROVISIONS
NOTICE OF ACTIONS FOR AFFIRMATIVE ACTION

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
1 of 8

**NOTICE OF ACTIONS REQUIRED FOR AFFIRMATIVE ACTION TO
ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)**

1. The Offeror's or Bidders attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as noted in Appendix A and B:

These goals are applicable to all the Contractors' construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this notification. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.
4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is noted on appendix B.

**STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION
CONTRACT SPECIFICATIONS (Executive Order 11246)**

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;

CONTRACT PROVISIONS
NOTICE OF ACTIONS FOR AFFIRMATIVE ACTION

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
2 of 8

- c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
- d. "Minority" includes:
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original people of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and,
 - (iv) American Indians or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
- 2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
- 3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
- 4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7.a through 7.p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward its goal in each craft during the period specified.
- 5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

CONTRACT PROVISIONS
NOTICE OF ACTIONS FOR AFFIRMATIVE ACTION

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
3 of 8

6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with reason therefore, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7.b above.
 - f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the

CONTRACT PROVISIONS
NOTICE OF ACTIONS FOR AFFIRMATIVE ACTION

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
4 of 8

policy with all management personnel and with all minority and female employees at least once a year and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

- g.** Review, at least annually, the company's EEO Policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h.** Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
- i.** Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j.** Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.
- k.** Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- l.** Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- m.** Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to insure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
- n.** Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- o.** Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

CONTRACT PROVISIONS
NOTICE OF ACTIONS FOR AFFIRMATIVE ACTION

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
5 of 8

- p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7.a through 7.p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7.a through 7.p of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's non-compliance.
9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
14. The Contractors shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at

CONTRACT PROVISIONS
NOTICE OF ACTIONS FOR AFFIRMATIVE ACTION

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
6 of 8

which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

- 15.** Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents

(a.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

- 16.** The Contractor will receive at the time of Award Federal Form CC-257 for his use in reporting monthly the Affirmative Actions for minority and female which he has employed.

CONTRACT PROVISIONS
NOTICE OF ACTIONS FOR AFFIRMATIVE ACTION

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
7 of 8

APPENDIX A

The following goals and timetables for female utilization shall be included in all Federal and federally assisted construction contracts and subcontracts in excess of \$10,000. The goals are applicable to the Contractor's aggregate on-site construction work force whether or not part of that work force is performing on a Federal or federally assisted construction contract or subcontract.

AREA COVERED: Nationwide

GOALS AND TIMETABLES

Timetable	Goals (percent)
From April 1, 1978 until March 31, 1979.....	3.1
From April 1, 1979 until March 31, 1980.....	5.0
From April 1, 1980 until further notice.....	6.9

CONTRACT PROVISIONS
NOTICE OF ACTIONS FOR AFFIRMATIVE ACTION

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
8 of 8

APPENDIX B

Until further notice, the following goals for minority utilization in each construction craft and trade shall be included in all Federal or federally assisted construction contracts and subcontracts in excess of \$10,000 to be performed in the respective geographical areas. The goals are applicable to each nonexempt contractor's total on-site construction work force, regardless of whether or not part of that work force is performing work on a Federal, federally assisted or nonfederally related project, contract or subcontract.

Construction contractors which are participating in an approved Hometown Plan (see 41 CFR 60-4.5) are required to comply with the goals of the Hometown Plan with regard to construction work they perform in the area covered by the Hometown Plan. With regard to all their other covered construction work such contractors are required to comply with the applicable SMSA or EA goal contained in this appendix B-80.

State	Goal (percent)
Maryland:	
019 Baltimore, MD:	
SMSA Counties:	
0720 Baltimore, MD.....	23.0
MD Anne Arundel; MD Baltimore;	
MD Carroll; MD Harford;	
MD Howard; MD Baltimore City	
Non-SMSA Counties.....	23.6
MD Caroline; MD Dorchester;	
MD Kent; MD Queen Annes;	
MD Somerset; MD Talbot;	
MD Wicomico; MD Worcester	
Washington, DC:	
020 Washington, DC:	
SMSA Counties:	
8840 Washington, DC.....	28.0
MD Charles; MD Montgomery;	
MD Prince Georges	
Non-SMSA Counties.....	25.2
MD Calvert; MD Frederick	
MD St. Marys; MD Washington	
Pennsylvania	
Non-SMSA Counties.....	4.8
MD Allegany; MD Garrett	

CONTRACT PROVISIONS
TRAINING PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
1 of 4

TRAINING PROVISIONS

As part of the Contract's Equal Employment Opportunity Affirmative Action Program, on-the-job training shall be provided as follows:

The on-the-job training shall be aimed at developing full journeypersons in the type of trade or job classification involved. On this Contract zero (0) persons will be trained.

In the event that a Contractor subcontracts a portion of the Contract work, the Contractor shall determine how many, if any, of the trainees are to be trained by the subcontractor, however, the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this Provision. The Contractor shall also ensure that this training Provision is physically included in each subcontract to ensure that the workforce utilized by the subcontractor meet the goals for minority and female employment and training. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees in each classification shall be distributed among the work classifications on the basis of the Contractor's needs, minority and women employment goals specified for each trade in the Contract Provision, and the reasonable area of recruitment.

Prior to beginning construction, the Contractor shall submit to the Administration for approval a Manpower and Training Utilization (MTU) Schedule no later than at the preconstruction meeting.

The MTU schedule shall include:

1. The proposed training programs.
2. The number of trainees to be trained in each classification.
3. Anticipated starting and ending dates for training in each classification.

No Contract work may be undertaken until the Administration has accepted the schedule.

If the submitted training programs fail to meet the requirements as defined within these Provisions, the Administration will withhold one percent of the total category code one pay items from the payment due the Contractor. The Contractor shall submit a revised Manpower and Training Utilization Schedule when major changes in the Contract work schedule occur that substantially affect the previously submitted schedule.

The Contractor shall be credited for each trainee employee who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for the hourly cost of the trainee as specified in the schedule of prices.

CONTRACT PROVISIONS
TRAINING PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
2 of 4

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Provision. The purpose for this objective is to ensure a pool of qualified minorities and women to replace those journeymen who, in the natural course of events will leave the workforce. The program will also provide opportunities to the minorities and women trainees in geographic areas where shortages in minority and women journeymen are prevalent and recognized due to the Contractor's inability to meet the Equal Employment Opportunity goals specified in this Contract.

The training requirements of this Training Provision are not intended nor shall they be used to discriminate against any applicant for training, whether a member of a protected class or not. It is the Contractor's responsibility to demonstrate good faith efforts to ensure an adequate workforce representation of minorities and women in all job classifications on this Contract. Therefore, the Contractor shall consider the employment Contract goals set for minorities and females when enrolling trainees. The Contractor's utilization of the on-the-job training goals will be weighed when an Equal Employment Opportunity workforce compliance determination is made.

The Contractor shall make every effort to enroll minority and women trainees (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minorities and women to the extent that these persons are available within a reasonable area of recruitment).

No employee shall be employed as a trainee in any classification which the individual has successfully completed a training program leading to journeyman status or has been employed as a journeyman. This includes a person gainfully employed as a journeyman by virtue of informal on-the-job training. The Contractor should satisfy this requirement by including appropriate questions in the employee job application or by other suitable means. Regardless of the method used, the Contractor's records shall document the findings in each case. In the case of apprentices, evidence of indentureship and registration of the approved apprenticeship program shall be included in the Contractor's records.

The minimum length and type of training and rate for each classification shall be specified in the training program by the Contractor and approved by the Administration and the Federal Highway Administration.

The Administration will approve any program specified in the Administration's On-The-Job Training Manual. The Administration and the Federal Highway Administration will consider other programs if it is reasonably calculated that the programs conform to the Equal Employment Opportunity obligations of the Contract and will qualify the average trainee for journeyman status in the specified classification by the end of the training period. Apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, and training programs approved by, but not necessarily sponsored by the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training will also be acceptable, provided that the program being offered is administered in a manner consistent with the Equal Employment obligation of Federal-aid highway construction Contracts and meets the minimum requirements of this Training Provision.

CONTRACT PROVISIONS
TRAINING PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
3 of 4

Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Unless otherwise specified, the Contractor will be reimbursed 80 cents per hour of training given an employee on this Contract in conformance with an approved training program. As approved by the Engineer, reimbursement will be made for training persons in excess of the number specified herein. This reimbursement will be made even though the Contractor received additional training program funds from other sources, provided that the other sources do not specifically prohibit the Contractor from receiving other reimbursement. Reimbursement for offsite training indicated above will only be made to the Contractor where the Contractor does one or more of the following and the trainees are concurrently employed on a Federal-aid project:

1. Contributes to the cost of the training.
2. Provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment will be made to the Contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman is caused by the Contractor and evidences a lack of "good faith" on the part of the Contractor in meeting the requirements of this Training Provision. It is normally expected that a trainee will begin training on the project as soon as feasible after the start of work utilizing the skill involved and remain on the project as long as training opportunities exist in the work classification or until the program is completed. It is not required that all trainees be on board for the entire length of the Contract. A Contractor will have fulfilled their responsibilities under this Training Provision when:

1. Systematic and direct recruitment likely to yield qualified minority and women applicants is conducted through:
 - a. Public and private referral sources.
 - b. Advising the existing workforce of training opportunities.
 - c. Unions (if applicable).
2. Acceptable training has been provided to trainees enrolled in the program.
3. The number of specified trainees have completed the minimum hours required in an approved training program.
4. Trainees completing approved programs are retained in the workforce as journeymen.

CONTRACT PROVISIONS
TRAINING PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
4 of 4

The Contractor shall pay the trainees at least 60 percent of the appropriate minimum journey person's hourly rate plus the full fringe benefits specified in the Contract for the first half of the training period, 75 percent for the third quarter of the training period plus full fringe benefits, and 90 percent for the last quarter of the training period plus full fringe benefits. However, in no case shall the total hourly rate be less than the U.S. Department of Labor's unskilled laborer wage rate for the project. In addition, all trainees shall be identified as such on the certified payroll.

The Contractor shall furnish the trainee a copy of the approved training program in which the trainee is enrolled. The Contractor shall provide each trainee with a certificate showing the type and length of training satisfactorily completed. The Contractor shall submit a Certificate to the trainee in the following instances:

1. Certificate of Completion when a trainee completes the total number of hours required to complete a training program.
2. Certificate of Training when a trainee does not totally complete the required program hours.

The Contractor shall provide for the maintenance of records and furnish periodic reports inclusive of the Administration's Contractor's Semiannual Training Reports, documenting his performance under this Training Provision. The Semiannual Training Report is to be submitted by the 10th of the month following the reporting period (July 10 and January 10).

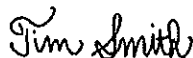
If the Contractor fails to fully comply with these Training Provisions, the Administration's Representative will make a final report of non compliance to the Administrator, who may direct the imposition of one or both of the sanctions listed below:

1. Withholding a percentage of the progress payment.
2. Other action appropriate and/or within the discretion of the Administrator.

Maryland Department of Transportation
State Highway Administration
High Visibility Safety Apparel Policy

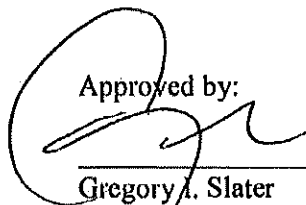
This policy replaces all pre-existing high visibility apparel policies.

Recommended by:



Tim Smith, P.E.
Deputy Administrator
Chief Engineer for Operations

Approved by:



Gregory A. Slater
Administrator

Date:

Date:

1. BACKGROUND

- 1.1 Research demonstrates that high visibility safety apparel has a significant impact on the safety of employees who work on highways and rights-of-way.
- 1.2 In addition, high visibility safety apparel may help to prevent injuries and accidents and to make highway workers more visible to the motoring public, which ultimately improves traffic safety.

2. STATEMENT OF POLICY

- 2.1 The High Visibility Safety Apparel Policy provides a standardized apparel program.
- 2.2 The program seeks to improve the visibility of all persons who work on Maryland Department of Transportation State Highway Administration (MDOT SHA) highways and rights-of-way.
- 2.3 All safety apparel shall contain the appropriate label identifying the class.
- 2.4 Compliance with this policy was effective as of January 1, 2019.

3. APPLICABILITY

- 3.1 This policy applies to all MDOT SHA employees and all other persons who work on Maryland state highways and rights-of-way.
- 3.2 This policy exceeds the standards referenced in the Maryland Manual on Uniform Traffic Control Devices (MD MUTCD) 2011 Edition.
- 3.3 All workers shall wear, at a minimum, a single ANSI/ISEA 107/2015 Class 3 safety garment on the upper torso.
- 3.4 All ANSI Class 3 safety garments must be worn fully fastened to meet ANSI/ISEA 107/2015 specifications.
- 3.5 MDOT SHA employee garments shall have a fluorescent yellow-green background material color and be the outermost garment worn.
- 3.6 MDOT SHA employee garment retro-reflective material color shall be silver or white and shall be visible at minimum distance of 1,000 feet. The retro-reflective safety

apparel shall be designed to clearly recognize and differentiate the wearer as a person from the surrounding work environment. The retro-reflective material may be contrasted by fluorescent orange background material not to exceed one-and-one-half inches on either side of the retro-reflective material.

- 3.7 SPECIAL NOTE: A breakaway vest may be considered for certain tasks to prevent entanglement.
- 3.8 Non-MDOT SHA workers' garments shall be approved ANSI/ISEA 107/2015 Class 3 for wear on the upper torso that is either fluorescent orange-red or fluorescent yellow-green background material color and must be the outermost garment worn.
- 3.9 Non-MDOT SHA workers' garments retro-reflective material color shall be orange, yellow, white, silver, yellow-green, or fluorescent version of these colors, and be visible at a minimum distance of 1,000 feet. The retro-reflective safety apparel shall be designed to clearly recognize and differentiate the wearer as a person from the surrounding work environment.
- 3.10 For all MDOT SHA and non-MDOT SHA workers applicable to this Policy, it is recommended that all ANSI Class 3 safety garments under this Policy be cared for according to the manufacturer specifications.

4. REFERENCES

- 4.1 ANSI/ISEA 107/2015 standard — American National Safety Institute/International Safety Equipment Association
- 4.2 MUTCD 2011 -Manual for Uniform Traffic Control Devices - Sections 6D.03 Paragraph 4 and 6E.02
- 4.3 Visibility Research — The VCTR 1989 report concludes that fluorescent colors, when compared with non-fluorescent colors, enhance the daytime conspicuity of worker clothing.

5. DEFINITIONS

- 5.1 Highways — all Maryland roadways owned and maintained by MDOT SHA .
- 5.2 High Visibility Safety Apparel (HVSA) — Personal protective safety clothing intended to ensure roadside workers stand-out to drivers during both daytime and nighttime, and other low-light condition usage. The outermost high-visibility garment worn by MDOT SHA and non-MDOT SHA workers who work on MDOT SHA highways and rights-of-way.
- 5.3 Retro-reflective Material — Material that reflects and returns a relatively high proportion of light in a direction close to the direction from which it came.
- 5.4 Background Material — Colored fluorescent material intended to be highly visible, but when not used in conjunction with retro-reflective material as intended, are not compliant with the requirements of this standard for retro-reflective material.
- 5.5 Breakaway — A garment system that allows workers to quickly remove the vest for additional safety around extreme traffic hazards, moving machinery, or equipment.

**MARYLAND SHA
SPECIAL
PROVISIONS**

SPECIAL PROVISIONS
PROJECT DESCRIPTION

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

1 of 1

PROJECT DESCRIPTION

This project, located in Washington County, is for the cosmetic refurbishment of historic train locomotive #202 and construction of a pavilion. Project is located at 730 City Park Drive within the City Park of Hagerstown, Maryland.

The work will consist of the following:

- (a) Complete cosmetic refurbishment of historic train locomotive #202 including furnishing some missing or deteriorated parts. This work will be completed by a contractor who has demonstrated the required minimum qualifications via the multi-step bid opening process and deemed qualified by the City of Hagerstown.**
- (b) Remove existing pavilion over the locomotive.**
- (c) Construct new pavilion to protect the locomotive.**
- (d) Complete miscellaneous site work including grading, sidewalks, storm drain system, rain gardens and other related work.**

SPECIFICATIONS

All work on this project shall conform to the Maryland Department of Transportation, State Highway Administration's Specifications entitled, "Standard Specifications for Construction and Materials" dated July 1, 2023, revisions thereof, or additions thereto, and the Special Provisions included in this Invitation for Bids.

PROJECT SCHEDULE

The required project schedule for this project is Type A - Bar Chart.

EMPLOYMENT AGENCY

The Maryland Department of Labor, Division of Workforce Development and Adult Learning, Maryland American Job Centers can be found on the Website at <http://www.labor.maryland.gov/county/>.

County: Washington County
Address: Washington County American Job Center
14 North Potomac Street, Suite 100
Hagerstown, Maryland 21740
Telephone: 301-393-8200
D1wdalhagerstown-dllr@maryland.gov

NOTICE TO CONTRACTOR FOR FEDERAL CONTRACTS

NOTICE TO BIDDERS. The Proposal Form Packet in Bid Express requires the following information be submitted for the Bidder and each firm quoting or considered as subcontractors:

- (a) Name of firm.
- (b) Address of firm.
- (c) DBE or Non-DBE.
- (d) Age of firm.
- (e) Annual gross receipts per last calendar year.

AFFIRMATIVE ACTION PLAN (AAP) CONTRACT GOALS. In order to be in compliance with the revised DBE laws effective September 27, 2011, or later, the bidder is required to complete the AAP information within the MDOT DBE Form A and Form B (Parts 2 and 3) of the Proposal Form Packet for State, Federal, and State Small Business Reserve Procurements. Failure to complete the information may be grounds for the bid to be declared non-responsive.

HIGH VISIBILITY SAFETY APPAREL POLICY. The Maryland Department of Transportation's State Highway Administration (MDOT SHA) has updated the High Visibility Safety Apparel Policy which is included in this Contract. Contractor shall comply to the policy fully for the parts Contractor is responsible for.

BOOK OF STANDARDS. The Book of Standards for Highway and Incidental Structures is only available on the Administration's Internet Site at www.roads.maryland.gov. The Book of Standards can be located by clicking on Business; Business Standards and Specifications; Construction and Material Standards and Specifications; and Book of Standards for Highway and Incidental Structures.

2023 STANDARD SPECIFICATION FOR CONSTRUCTION AND MATERIALS BOOK. The 2023 Standard Specifications for Construction and Materials Book is only available on the Administration's Internet Site at www.roads.maryland.gov. The 2023 Specification Book can be located by clicking on Business; Business Standards and Specifications; Construction and Material Standards and Specifications; and Standard and Supplemental Specifications for Construction and Materials.

PAYMENT OF STATE OBLIGATIONS. Electronic funds transfer will be used by the State to pay Contractor for this Contract and any other State payments due Contractor unless the State Comptroller's Office grants Contractor an exemption.

By submitting a response to this solicitation, the Bidder/Offeror agrees to accept payments by electronic funds transfer unless the State Comptroller's Office grants an exemption. The selected Bidder/Offeror shall register using the attached form COT/GAD X-10 Vendor Electronic Funds (EFT) Registration Request Form. Any request for exemption must be submitted to the State Comptroller's Office for approval at the address specified on the COT/GAD X-10 form and must include the business identification information as stated on the form and include the reason for the exemption.

SPECIAL PROVISIONS
NOTICE TO CONTRACTOR FOR FEDERAL CONTRACTS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

2 of 5

An electronic form and additional information can be found at
<https://www.marylandtaxes.gov/divisions/gad/eft-program.php>

BRIDGE UNDERCLEARANCE. The minimum underclearances shall be maintained whenever resurfacing a roadway. This may require grinding the existing pavement prior to placing the resurfacing material. Immediately after completing the resurfacing operation and when the lane closures are still in the effect, the Contractor, in the presence of the Engineer, shall measure the minimum vertical underclearance. The Engineer will submit results to the Office of Structures. The cost of these measurements will be incidental to other pertinent items specified in the Contract Documents.

REQUEST FOR INFORMATION. Any information regarding the requirements or the interpretation of any provision of the Contract Documents shall be requested, in writing, as specified in GP-2.09. Responses to questions or inquiries having any material effect on the bids shall be made by written addenda sent to all prospective bidders. The Administration will not respond to telephone requests for information concerning this invitation for bids that would materially affect the bid.

Written requests for information or questions shall be addressed to:

City of Hagerstown
Department of Engineering
Attention: Jim Bender, P.E.
City Engineer
1 East Franklin Street
Hagerstown, MD 21740

Each request for information or questions shall include the Contract number and the name and address of the originator.

PROCUREMENT OFFICER. The Procurement Officer for this Contract is as follows:

Jim Bender, City Engineer
City of Hagerstown Engineering Department
1 East Franklin Street
Hagerstown, MD 21740

RIGHT-OF-WAY STATUS.

The City of Hagerstown possesses all Right-of-Way and rights of way required to construct and maintain the project.

105

07/01/2023

SPECIAL PROVISIONS
NOTICE TO CONTRACTOR FOR FEDERAL CONTRACTS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

3 of 5

RAILROAD STATEMENT. Federal Aid Contract No. AC-TAP-3(910)E

For this project, the Administration is providing the following statement of coordination (check one):

- No Railroad coordination required (no RR facilities are affected) (check this box when there is no railroad facility within or near the terminus of the project limits)
- All Railroad work has been completed prior to the project (check this box if traffic control devices within or near the terminus of the Federal-Aid project limits comply with the current edition of the Manual on Uniform Traffic Control Devices)
- The necessary arrangements have been made for all railroad work to be undertaken and completed as required for proper coordination with physical construction schedules. (Appropriate notification shall be provided in the PS&E for railroad coordination concurrent with the project construction)
- For AREAWIDE Contracts, the Administration will provide a Statement of Coordination when the Modification to the 25C is submitted, prior to NTP. (Check this box for all AREAWIDE Projects)

SPECIAL PROVISIONS

NOTICE TO CONTRACTOR FOR FEDERAL CONTRACTS

City Contract No. 20-CPTH-33

SHA Contract No. WA061B51

FAP No. AC-TAP-3(910)E

REQUIRED ENVIRONMENTAL PERMITS, APPROVALS AND AUTHORIZATIONS.

The Administration will obtain all required permits, approvals, or authorizations which are within the project scope and limits set forth in the Contract Documents and listed in the below table. The Contractor shall comply with the requirements of all permits, approvals, or authorizations required for this project. All permits received by advertisement are included in the IFB. Permits received after advertisement and prior to bid opening will be added to the IFB via an addendum.

All of the indicated permits, approvals, and authorizations should be kept on-site unless indicated otherwise. Proposed changes to the project may require additional permits, approvals, and authorizations and/or modifications.

Permit/ Approval/Authorization Description	Required for this project?	Approval/ Permit/ Authorization Included in IFB? ¹	Permit, Approval, Or Auth. Number	Expiration Date
WETLANDS, WATERWAYS, CRITICAL AREA				
MDE Non-tidal Wetland & Waterway Permit	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> Draft <input type="checkbox"/> No		
MDE Authorization to Proceed	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> Draft <input type="checkbox"/> No		
MDE Letter of Authorization	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> Draft <input type="checkbox"/> No		
MDE General Waterway Construction Permit	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> Draft <input type="checkbox"/> No		
MDE Water Quality Certification	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> Draft <input type="checkbox"/> No		
MDE Tidal License	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> Draft <input type="checkbox"/> No		
MDE Tidal Permit	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> Draft <input type="checkbox"/> No		
MDE Tidal No-License	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> Draft <input type="checkbox"/> No		
Maryland State Programmatic General Permit	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> Draft <input type="checkbox"/> No		
COE Individual Permit	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> Draft <input type="checkbox"/> No		
U.S. Coast Guard Permit	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> Draft <input type="checkbox"/> No		
Critical Area Commission Approval	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> Draft <input type="checkbox"/> No		
MDE Water Appropriations Permit for Ground Water	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> Draft <input type="checkbox"/> No		
Other	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> Draft <input type="checkbox"/> No		
EROSION/SEDIMENT CONTROL & STORMWATER MANAGEMENT				
Stormwater Management and Erosion & Sediment Control Approval	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> Draft <input type="checkbox"/> No	Washington County SCD	02-02-2025
NPDES Permit for Stormwater Associated with Construction Activity ²	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> Draft <input type="checkbox"/> No		

SPECIAL PROVISIONS

NOTICE TO CONTRACTOR FOR FEDERAL CONTRACTS

City Contract No. 20-CPTH-33

SHA Contract No. WA061B51

FAP No. AC-TAP-3(910)E

5 of 5

Permit/ Approval/Authorization Description	Required for this project?	Approval/ Permit/ Authorization Included in IFB? ¹	Permit, Approval, Or Auth. Number	Expiration Date
AASCD Approval	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> Draft <input type="checkbox"/> No		
TREES				
MD Roadside Tree Permit	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> Draft <input type="checkbox"/> No		
Maryland Reforestation Law Approval	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> Draft <input type="checkbox"/> No		
Maryland Forest Conservation Act Approval	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> Draft <input type="checkbox"/> No		

¹ 'Draft' indicates the formal permit has not been obtained but draft permit conditions are included.

² See website listed below for complete NPDES Permit requirements:

<http://mde.maryland.gov/programs/Permits/WaterManagementPermits/Documents/2014MDRC-GeneralPermit.pdf>

Abbreviations:

AASCD - Anne Arundel Soil Conservation District

COE – U.S. Army Corps of Engineers

MDE – Maryland Department of the Environment

NPDES – National Pollutant Discharge Elimination System

MDOT
MARYLAND DEPARTMENT
OF TRANSPORTATION
STATE HIGHWAY
ADMINISTRATION

Larry Hogan
Governor
Boyd K. Rutherford
Lt. Governor
Gregory Slater
Secretary
Tim Smith, P.E.
Administrator

September 22, 2021

Ms. Chineme Ijeabunwu, Realty Specialist
Federal Highway Administration
George H. Fallon Federal Building
31 Hopkins Plaza, Suite 1520
Baltimore, Maryland 21201

RE: Type of Certification	Right of Way Certification - Type 1
Maryland Contract Number:	AX609A15
Federal Project Number:	Pending
City Contract Number:	20-CPYH-33
Project:	City Park Train Hub Locomotive Refurbishment & Pavilion Replacement

Dear Ms. Ijeabunwu:

In accordance with the requirements of Title 23, Code of Federal Regulations, Part 635, this is to certify that the acquisition of right of way was not required for the above captioned project. All proposed work is within the City of Hagerstown's right of way.

Sincerely,
Tim Smith, P.E.
Administrator

By: *Olu A. Okunola*
Olu A. Okunola, Director
Office of Real Estate

cc: Rodney Tissue, P.E., City Engineer, Hagerstown, Maryland
Guy Talerico, Chief, Federal Aid Programming Section Chief, MDOT-SHA
Christy Bernal, TAP Manager, MDOT-SHA
Britney Jackson, Assistant TAP Manager, MDOT-SJA
Susan Solo, TAP Consultant, MDOT-SHA

SPECIAL PROVISIONS
NOTICE TO CONTRACTOR

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

1 of 1

NOTICE TO CONTRACTOR

EARLY SUBMISSIONS. The last sentence of the first paragraph of TC-5.02, "No work shall be started before receipt of the Notice to Proceed" shall not apply to the following:

After notification to the Contractor from the Administration that the Contractor is the apparent low bidder, the Contractor will be permitted to provide a written request to the Engineer to submit documentation for materials sources and working drawings for any items of work that have a long lead time and could jeopardize the project schedule. Upon written approval from the Engineer the Contractor may submit the applicable documentation to the Engineer.

Should the Contract not be awarded to the apparent low bidder who meets the requirements of the Contract, GP-8.10 will apply for all costs accrued for the preparation and approval of the working drawings and any resultant material purchase approved by the District Engineer and steel fabricated in conformance with the approved working drawings between the date the Contractor received notice of apparent low bidder and the date of notice that the apparent low bidder will not be awarded this Contract.

Should this Contract not be awarded to the apparent low bidder due to failure of the Contractor to comply with all award and execution requirements, all costs accrued for the preparation of the specific items and any resultant material purchased and steel fabrication shall be borne by the Contractor.

Failure of the Contractor to submit the early submissions will not be basis for delaying issuance of the Notice to Proceed or be considered a reason for a time extension.

**MARYLAND SHA
GENERAL
PROVISIONS**

GENERAL PROVISIONS

**GP SECTION 2
BIDDING REQUIREMENTS AND CONDITIONS**

DELETE: GP-SECTION 2 — BIDDING REQUIREMENTS AND CONDITIONS in its entirety.

INSERT: The following.

GP-2.01 BID IRREVOCABLE.

Unless otherwise provided in the Invitation for Bids, bid prices are irrevocable for 90 days following bid opening.

GP-2.02 CONTENTS OF BID FORMS.

All papers included in, bound thereto or attached to the bid form are necessary parts thereof and shall not be detached, separated or altered. The Plans, Specifications, Supplemental Specifications, referred to in the Specifications, and all other Contract Documents will be considered a part of the bid form whether attached thereto or not.

GP-2.03 INTERPRETATION OF QUANTITIES IN BID SCHEDULE.

Where designated as estimated quantities, the quantities in the prepared bid schedule are approximate only. Payment to the Contractor will be made only for the actual quantities of work performed or materials furnished in accordance with the Contract and as provided in GP-4.04 Variations in Estimated Quantities.

GP-2.04 SITE INVESTIGATION.

The Contractor acknowledges that he has investigated and satisfied himself as to the conditions affecting the work, including but not restricted to those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electric power, roads and uncertainties of weather, river stages, tides or similar physical conditions at the site, and confirmation and conditions of the ground, the character of equipment and facilities needed preliminary to and during prosecution of the work. The Contractor further acknowledges that he has satisfied himself as to the character, quality and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the State, as well as from information presented by the drawings and specifications made a part of this Contract. Any failure by the Contractor to acquaint himself with the available information may not relieve him from responsibility for estimating properly the difficulty or cost of successfully performing the work. The State assumes no responsibility for any conclusions or interpretations made by the Contractor on the basis of the information made available by the State.

SPECIAL PROVISIONS

City Contract No. 20-CPTH-33

SHA Contract No. WA061B51

FAP No. AC-TAP-3(910)E

GP – SECTION 2 — BIDDING REQUIREMENTS AND CONDITIONS

2 of 10

GP-2.05 TAXES-RESPONSIBILITY FOR PAYMENT, EXEMPTIONS, FORMS TO FILE, ETC.

- (a) The Contractor is responsible for, and by submitting a bid agrees to pay, all retail sales, income, real estate, sales and use, transportation and special taxes applicable to and assessable against any materials, equipment, processes and operations incident to or involved in the construction. The Contractor is responsible for ascertaining and acquainting himself with such taxes and making all necessary arrangements to pay same.
- (b) The Contractor shall indicate its Federal Tax Identification or Social Security number on the face of each invoice billed to the Administration.
- (c) The Administration or the Comptroller of the Treasury may withhold any payment under this Contract until the Contractor and any subcontractors performing any duties under this Contract have paid all State taxes or other obligations due the State of Maryland. The taxes or other obligations shall be resolved either by set-off of the amount due the Contractor against the amounts due the State or by direct payment.

GP-2.06 PREPARATION OF BID.

On Administration Contracts the Contractor may elect to submit his bid on forms generated in the development of his bid as specified in TC-2.02 Preparation of Bid.

- (a) The bidder shall submit his bid upon the blank forms furnished by the Administration. The bidder shall specify a price in dollars and cents for each pay item given, and shall show the products of the respective unit prices and quantities written in figures in the column provided for that purpose, together with the total amount of the bid obtained by adding the amounts of the several items.
- (b) The bid form(s) shall be filled out legibly in ink or typed. The bid, if submitted by an individual, shall be signed by the individual. If submitted by a partnership, the bid shall be signed by such member or members of the partnership as have authority to bind the partnership. If submitted by a corporation or other business entity, the same shall be signed by an officer with his or her position stated below the signature line. Such signature shall constitute the Contractor's representation and warrant that the signing party has the Contractor's authorization to do so, binding the Contractor to the bid and to the Contract. All bids shall be signed in ink. All erasures or alterations shall be initialed by the signer in ink.
- (c) **Bid Samples and Descriptive Literature.** If the Invitation for Bids requires the bidder to furnish samples or descriptive literature, it shall be submitted with the bid, unless the Invitation for Bids provides otherwise.
- (d) Offerors shall identify those portions of their proposals which they deem to be confidential, proprietary information or trade secrets and provide any justification of why such materials

SPECIAL PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

GP – SECTION 2 — BIDDING REQUIREMENTS AND CONDITIONS

3 of 10

should not be disclosed by the State under the Maryland Public Information Act, Section 10-611 et seq. of the State Government Article of the Annotated Code of Maryland.

- (e) Foreign Corporations – Pursuant to the Corporations and Associations, Title 7 of the Annotated Code of Maryland, corporations not incorporated in the State shall register with the State Department of Assessments and Taxation, before doing any interstate or foreign business in this State. Before doing any intrastate business in this State, a foreign corporation shall qualify with the Department of Assessments and Taxation.

GP-2.07 PROPOSAL GUARANTY.

(a) No bid will be considered for any Contract in excess of \$100,000 unless accompanied by a guaranty in an amount not less than 5 percent of the amount bid, or such amount as may be specified elsewhere in the bid documents and made payable to the State of Maryland.

(b) Acceptable forms of security for bid guaranty shall be:

- (1) A bond in a form satisfactory to the State underwritten by a surety company authorized to do business in this State;
- (2) A bank certified check, bank cashier's check, bank treasurer's check, or trust account;
- (3) Pledge of securities backed by the full faith and credit of the United States government or bonds issued by the State of Maryland; or
- (4) Cash or other securities—if submitted pursuant to COMAR 21.06.07.01

GP-2.08 DELIVERY OF BIDS.

Each bid must be submitted in a sealed envelope plainly marked to indicate its contents. When sent by mail, the sealed bid must be addressed to the Administration at the address and in care of the official in whose office the bids are to be received. All bids shall be filed prior to the time and at the place specified in the Notice to Contractors. Bids received after the time for opening of bids will be treated in accordance with the provisions of GP-2.12.

GP-2.09 COMMUNICATIONS AND INTERPRETATIONS PRIOR TO BID OPENING.

Any information regarding the requirements or the interpretation of any provision of the General Provisions, Special General Provisions, Specifications or any part of the bidding documents shall be requested, in writing, from the procurement officer, and delivered no later than 10 days prior to the scheduled date of bid opening. Responses to questions or inquiries having any material effect on the bids shall be made by written addenda, or by written notice sent to all prospective bidders. **DO NOT MAKE VERBAL INQUIRIES.**

SPECIAL PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

GP – SECTION 2 — BIDDING REQUIREMENTS AND CONDITIONS

4 of 10

Any verbal interpretations or oral pre-bid statements made by State employees or their representatives shall not be binding upon the State.

GP-2.10 AMENDMENTS TO INVITATION FOR BIDS.

- (a) **Form.** Each amendment to an Invitation for Bids shall be in writing and identified as such.
- (b) **Acknowledgements.** Unless otherwise provided, the bidder shall acknowledge receipt of all amendments.

GP-2.11 PRE-OPENING MODIFICATION OR WITHDRAWAL OF BIDS.

- (a) **Procedure.** Bids may be modified or withdrawn by written notice delivered to and received in the office designated in the Invitation for Bids before the time and date set for bid opening. Written notice of modification or withdrawal may be delivered by hand delivery, overnight carrier, or by US Postal mail. Any notice addressed in this subsection must be received before the time and date set for bid opening.
- (b) **Disposition of Bid Security.** If a bid is withdrawn in accordance with this regulation, the bid security, if any, shall be returned to the bidder.

GP-2.12 LATE BIDS, LATE WITHDRAWALS, AND LATE MODIFICATIONS.

- (a) **Policy.** Any bid received at the place designated in the solicitation after the time and date set for receipt of bids is late. Any request for withdrawal or request for modification received after the time and date set for opening of bids at the place designated for opening is late.
- (b) **Treatment.** A late bid, late request for modification, or late request for withdrawal may not be considered. Late bids will be returned to the bidder unopened. Upon written approval of the Office of the Attorney General, exceptions may be made when a late bid, withdrawal, or modification is received before Contract award, and the bid, withdrawal, or modification would have been timely but for the action or inaction of State personnel directing the procurement activity or their employees.

NOTE: Provision GP-2.12(b) does not apply to Federal Aid projects.

GP-2.13 OPENING AND RECORDING OF BIDS.

- (a) **Opening and Recording.** Bids and modifications shall be opened publicly, at the time, date, and place designated in the Invitation for Bids. The name of each bidder, the bid price, and such other information as is deemed appropriate shall be read aloud or otherwise made available. This information also shall be recorded at the time of bid opening. The bids shall be tabulated or a bid abstract made. The opened bid shall be available for public inspection at a reasonable time after bid opening but in any case before Contract award except to the extent the bidder designates trade secrets or other proprietary data to be confidential as set forth in COMAR 21. Material so designated shall accompany the bid and shall be readily separable from the bid in order to facilitate public inspection of the nonconfidential portion of the bid. Prices, makes, and model or catalog numbers of the items offered, deliveries, and terms of payment shall be publicly available at a reasonable time after bid opening but in any event before Contract award regardless of any designation to the contrary at the time of bid opening.
- (b) **Confidential Data.** The procurement officer shall examine the bids to determine the validity of any requests for nondisclosure of trade secrets and other proprietary data identified in writing. Confidential, proprietary information, and trade secrets furnished by a bidder or offeror may be disclosed to another State agency if there is a need for the information and may not be disclosed outside of State government except as provided by the Public Information Act or other applicable laws of this State.

GP-2.14 MISTAKES IN BIDS.

- (a) **Mistakes Discovered Before Opening.** A bidder may correct mistakes discovered before the time and date set for bid opening by withdrawing or correcting the bid as provided in GP-2.11.

- (b) **Confirmation of Bid.** If the procurement officer knows or has reason to conclude that a mistake may have been made, the bidder may be required to confirm the bid. Situations in which confirmation may be requested include obvious, apparent errors on the face of the bid or a bid unreasonably lower than the other bids submitted. If the bidder alleges mistake, the bid may be corrected or withdrawn upon written approval of the Office of the Attorney General if any of the following conditions are met:
 - (1) If the mistake and intended correction are clearly evident on the face of the bid document, the bid shall be corrected to the intended correct bid and may not be withdrawn. Examples of mistakes that may be clearly evident on the face of the bid document are typographical errors, errors in extending unit prices, transposition errors, and arithmetical errors.

 - (2) A bidder may be permitted to withdraw a low bid if:
 - (a) A mistake is clearly evident on the face of the bid document but the intended correct bid is not similarly evident; or

 - (b) The bidder submits proof of evidentiary value which clearly and convincingly demonstrates that a mistake was made.

 - (c) **Mistakes Discovered After Award.** Mistakes may not be corrected after award of the Contract except when the procurement officer and the head of a procurement agency makes a determination that it would be unconscionable not to allow the mistake to be corrected. Changes in price are not permitted. Corrections shall be submitted to and approved by the Office of the Attorney General.

GP-2.15 MINOR IRREGULARITIES OR INFORMALITIES.

General. Minor irregularities or informalities in bids, as defined below, may be waived if the procurement officer determines that it shall be in the State's best interest. The procurement officer may either give a bidder an opportunity to cure any deficiency resulting from a technicality or minor irregularity in its bid, or waive the deficiency where it is to the State's advantage to do so.

When at any public opening of bids, a bid appears to be irregular, as herein specified, this fact may be announced when read. Said bid shall be read as other bids and then referred to the procurement officer for consideration and appropriate action thereon in accordance with these General Provisions, Law and Regulation.

SPECIAL PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

GP – SECTION 2 — BIDDING REQUIREMENTS AND CONDITIONS

7 of 10

A minor irregularity is one which is merely a matter of form and not of substance or pertains to some immaterial or inconsequential defect or variation of a bid or proposal from the exact requirement of the solicitation, the correction or waiver of which would not be prejudicial to other bidders or offerors. The defect or variation in the bid or proposal is immaterial and inconsequential when its significance as to price, quantity, quality, or delivery is trivial or negligible when contrasted with the total cost or scope of the supplies or services being procured and the intent and meaning of the entire bid or proposal is clear.

GP-2.16 CANCELLATION OF INVITATION FOR BIDS.

- (a) Before opening of bids a solicitation may be canceled in whole or in part when the State determines this action is fiscally advantageous or otherwise in its best interest.
- (b) When a solicitation is canceled before bid opening, the bids shall be returned to the vendors submitting them and notice of cancellation shall be included.

GP-2.17 REJECTION OF INDIVIDUAL BIDS OR PROPOSALS.

- (a) Any bid may be rejected in whole or in part when it is in the best interest of the State to do so.
- (b) Reasons for rejection of a bid may include but are not limited to:
 - (1) The bid is not responsive i.e., it does not conform in all material respects to the solicitation.
 - (2) Unreasonable price;
 - (3) The bidder submitting the bid is determined to be nonresponsible. A determination of nonresponsibility may be made for, but is not limited to, any of the following reasons:
 - (a) Bidder debarred or ineligible and period of debarment or ineligibility not expired.
 - (b) The unit prices contained in a bid are unbalanced.
 - (c) Evidence of collusion among bidders.
 - (d) Inadequate quantity and/or quality of experience, plant, equipment, financing, manpower or other resources required to perform the Contract.
 - (e) Bidder's workload which, in the judgement of the Administration, might hinder or prevent the prompt completion of the subject work if awarded.
 - (f) Default by the bidder on other Contracts.
 - (g) Failure to pay or satisfactorily settle all reasonable and just bills due for labor and material on prior or current Contracts.

- (h) The same person has an interest in more than one bid on a Contract exclusive of being named by another bidder as a subcontractor.
 - (i) Failure to perform satisfactorily on other Contracts awarded, and the conditions leading to unsatisfactory performance remain unresolved.
 - (j) Any other reason affecting the bidder's ability to perform, or record of business integrity.
 - (k) Bidder not otherwise qualified and eligible to receive an award under applicable laws and regulations.
- (4) The bidder or offeror fails to supply information to the procurement officer promptly, after notification from the procurement officer that such information is required in connection with a determination to be made pursuant to this GP-2.17.

GP-2.18 REJECTION OF ALL BIDS.

- (a) After opening of bids or proposals but before award, all bids or proposals may be rejected in whole or in part when the procurement officer, with the approval of the agency head or his designee, determines that this action is fiscally advantageous or otherwise in the State's best interest.
- (b) A notice of rejection of all bids shall be sent to all vendors that submitted bids, and bids which have been opened shall be retained by the Administration.

GP-2.19 BID EVALUATION AND AWARD.

- (a) **General.** The Contract is to be awarded to the responsible and responsive bidder whose bid meets the requirements and evaluation criteria set forth in the Invitation for Bids, and is either the lowest bid price or lowest evaluated bid price.
- (b) **Determination of Lowest Bidder.** Bids shall be evaluated to determine which bidder offers the lowest cost to the State in accordance with the evaluation criteria set forth in the Invitation for Bids.

Except as otherwise provided under GP-2.14 Mistakes in Bids:

- (1) The unit price will govern in the event of a discrepancy between the unit price bid and the extended price (product of unit price multiplied by the quantity).
- (2) The sum of the extended prices will govern in the event of a discrepancy between the total lump sum bid and the extended prices.

SPECIAL PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

GP – SECTION 2 — BIDDING REQUIREMENTS AND CONDITIONS

9 of 10

- (3) The written words will govern in the event of a discrepancy between the prices written in words and the prices written in figures.
- (4) If a unit price has been omitted, the unit price will be determined by dividing the extended price by the quantity.

The Administration reserves the right to make the award by item, or groups of items, or total bid if it is in the best interest of the State to do so unless the bidder specifies in his bid that a particular or progressive award is not acceptable.

- (c) **Award.** Upon determination of the lowest bidder, review of the bid for responsiveness, and satisfaction that the bidder is responsible, the Contract may be awarded to that bidder. A Contract may be awarded to a bidder offering a higher quality item than that designated in the Invitation for Bids if that bidder is also the lowest responsive and responsible bidder.

GP-2.20 TIE BIDS.

On Administration Federal Aid Contracts, the preference to in-State Contractors does not apply.

- (a) **Definition.** Tie bids are responsive bids from responsible bidders that are identical in price, terms and conditions and which meet all the requirements and evaluation criteria set forth in the Invitation for Bids.
- (b) **Award.** In the instance of tie bids, the award shall be made in accordance with COMAR 21.05.02.14. If identical low bids are received from an in-State and out-of-State bidder, the award shall be made to the in-State bidder. If identical low bids are received from in-State bidders or from out-of-State bidders, a drawing shall be conducted, and a witness shall be present to verify and certify the result.

GP-2.21 RESIDENT BUSINESS PREFERENCE.

- (a) When awarding a Contract by competitive sealed bidding, if the State in which a nonresident firm submitting the lowest responsible bid is located gives a competitive advantage to its resident businesses, a procurement agency may give an identical competitive advantage to the Maryland firm submitting the lowest responsive and responsible bid in order to determine Contract award.
- (b) A competitive advantage may include:
 - (1) A percentage preference;
 - (2) An employee residency requirement;
 - (3) Any other provision that favors a nonresident firm over a Maryland firm.

120

SPECIAL PROVISIONS

City Contract No. 20-CPH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

GP – SECTION 2 — BIDDING REQUIREMENTS AND CONDITIONS

10 of 10

- (c) This provision GP-2.21 shall not apply if it conflicts with any Federal grant or regulation affecting this Contract.

GP-2.22 MULTIPLE OR ALTERNATE BIDS.

Unless multiple or alternate bids are requested in the solicitation, these bids may not be accepted. However, if a bidder clearly indicates a base bid, it shall be considered for award as though it were the only bid submitted by the bidder.

GP-2.23 BID PROTESTS.

A bid protest must be in writing and filed with the procurement officer. Oral objections, whether or not acted on, are not protests.

(a) Time for Filing.

- (1) A bid protest shall be filed not later than 7 days after the basis for protest is known or should have been known, whichever is earlier.
- (2) A protest based on alleged improprieties in the solicitation which are apparent before the bid opening or the closing date for receipt of initial proposals shall be filed before the opening date or the closing date for receipt of initial proposals.

(b) Content of Written Protest.

- (1) Name and address of protestor.
- (2) Bid or Contract number.
- (3) Reasons for protest.
- (4) Supporting exhibits, evidence or documents to support claim. If not available within filing time, indicate expected availability date.
- (5) Mark envelope "protest".

Bid protests will be resolved pursuant to COMAR 21.10.02.

SPECIAL PROVISIONS INSERT

City Contract No. 20-CPH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

GP — 5.13 ACCEPTANCE FOR MAINTENANCE

1 of 2

GENERAL PROVISIONS

GP - SECTION 5 – CONTROL OF THE WORK

GP-5.13 ACCEPTANCE FOR MAINTENANCE

DELETE: Paragraph (b) to (d) in its entirety.

INSERT: The following after paragraph (a).

- (b) Subcontractor Final Acceptance.** Upon due notice from the contractor of presumptive completion of all responsibilities of a subcontractor, the procurement officer shall make a construction inspection and if at such inspection all construction provided for and contemplated by the Contract is found complete in regard to the assign duties of the subcontractor by the Contract and subcontractor agreement between the Contractor and subcontractor. Such inspection shall constitute the final subcontractor inspection and the procurement officer shall make the Subcontractor Acceptance for maintenance as of that date, and the Contractor shall be notified of such acceptance in writing. The Contractor will be responsible for providing a copy of the written acceptance to the Subcontractor. After acceptance for maintenance the Administration will assume responsibility for maintenance except where otherwise provided by the Contract and items that are identified as partial on the subcontractor agreement with the Contractor. Once the Subcontractor Accepted for Maintenance letter is issued that Subcontractor is relieved of their contractual obligations as of the date on said letter. For a subcontractor to work on a project after they have been issued a Subcontractor Final Acceptance letter, a new subcontractor agreement and subcontractor approval request must be resubmitted for work by that subcontractor to be performed after the date on the acceptance letter.
- (c) Final Acceptance for Maintenance.** Upon due notice from the Contractor of presumptive completion of the entire project, the procurement officer shall make a construction inspection and if at such inspection all construction provided for and contemplated by the Contract is found completed, such inspection shall constitute the final inspection and the procurement officer shall make the acceptance for maintenance as of that date, and the Contractor shall be notified of such acceptance in writing. After acceptance for maintenance the Administration will assume responsibility for maintenance except where otherwise provided by the Contract.
- (d)** If, however, at any construction inspection any work in whole or in part is found unsatisfactory, the procurement officer shall give the Contractor the necessary instructions as to the work required for final completion and acceptance for maintenance. The Contractor forthwith shall comply with and execute such instructions. Upon completion of such work, another inspection shall be made which shall constitute the final inspection if the said work is found to have been completed satisfactorily. In such event, the procurement officer shall make the acceptance for maintenance and the Contractor shall be notified as aforesaid. After final acceptance for

SPECIAL PROVISIONS INSERT

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

GP — 5.13 ACCEPTANCE FOR MAINTENANCE

2 of 2

maintenance, the Administration will assume responsibility for maintenance except where otherwise provided by the Contract.

- (e) Unless otherwise provided in this Contract, acceptance by the State shall be made as promptly as practicable after completion and inspection of all work required by this Contract, or that portion of the work that the procurement officer determines can be accepted separately. Acceptance shall be final and conclusive except as regards latent defects, fraud, such gross mistakes as may amount to fraud or the State's rights under any warranty or guarantee or any claims or counter claims reserved by the State.

**MARYLAND SHA
TERMS AND
CONDITIONS**

SPECIAL PROVISIONS INSERT

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
1 of 1

TC — 1.03 DEFINITIONS

TERMS AND CONDITIONS

TC – SECTION 1 — REFERENCES AND DEFINITIONS

TC-1.03 DEFINITIONS

Holidays—In the State of Maryland, holidays occur on:

ADD: The following after the “4th Monday in May Memorial Day.”

June 19

Juneteenth National Independence Day

**TERMS AND CONDITIONS
TC SECTION 2
BIDDING REQUIREMENTS AND CONDITIONS**

DELETE: TC-SECTION 2 — BIDDING REQUIREMENTS AND CONDITIONS in its entirety.

INSERT: The following.

TC-2.01 PROJECT CLASSIFICATION.

The Administration will estimate the cost of the Contract and classify it within one cost group and letter designation as follows:

COST GROUP ESTIMATE	COST GROUP LETTER CLASS
Up to \$ 100 000	A
\$ 100 001 to \$ 500 000	B
\$ 500 001 to \$ 1 000 000	C
\$ 1 000 001 to \$ 2 500 000	D
\$ 2 500 001 to \$ 5 000 000	E
\$ 5 000 001 to \$ 10 000 000	F
\$10 000 001 to \$ 15 000 000	G
\$ 15 000 001 to \$ 30 000 000	H
\$ 30 000 001 to \$ 50 000 000	I
\$ 50 000 001 to \$ 75 000 000	J
\$ 75 000 001 to \$ 100 000 000	K
Over \$ 100 000 000	L

The letter designation will be published as part of the Notice to Contractors.

TC-2.02 PREPARATION OF BID.

The requirements of GP2.06 (Preparation of Bid) is modified for Administration Contracts to include the following after paragraph (a):

The Contractor may elect to submit the bid on forms generated in the development of the bid. When approved, these forms may be submitted in lieu of the schedule of prices bid forms furnished by the Administration in the Invitation for Bids. They shall emulate the forms currently furnished by the Administration and contain the following information.

SPECIAL PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

TC - SECTION 2 — BIDDING REQUIREMENTS AND CONDITIONS

2 of 5

- (1) State and Federal Contract Nos.
- (2) Administration Item Nos.
- (3) Administration Category Code Nos.
- (4) Administration Proposed Quantities
- (5) Description of Items
- (6) Unit Price
- (7) Total Cost of Each Item
- (8) Total Bid Amount

The document shall be 8-1/2 X 11 inches, and in landscape format. The font size shall be at least 10 points, with horizontal lines dividing each item. Addendums that revise items or quantities shall be noted on all affected Schedule of Prices sheets. Any special bid requirements that are noted in the Schedule of Prices shall also be listed on the form.

A sample of the form shall be submitted to the Administration at least 14 days prior to the scheduled bid opening. Contractor generated forms shall be approved in writing prior to use. If the forms were previously approved on another Administration project and were not changed, they need not be resubmitted for each project.

Sample forms shall be submitted to:

Maryland State Highway Administration
Director, Office of Construction
Contracts Award Team
7450 Traffic Drive
Hanover, Maryland 21076

TC-2.03 VALUE ENGINEERING CHANGE PROPOSALS.

The Contractor may submit to the District Engineer, in writing, Value Engineering Change Proposals (VECP) for modifying the Contract Documents for the purpose of reducing the total cost of construction without reducing design capacity or quality of the finished product. The District Engineer will then forward the proposal to the Chief Engineer with recommended action. The final decision to accept or deny the VECP will be made by the Chief Engineer. The Administration will not consider appeals once the final decision is made. If accepted by the Administration, net savings resulting from a VECP will be equally divided between the Administration and the Contractor.

SPECIAL PROVISIONS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

TC - SECTION 2 — BIDDING REQUIREMENTS AND CONDITIONS

3 of 5

The Contractor may elect to pursue one of the following options:

Option 1—Submit the detailed plans, specifications, and estimate of savings, or

Option 2—Submit a written concept of the VECP for tentative approval and if accepted, submit the detailed plans, specifications, and estimate for final approval at a later date.

Each VECP shall result in a net savings to the Contract cost without impairing essential functions and characteristics of the items or of any other part of the project, including but not limited to service life, reliability, economy of operation, ease of maintenance, desired aesthetics, and safety.

As a minimum, the Contractor shall submit the following information before final approval of a VECP can be given:

- (a) A statement that the proposal is submitted as a VECP.
- (b) A statement concerning the basis for the VECP and benefits to the Administration, together with an itemization of the Contract items and requirements affected by the VECP.
- (c) A detailed estimate of the cost under the existing Contract and under the VECP.
- (d) Proposed plans, specifications, and recommendations as to how the VECP changes shall be accomplished.
- (e) A statement as to the time by which a change order adopting the VECP must be issued so as to obtain the maximum cost effectiveness. The Administration will require 30 days to review and approve a VECP.
- (f) The Contractor's engineering cost for the VECP.

The Administration will process the VECP in the same manner as prescribed for any other proposal that would necessitate issuance of a change order. The Administration may accept, in whole or in part, any VECP by issuing a change order, which will identify the VECP on which it is based. The Administration will not be liable to the Contractor for failure to accept or act upon any VECP submitted pursuant to these requirements nor for any delays to the work attributable to any VECP proposal. Until a proposal is affected by a change order, the Contractor shall remain obligated to the terms and conditions of the existing Contract. If an executed change order has not been issued by the date upon which the Contractor's proposal specifies that a decision should be made, or any other date as the Contractor may subsequently have specified in writing, the proposal shall be deemed rejected.

128

SPECIAL PROVISIONS

City Contract No. 20-CPTH-33

SHA Contract No. WA061B51

FAP No. AC-TAP-3(910)E

TC - SECTION 2 — BIDDING REQUIREMENTS AND CONDITIONS

4 of 5

The change order affecting the necessary Contract modification will establish the net savings agreed upon, will provide for adjustment in the Contract prices or Contract time, and will indicate the net savings to be equally divided between the Contractor and the Administration. The Contractor's costs for preparation of the VECP and the Administration's costs to review and administer the VECP will be deducted from the gross savings. The Administration reserves the right to include in the agreement any conditions it deems appropriate for consideration, approval, and implementation of the proposal. The Contractor's 50 percent share of the net savings shall constitute full compensation for affecting all changes pursuant to the agreement.

Acceptance of the VECP and performance of the additional work will not change the Contract time limit as a result of the VECP, unless specifically provided for in the change order authorizing the VECP.

The Administration expressly reserves the right to adopt a VECP for general use in Contracts administered by the Administration when it determines that the proposal is suitable for application to other Contracts. VECPs identical or similar to previously submitted proposals will be eligible for consideration and compensation under these provisions if such proposals were not previously adopted for general application to other Contracts administered by the Administration. When a VECP is adopted for general use, compensation pursuant to these requirements will be applied only to those Contracts awarded and for which the subject VECP has been submitted prior to the date of adoption of the specific VECP.

Proposed changes in the basic design of a bridge or pavement type, or requiring modification to the right of way limits, will not normally be considered as an acceptable VECP. Quantity decreases or elimination of any Contract pay items as a result of changing field conditions, errors, etc. will not be considered as an acceptable VECP. If a VECP is based upon or similar to a change in the Plans, Specifications, or Special Provisions adopted by the Administration prior to submission of the VECP, the Chief Engineer will reject the proposal.

These requirements apply to all VECPs initiated and developed by the Contractor and which are identified as such by the Contractor at the time of its submission to the Chief Engineer; however, nothing herein shall be construed as requiring the Chief Engineer to consider or approve a VECP submitted by the Contractor.

Subject to these provisions, the Administration or any other public agency will have the right to use all or part of any accepted VECP on other projects without obligation or compensation of any kind to the Contractor.

In the event a VECP is accepted by the Administration, the provisions of the Contract Documents that pertain to adjustment of Contract unit prices due to alterations of Contract quantities will not apply to the items adjusted or deleted as a result of affecting the VECP by change order.

SPECIAL PROVISIONS

City Contract No. 20-CPTH-33

SHA Contract No. WA061B51

FAP No. AC-TAP-3(910)E

TC - SECTION 2 — BIDDING REQUIREMENTS AND CONDITIONS

5 of 5

TC-2.04 OWNER/OPERATOR.

For the purpose of labor compliance, the term "Owner/Operator" will be defined as being the individual who owns and operates their own vehicle.

The prevailing wage rates shall not apply to these individuals. However, they shall appear on the payroll of the Contractor or subcontractor with the notation "Owner/Operator".

Employees of Owner/Operator shall be subject to prevailing wage rates and shall appear on a certified payroll.

TC-2.05 DEBARMENT/SUSPENSION.

Pursuant to the emergency regulations which were approved by the Administrative and Executive Legislative Review (AELR) Committee of the Maryland General Assembly on July 27, 1982, and which went into effect on July 28, 1982, the Maryland Department of Transportation, State Highway Administration has pursuant to applicable laws and regulation established a list of Debarred or Suspended Contractors.

The current list of Debarred or Suspended Contractors or Suppliers is available at the Administration's Cashier's Office, Baltimore, Maryland.

TC-2.06 PARTNERING.

The Administration invites the Contractor, subcontractors, and suppliers to participate in a voluntary partnership agreement for the work. The partnership will be structured to draw on the strengths of each organization through open communication, teamwork, and cooperative action to identify and achieve reciprocal goals. The objectives are effective and efficient Contract performance, completion within the Contract bid price, on schedule, and in conformance with the Contract Documents. This partnership will not change the legal relationship of the parties to the Contract nor relieve any party from any of the terms of the Contract.

The Administration will contact the Contractor to determine if there is an interest in partnering. If the Contractor is interested, the Administration's Assistant District Engineer Construction and the Contractor's management representative will meet, plan, and organize a partnering development team. Persons recommended to be on the team are: The Administration's District Engineer, Assistant District Engineer, Area Engineer, Construction Project Engineer, and Project Design Engineer, the Contractor's designated on site project manager, and key project supervision personnel of both the Contractor and principal subcontractors and suppliers. FHWA and key local government personnel will also be invited to attend as necessary. The initial workshop team meeting will be held prior to the Preconstruction Conference. Follow up workshops may be held regularly as agreed by the Contractor and the Administration.

The partnership will be bilateral. Participation is voluntary. All partnering costs will be shared equally by the Contractor and the Administration.

TERMS AND CONDITIONS

**TC SECTION 4
CONTROL OF WORK**

TC-4.02 FAILURE TO MAINTAIN PROJECT

ADD: As a third paragraph.

Additionally, an appropriate deduction will be made from the Contractor's next progress estimate for each day or portion thereof that Maintenance of Traffic deficiencies exist, and will continue until the deficiencies are satisfactorily corrected and accepted by the Engineer. Any portion of a day will be assessed a full day deduction. The deduction will be equal to a prorata share of the lump sum price bid for Maintenance of Traffic or an amount prorated from the Engineer's estimate, whichever is more. The amount prorated will be the per diem amount established by using the working days (based upon calendar dates when required) divided into the total value of the bid item or the Engineer's estimate of that item, whichever is more.

The above noted deduction will be assessed on the next progress estimate if:

The Contractor does not take action to correct the deficiencies and properly assume the responsibilities of maintaining the project (as determined by the Engineer) within four hours of receiving a notice to comply with the required maintenance provisions.

The deduction will be equal to the daily prorated share of the lump sum price bid for Maintenance of Traffic or \$IFB FailureToMaintain per day, whichever is more for each day or portion thereof that the deficiencies exist, and will continue until the deficiencies and proper assumption of the required maintenance provisions are satisfactorily corrected and accepted by the Engineer. The amount of monies deducted will be a permanent deduction and are not recoverable. Upon satisfactory correction of the deficiencies, payment of the Maintenance of Traffic lump sum item will resume.

SPECIAL PROVISIONS INSERT

City Contract N0. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

TC — 7.02 PAYMENT ALLOWANCES FOR STORED MATERIAL

1 of 1

TERMS AND CONDITIONS

TC - SECTION 7 — PAYMENT

TC-7.02 PAYMENT ALLOWANCES FOR STORED MATERIAL

DELETE: TC-7.02(a) The first sentence of the first paragraph, “For superstructure members... of the applicable Contract item.”

INSERT: The following.

For superstructure members delivered to the project or in storage at an approved site, an allowance of 100 percent of the material cost plus freight charges as invoiced may be made provided the cost does not exceed 90 percent of the Contract price of the applicable Contract item.

DELETE: TC-7.02(b) in its entirety.

INSERT: The following.

- (b) For reinforcement steel, piling, pipe, traffic barrier, signs and sign assemblies, form lumber, falsework, temporary structures, and other nonperishable material delivered to the project or in storage at an approved site, excluding aggregates, cement, seed, plants, fertilizer, or other perishable items, an allowance of 100 percent of the invoiced cost of the material plus freight charges to the Contractor may be made provided the cost does not exceed 90 percent of the Contract price of the applicable Contract item. Such material shall be delivered and stock-piled at the project site or an approved location (TC-7.02(d)) after being tested by the Administration and found to have conformed to the Specifications, if applicable, or to have been accepted under an approved certification program prior to the allowance.

DELETE: TC-7.02(c) The first paragraph, “No allowance will ... the finished construction.”

INSERT: The following.

- (c) No allowance will be made for fuels or other materials that will not structurally assist the construction of a finished work item.

DELETE: TC-7.02(c) The third paragraph, “Only end product ... eligible for prepayment.”

SPECIAL PROVISIONS INSERT

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
1 of 3

TC — 7.05 PROGRESS PAYMENTS

TERMS AND CONDITIONS

TC – SECTION 7 — PAYMENTS

TC-7.05 PROGRESS PAYMENTS

(a) Current Estimate

DELETE: Paragraph (2) in its entirety.

INSERT: The following.

- (2) **Monthly Estimates.** Each month the Administration will pay the Contractor for the Contract value of the authorized work satisfactorily performed during the preceding calendar month, less variable retainage specified in (3) Variable Retainage. Retainage will not be released until final payment (unless partially released in a semifinal payment or released to a subcontractor as per TC-7.05(a)(3)(F)). Current estimates will be based upon the procurement officer's estimate of satisfactorily performed work (including materials and/or equipment complete in place). In the instance of lump sum items and each items, the procurement officer's estimate will either be the percentage of the item satisfactorily performed during the preceding month or as specified in contract documents. All quantities, estimates, and fractions will be reasonably accurate approximations and are subject to corrections: (a) in subsequent current estimates; (b) in any semi final estimate; and (c) in final payment. Any or all partial payments may be withheld in the event the Contractor has not complied with current requirements of the Specifications. Should either the procurement officer or the Contractor be of the opinion that any estimates, quantities, or fractions (either as to an individual current estimate or accumulations thereof) do not represent a reasonably accurate approximation of actual work, then the details questioned will be reviewed. Any necessary corrections and adjustments will be made in the next current estimate.

Subcontractors

DELETE: Paragraph (A) in its entirety.

INSERT: The following.

- (A) Sections A-F apply if the contractor has furnished 100 percent payment security and 100 percent performance security.

ADD: The following after paragraph (E).

- (F) A subcontractor may submit written notification to the Contractor requesting to have their portion of the retainage released if the following requirements are met.

SPECIAL PROVISIONS INSERT

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
2 of 3

TC — 7.05 PROGRESS PAYMENTS

- (1) All tasks assigned to the subcontractor within the subcontractor agreement are satisfied.
- (2) All related pay items associated with the subcontractor's responsibility have had all required documentation for those items submitted and approved by the Administration.
- (3) The Contractor has notified the Administration that the subcontractor has fulfilled its contractual obligations, including submitting all required documentation, and has requested that the Administration conduct an Interim Subcontractor Final Inspection.
- (4) The Administration has performed the said Interim Subcontractor Final Inspection. The Administration will verify that all Contract requirements have been satisfied during the Subcontractor Final Inspection, and issue in writing a Subcontractor Accepted for Maintenance letter. Subcontractor Accepted for Maintenance letter does not relieve the Contractor of the responsibility to perform the work to specifications or remedy its latent defects.
- (5) All issues, including punch list items, and claims related to the subcontractor's work are resolved.

When (1)-(5) are met, the Contractor shall verify that the subcontractor's requested retainage is accurate and then submit, in writing, the subcontractor's request to release the subcontractor's portion of the retainage held by the Administration. The Assistant District Engineer-Construction (ADE-C) or department head shall then perform a subcontractor final inspection to determine if a Subcontractor Final Acceptance for Maintenance is warranted, if the acceptance is approved then the retainage request will be processed as per this specification. If the Subcontractor Final Acceptance for Maintenance is not granted, a list of outstanding responsibilities shall be provided to the contractor by the Administration for the subcontractor to complete in order to request another follow up Final Subcontractor Inspection.

Once the request is approved by the Administration, the Administration will submit to the Contractor "Subcontractor's Final Quantities" within 60 days of the approval. The tabulation shall be accompanied by a statement setting forth:

- (a) The eliminated work, changed work and additional work performed under change orders and/or supplemental agreements by the subcontractor;
- (b) The authorized extension or adjustments of time;
- (c) The number of days that have been charged to date of the subcontractor's early retainage request;

SPECIAL PROVISIONS INSERT

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
3 of 3

TC — 7.05 PROGRESS PAYMENTS

- (d) Any deductions, charges, or liquidated damages that have been made or imposed to date of the subcontractor's early retainage request. The Contractor shall have a period of 30 days from the date of receiving the aforementioned tabulations from the Administration, in which:
- (1) To decide whether or not to accept the subcontractor's final tabulation of final quantities, and
 - (2) To notify the Administration, in writing, of the decision. The Contractor may request an additional period of 30 days in which to notify the Administration of their decision. In the event the Contractor notifies the Administration that the Contractor or subcontractor protests the final quantities on such basis, the notification shall outline the reasons for said protest.

After all parties have agreed upon the Subcontractor's Final Quantities, the Administration will begin the process of releasing the subcontractor's portion of the retainage. Once the Subcontractor Final Quantities are agreed upon, those items cannot be disputed at a future date and these items are considered finalized unless further work has been performed due to a partial item status or other contractual responsibilities of the Contractor in which further work had to be completed for said item.

The Contractor will have a period of 10 days to submit payment of the released retainage to the requesting subcontractor, after the Contractor has received said payment from the Administration for the subcontractor's portion of the remaining retainage held. The Contractor cannot hold additional retainage from the subcontractor after the subcontractor's final portion of retainage is released.

**MARYLAND SHA
SUPPLEMENTAL
PROVISIONS**

CATEGORY 100
PRELIMINARY

SECTION 104 — MAINTENANCE OF TRAFFIC

104.01 TRAFFIC CONTROL PLAN (TCP)

104.01.01 DESCRIPTION.

DELETE: The fourth paragraph sentence “Refer to contract Documents for Work Restrictions.” in its entirety.

INSERT: The following.

Work Restrictions.

Work is not permitted on the following days indicated below with an “X” unless prior written approval is given by the Engineer.

Holiday	Day immediately preceding the holiday	Day of observed holiday	Day immediately following the holiday
New Year's Day, January 1*	<input type="checkbox"/>	X	<input type="checkbox"/>
Dr. Martin Luther King, Jr.'s Birthday, the third Monday in January	<input type="checkbox"/>	X	<input type="checkbox"/>
Presidents’ Day, the third Monday in February	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Good Friday	<input type="checkbox"/>	X	<input type="checkbox"/>
Easter Sunday	<input type="checkbox"/>	X	<input type="checkbox"/>
Memorial Day, the last Monday in May	<input type="checkbox"/>	X	<input type="checkbox"/>
Juneteenth National Independence Day, June 19*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Independence Day, July 4*	<input type="checkbox"/>	X	<input type="checkbox"/>
Labor Day, the first Monday in September	<input type="checkbox"/>	X	<input type="checkbox"/>
Columbus Day, the second Monday in October	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Veterans’ Day, November 11*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thanksgiving Day, the fourth Thursday in November	<input type="checkbox"/>	X	<input type="checkbox"/>
Christmas Day, December 25*	<input type="checkbox"/>	X	<input type="checkbox"/>

SPECIAL PROVISIONS
 104.01 —TRAFFIC CONTROL PLAN

City Contract No. 20-CPTH-33
 SHA Contract No. WA061B51
 FAP No. AC-TAP-3(910)E
 2 of 7

OTHER: List below. (e.g., special events, Election day, etc.).	Day immediately preceding the event	Day of the event	Day immediately following the event
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*When the holiday occurs on a Saturday, the holiday is observed on the Friday before. When a holiday occurs on Sunday, the holiday is observed on the Monday after the actual holiday.

Work is not permitted on the following weekend days indicated below with an "X".

- X Saturdays, unless prior written approval is given by the Engineer
- X Sundays, unless prior written approval is given by the Engineer

SPECIAL PROVISIONS
 104.01 —TRAFFIC CONTROL PLAN

City Contract No. 20-CPTH-33
 SHA Contract No. WA061B51
 FAP No. AC-TAP-3(910)E
 3 of 7

TEMPORARY LANE OR SHOULDER CLOSURE SCHEDULE			
ROADWAY	# LANE(S) / SHOULDER CAN BE CLOSED	DAY OF THE WEEK	CLOSURE PERIOD (TIME OF DAY)
<p>Note: This work site is entirely within Hagerstown City Park and is not adjacent to any public streets. There will be no traffic control required. Orange fence will be placed around the work zone to keep pedestrians out of the work area.</p>		<p>7 days a week for the duration of project.</p>	

A Traffic Control Permit must be obtained for all temporary lane or shoulder closures. Permits will be approved according to the schedule above. The Contractor must submit a Traffic Control Permit Application to the Project Engineer at least 5 business days prior to the needed closure. Weekend requests must be in by Monday and Monday requests must be in by the previous

SPECIAL PROVISIONS
104.01 —TRAFFIC CONTROL PLAN

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
4 of 7

Tuesday. Permittee must coordinate closures with adjacent work zones and provide coordination between adjacent work zone operations to ensure that inapplicable or conflicting messages or devices are not displayed to traffic. Permittee is responsible for implementation of all traffic control devices, which must be in compliance with noted traffic control standard(s) and the MdMUTCD. This permit is subject to revocation at the direction of MDOT SHA. Permittee must have a copy of the approved Traffic Control Permit at the work site. The State Operations Center (SOC) must be contacted at 1-800-543-2515 each day the permit is in effect. Permittee must contact the SOC within 30 minutes prior to closing any MDOT SHA roadway lane or shoulder and within 30 minutes after the closure is removed.

ADD: The following after the last paragraph, “Any monetary savings...and the Administration.”

When closing, or opening a lane or shoulder on freeways, expressways, and roadways with posted speed ≥ 55 mph, ensure a work vehicle is closely followed by a protection vehicle (PV) during installation and removal of temporary traffic control devices. Per specification 104.23.01, The PV shall consist of a work vehicle with approved flashing lights, either a truck-mounted attenuator (TMA) with support structure designed for attaching the system to the work vehicle or a trailer truck-mounted attenuator (TTMA) designed for attaching the system to the work vehicle by a Pintle hook and an arrow panel.

Temporary Traffic Control for shoulder work along freeways, expressways, and roadways with posted speed ≥ 55 mph shall include the use of a PV. The PV shall be outfitted with a TMA or TTMA as noted above and be positioned on the shoulder to protect the work area throughout the duration of the shoulder work operation.

While the PV is used to protect workers and equipment the PV shall not be used to store items unrelated to MOT operations or items that will influence the performance characteristics of the crash attenuator.

During mobile operations, the PV operator shall remain inside the vehicle. When PV is used within a shoulder or lane closure for stationary operations, the PV operator may exit the positioned PV to participate in work activities.

When a temporary lane or shoulder closure is in effect, begin work within one hour after the lane is closed. For any delay, greater than one hour and no work in progress, remove the lane/shoulder closure. Ensure the Traffic Manager attends the Pre-Construction, Pre-Structural Steel Erection, Pre-Concrete Placement, Pre-MOT Shift, and Pre-Paving Meetings and is prepared to competently discuss traffic control, the Traffic Control Plan (TCP), and the procedures to be implemented for lane closures.

All closures shall be in conformance with the approved TCP, Standards, Specifications, and at the direction of the Traffic Manager and the Engineer.

Workers and equipment, including temporary traffic control devices needed for setting up a lane closure or restriction, are prohibited in the lane/shoulder to be closed or restricted before the time permitted in the Contract Documents unless otherwise approved by the Engineer.

SPECIAL PROVISIONS
 104.01 —TRAFFIC CONTROL PLAN

City Contract No. 20-CPTH-33
 SHA Contract No. WA061B51
 FAP No. AC-TAP-3(910)E
 5 of 7

Temporary traffic control devices to be used for lane/shoulder closure may be placed on the shoulder of the roadway by workers no earlier than _____ minutes prior to the actual time lane/shoulder closure or restriction is permitted. When temporary traffic control devices are being installed, ensure that all work vehicles involved in the installation display flashing lights that provide a 360-degree visibility of the vehicles. These lights shall remain on until the full installation of TTC devices is complete. Temporary traffic signs may be displayed to traffic at this time.

Workers shall not enter any lane open to traffic. Workers may be present on shoulders to prepare for lane closure setup no earlier than _____ minutes prior to the actual time lane/ shoulder closures or restrictions are permitted. During preparation for the lane closure, ensure that all work vehicles at the site and involved in the installation of the lane closure or restriction display flashing lights that provide 360-degree visibility of the vehicles, as required by MD 104.01-18B. These lights shall remain on while the vehicle remains in the work zone and until the full implementation of the road closure or restriction is complete.

Ensure that no travel lane has been reduced to less than 11 ft on expressways and freeways, 10 ft on other roadways, or as specified in the contract documents. Restore all temporary lane or shoulder closures at the end of the closure period. Prior to opening the closed lane or shoulder, clear the lane or shoulder of all material, equipment, and debris.

Failure to restore full traffic capacity within the time specified will result in a deduction assessed in conformance with the following.

This is in addition to the requirements specified in TC-4.02.

The lane closure penalties for freeways are categorized by the District in which they are located.

For Districts 1, 2 and 6, the following fee structure will be followed:

ASSESSED DEDUCTIONS FOR FREEWAYS	
ELAPSED TIME, (MINUTES)	DEDUCTION
<i>For 1 Lane Closures</i>	
1 – 10	\$ 100.00
Each minute over 10	\$50.00 per minute (In addition to original 10 minute deduction)
<i>For 2 or more Lane Closures</i>	
1 – 10	\$ 200.00
Each minute over 10	\$100.00 per minute (In addition to original 10 minute deduction)

SPECIAL PROVISIONS
 104.01 —TRAFFIC CONTROL PLAN

City Contract No. 20-CPTH-33
 SHA Contract No. WA061B51
 FAP No. AC-TAP-3(910)E
 6 of 7

For Districts 3, 4, 5 and 7, the following fee structure will be followed:

ASSESSED DEDUCTIONS FOR FREEWAYS	
ELAPSED TIME, (MINUTES)	DEDUCTION
<i>For 1 Lane Closures</i>	
1 – 10	\$ 1,000.00
Each minute over 10	\$500.00 per minute (In addition to original 10 minute deduction)
<i>For 2 or more Lane Closures</i>	
1 – 10	\$ 2,000.00
Each minute over 10	\$1,000.00 per minute (In addition to original 10 minute deduction)

The lane closure penalties for other roads are categorized by intersection Level of Service. The penalty for other roads with Level of Service D, E or F is greater than that for Level of Service A, B or C.

For Level of Service A, B or C, the following fee structure will be followed:

ASSESSED DEDUCTIONS FOR OTHER ROADS	
ELAPSED TIME, (MINUTES)	DEDUCTION
<i>For 1 Lane Closures</i>	
1 – 10	\$ 150.00
Over 10	\$75.00 per minute (In addition to the original 10 minute deduction)
<i>For 2 or more Lane Closures</i>	
1 – 10	\$ 300.00
Over 10	\$150.00 per minute (In addition to the original 10 minute deduction)

For Level of Service D, E or F, the following fee structure will be followed:

ASSESSED DEDUCTIONS FOR OTHER ROADS	
ELAPSED TIME, (MINUTES)	DEDUCTION
<i>For 1 Lane Closures</i>	
1 – 10	\$ 300.00
Over 10	\$150.00 per minute (In addition to the original 10 minute deduction)
<i>For 2 or more Lane Closures</i>	
1 – 10	\$ 600.00
Over 10	\$300.00 per minute (In addition to the original 10 minute deduction)

142

SPECIAL PROVISIONS
104.01 —TRAFFIC CONTROL PLAN

City Contract No. 20-CPTH-33
SHA Contract No. WA061B5I
FAP No. AC-TAP-3(910)E
7 of 7

To modify the work restrictions, submit a request to the Engineer in writing with at least 5 business days notice. Do not implement any changes until written approval from the Engineer is received. Include a copy of the original work restrictions with the written request. The Engineer also reserves the right to modify or expand the methods of traffic control or working hours as specified in the Contract Documents.

MEMORANDUM

TO: OFFICE OF FINANCE FEDERAL AID PROGRAMMING CHIEF GUY
TALERICO
FROM: DISTRICT 6 ASSISTANT DISTRICT ENGINEER FOR TRAFFIC LINDA
PUFFENBARGER
SUBJECT: WORK ZONE TRAFFIC CONTROL APPROVAL FOR 20-CPTH-33
DATE: SEPTEMBER 24, 2021
RESPONSE
REQUESTED BY: N/A

PURPOSE OF MEMORANDUM

This memorandum is to inform you of the work zone traffic control approval for the above-referenced project. This project will refurbish the train locomotive at City Park in Hagerstown and will also replace the pavilion over said locomotive. No public roads will be affected by the project, so traffic control is not necessary, however this document is provided to meet federal aid requirements.

SUMMARY

Please consider this documentation as review and approval of traffic control requirements by the District 6 Traffic Office. If you have any questions, please contact me in the District 6 Office at 301-729-8444 or via email at lzerbee@mdot.maryland.gov. Thank you.



Ms. Linda Puffenbarger
Assistant District Engineer, Traffic

ATTACHMENTS

- SP 104 Insert

cc: Mr. Rodney Tissue, City Engineer – City of Hagerstown

CATEGORY 200
GRADING

SECTION 203 — BORROW EXCAVATION

203.01.02 Notice to Contractor — Borrow Pits.

ADD: After the first paragraph.

This project is located in Washington County, D6. The following conditions applicable to the county or city shall be complied with and documented.

DISTRICT 1

Dorchester (DO) County

Site plan approved by Soil Conservation District.
Grading permit from County Highway Department (except City of Cambridge).
Planning and Zoning approval for use.
Critical Areas approval (if applicable).
Inspection by County.

Somerset (SO) County

Site plan approved by Soil Conservation District.
Grading Permit from the County.
Land Use permit.
Critical Areas approval by Planning and Zoning (if applicable).
Inspection by SHA.

Wicomico (WI) County

Site plan approved by Soil Conservation District.
Certificate of compliance with Planning and Zoning if located in Critical Area.
Inspection by SHA.

Worcester (WO) County

Site plan approved by Soil Conservation District.
Critical areas approved by Planning and Zoning (if applicable).
Inspection by SHA.

DISTRICT 2

Caroline (CO), Cecil (CE), Queen Anne's (QA) and
Talbot (TA) Counties

Site plan approved by Soil Conservation District.
Planning and Zoning approval.
Critical Areas approval (if applicable).
Inspection by SHA.

Kent (KE) County

Site plan approved by Soil Conservation District.
Grading permit.
Planning and Zoning approval.
Critical Areas approval (if applicable).
Inspection by SHA.

DISTRICT 3

Montgomery (MO) County

Sediment control permit and plan approval by County
Department of Environmental Protection, Division of
Water Resources Management, Storm Water Management Section/Sediment Control.
Approval by Maryland National Capital Park and Planning Commission (if
applicable).
Inspection by County.

Prince Georges (PG) County

Site Plan approved by Soil Conservation District.
County Grading Permit.
Tree conservation plan approval by Maryland National Capital Park and Planning
Commission (if applicable).
Critical Areas approval (if applicable).
Payment of all pertinent county fees and/or securing of county required bonding.
Inspection by SHA with oversight by County.

DISTRICT 4

Baltimore (BA) County

Site Plan approved by the Department of Environmental Protection and the Soil
Conservation District.
County Grading Permit.
Critical Areas approval by the Department of Environmental Protection and Resource
Management (if applicable).
Inspection by County.

Harford (HA) County

Site Plan approved by Soil Conservation District.
County Grading Permit.
Critical Areas approval (if applicable).
Inspection by County.

DISTRICT 5

Anne Arundel (AA) County

Site Plan approved by Soil Conservation District.
Planning and zoning approval - special exception required.
Grading plan issued by the County Department of Inspections and Permits.
Critical Areas approval (if applicable).
Inspection by County and SHA.

Calvert (CA) County

Site Plan approved by Soil Conservation District.
Grading plan issued by the County after a mining permit or exemption is issued.
Critical Areas approval (if applicable).
Inspection by SHA.

SPECIAL PROVISIONS
203 — BORROW EXCAVATION

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

3 of 3

Charles (CH) County
Site Plan approved by Soil Conservation District.
Special exception granted by the County.
Critical Areas approval (if applicable).
Inspection by SHA.

St. Mary's (SM) County
Site Plan approved by Soil Conservation District.
County Grading Permit.
Critical Areas approval (if applicable).
Inspection by SHA.

DISTRICT 6

Allegany (AL) County
Site plan approved by Soil Conservation District.
Informational copy of plans to County Planning and Zoning Commission.
Inspection by SHA.

Garrett (GA) and Washington (WA) Counties
Site plan approval by Soil Conservation District.
Inspection by SHA.

DISTRICT 7

Carroll (CL) County
Site plan approved by County Planning Commission.
Sediment control plan approval by Soil Conservation District.
County Grading Permit.
Inspection by County.

Frederick (FR) County
Site plan approved by Soil Conservation District.
County Grading Permit.
Inspection by SHA.

Howard (HO) County
Site Plan approved by Soil Conservation District.
County Grading Permit.
Inspection by County.

BALTIMORE CITY (BC)

Site plan approved Baltimore City Department of Public Works (BCDPW).
Inspection by BCDPW.

STATE AND FEDERAL PROPERTY

Borrow pits located on state and federal property are subject to Maryland Department
of the Environment approval.
Inspection by SHA.

SPECIAL PROVISIONS INSERT
603 — SIDEWALKS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
1 of 2

CATEGORY 600
SHOULDERS

SECTION 603 — SIDEWALKS

603.02 MATERIALS

ADD: The following as the first sentence.

Refer to 701.02, 705.02, 708.02, and the following:

DELETE: Portland Cement Concrete from the materials table.

INSERT: The following into the materials table.

Portland Cement Concrete	902.10, Mix No, 13
Common Borrow	916.01
Topsoil	920.01.01, 920.01.02
Subsoil	920.01.03, 920.01.04

603.03 CONSTRUCTION

603.03.01 Concrete Sidewalks

DELETE: (d) **Finishing** in its entirety.

INSERT: The following.

(d) **Finishing.** Immediately after screeding and before bleed water appears, bull float the concrete to seat the coarse aggregate particles. After bull floating and waiting until bleed water has dissipated and the concrete has begun to set, float the concrete to provide a level surface and apply a broom finish. Do not plaster the surface. Use a 1/4 in. edging tool on all outside edges and all joints. On dry and/or windy days and as directed, while waiting for the concrete to set, apply a thin film of evaporation retarder according to the manufacturer's recommendations. Do not use evaporation retarder as a finishing aid. Do not add water to the concrete at any time during any phase of the finishing operations. Immediately following texturing and edging, begin the concrete curing. Ensure an ACI Concrete Flatwork Finisher or NRMCA Concrete Exterior Flatwork Finisher is present at all times during finishing operations.

DELETE: (f) **Cold Weather Construction and Curing** in its entirety.

INSERT: The following.

(f) **Cold Weather Construction and Curing.** Refer to 602.03.01(h).

SPECIAL PROVISIONS INSERT
603 — SIDEWALKS

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
2 of 2

603.03.02 Asphalt Sidewalks.

DELETE: (b) Placement and (c) Compaction in their entirety.

INSERT: The following.

(b) **Placement.** Place asphalt mix as specified in 504.03.06.

(c) **Compaction.** Use an approved roller. In areas inaccessible to a roller, a vibrating plate compactor or hand tamping may be used. Compact the asphalt mix uniformly, starting compaction as soon as the asphalt mix can be compacted without displacement. Continue until the material is thoroughly compacted and all marks have been removed.

603.03.03 Backfill

DELETE: 603.03.03 Backfill in its entirety.

INSERT: The following.

603.03.03 Backfill. Backfill as specified in 602.03.01(i).

603.04 MEASUREMENT AND PAYMENT

DELETE: The first sentence of the second paragraph, “The removal and disposal...replacement material.”

INSERT: The following.

The removal and disposal of unsuitable material will be measured and paid for at the Contract unit price for Class-1A Excavation, which price includes the cost of using acceptable excavation as replacement material.

DELETE: The third paragraph in its entirety, “When the existing sidewalk...for sidewalk.”

INSERT: The following.

When existing sidewalks are removed and replaced in the same location with new sidewalks, the removal will be measured and paid for as specified in 206.04.02.

SPECIAL PROVISIONS INSERT

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

705 — TURFGRASS ESTABLISHMENT

1 of 1

**CATEGORY 700
LANDSCAPING**

SECTION 705 — TURFGRASS ESTABLISHMENT

705.03.10 Final Acceptance.

DELETE: The first sentence of the first paragraph, “The Engineer and the Landscape... percent groundcover.”

INSERT: The following.

The Engineer and the Quality Assurance Division will complete an Inspection Report of turfgrass height, color, and percent groundcover.

SPECIAL PROVISIONS INSERT

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

706 — SHRUB SEEDING ESTABLISHMENT

1 of 1

**CATEGORY 700
LANDSCAPING**

SECTION 706 — SHRUB SEEDING ESTABLISHMENT

706.03.11 Final Acceptance.

DELETE: The first sentence of the first paragraph, “The Engineer and the Landscape... the Period of Maintenance.”

INSERT: The following.

The Engineer and the Quality Assurance Division will complete an Inspection Report of seedling height, color, and percent coverage at the end of the Period of Maintenance.

SPECIAL PROVISIONS INSERT

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

709 — SOIL STABILIZATION MATTING

1 of 1

**CATEGORY 700
LANDSCAPING**

SECTION 709 — SOIL STABILIZATION MATTING

709.03.11 Final Acceptance.

DELETE: The first sentence of the first paragraph, “The Engineer and the Landscape... with the pertinent specifications.”

INSERT: The following as the first sentence.

The Engineer and the Quality Assurance Division will complete an Inspection Report of the installed soil stabilization matting and vegetation establishment in conformance with the pertinent specifications.

UTILITIES STATEMENT

DESCRIPTION. The Contractor's attention is called to the requirements of Sections GP-5.05, GP-7.13 and GP-7.17.

MATERIALS. Not Applicable.

CONSTRUCTION.

- (a) Attention of the Contractor is directed to the possible presence of water, sewer, gas mains, electrical wires, conduit, communications cables (both overhead and underground), poles and house service connections in the vicinity in which the construction project is to be performed. The Contractor shall exercise special care and extreme caution to protect and avoid damage to utility company facilities. The Contractor shall take into consideration the adjustments and installations by public utilities in areas within the limits of this Contract. Existing utilities have been generally located and shown on the plans as they are believed to exist; however, the City assumes no responsibility for accuracy of these locations. All notifications to "MISS UTILITY" (1-800-257-7777) or City operations listed below shall be **at least**, 48 hours (two full working days) in advance of working in the area. The notification to "MISS UTILITY" is required by the Contractor whenever any excavating or similar work is to be performed.
- (b) The Contractor shall locate all existing utilities and be responsible for their protection. Should any existing utilities be damaged or destroyed due to the operations of the Contractor, the damaged or destroyed components shall be immediately replaced or repaired as necessary to restore the utility to a satisfactory operating condition. These repairs or replacements shall be at no additional expense to the City or the owner of the utility.

Prior to ordering any storm drain materials or precast items, the Contractor shall locate and test pit any underground facilities that may be in conflict in order to determine if conflicts exist. In the event that conflicts may be possible, this information shall immediately be forwarded to the City's project manager for review and resolution.

- (c) The existing utilities requiring immediate relocation or repair shall be relocated or repaired by the agency responsible for their maintenance or by the owner of the utility unless otherwise indicated in the Contract Documents. The Contractor shall inform the respective Utility, immediately upon discovering the condition(s). In addition, the Contractor shall give sufficient notice to the specific Utility of the Contractor's overall plan for construction. The Contractor and Utility Company will coordinate the applicable utility work with the Contractor's work operations based upon the Contractor's overall plan.
- (d) Any submittal by the Contractor to vary the sequence of work and/or perform concurrent work in multiple phased differing from the recommended maintenance of traffic phasing, must be accompanied by an updated schedule reflecting all utility relocations and adjustments.
- (e) The Contractor shall be responsible, upon gaining approval, for coordinating utility relocations and adjustments with the affected utility owners, the Project Engineer and the Utility Engineer. The following utility companies may have existing facilities or interests within the limits of the designated work areas in this Contract:

1. **Verizon**
1710 Underpass Way
Hagerstown, MD 21740
Phone: 301-790-7114
Contact: Bud Callahan
2. **Columbia Gas of Maryland**
55 Sycamore Street
Hagerstown, MD 21740
Phone: 301-964-1065
1-888-460-4332 ANYTIME (emergencies)
Contact: Dwayne Miller
3. **Allegheny Power Company**
10802 Bower Avenue
Williamsport, MD 21795
Phone: 301-790-6457
Contact: Gina McCann, Supervisor Engineering Services
4. **Antietam Cable Television**
1000 Willow Circle
Hagerstown, MD 21740
Phone: 240-420-2066
Contact: Benjamin Burger
5. **Point-Broadband**
18128 Oak Ridge Drive
Hagerstown, MD 21740
Phone: 717-816-2281
Contact: Ryan Howell
6. **Shentel**
30 Newberry Commons
Etters, PA 17319
Phone: 540-984-5931
Contact: Ken Rupert

In addition, the CITY OF HAGERSTOWN may have utilities or related operations affected by work in this contract:

1. **Department of Utilities**

- **Water Division:**
51 West Memorial Boulevard
Hagerstown, MD 21740
Phone: 301-739-8577
Nancy Hausrath, Water Operations Mgr. – Ext 654
Troy Johnson, Distribution Superintendent - Ext 691
- **Wastewater Division:**
1 Clean Water Circle
Hagerstown, MD 21740
Phone: 301-739-8577
Aaron Hammersmith, Collections Supervisor Ext 674
- **Electric Division**
425 East Baltimore Street
Hagerstown, MD 21740
Phone: 301-790-2600 – Ext 143 or 151
Jason Bachtell, Staff Engineer

2. **Public Storm Drains**

Public Works Department
51 West Memorial Boulevard
Hagerstown, MD 21740
Phone: 301-739-8577
Contact: Eric Deike, Public Works Mgr. – Ext 176
Cell: 301-964-0192

3. **Traffic Signals**

Public Works Department
Phone: 301-739-8577
Contact: Erik Kline, Traffic Control Super. -Ext 177
Cell: 240-675-3748
After Hours Dispatch: 301-790-3700

4. **Parking Meter Removal
& Installation**

Phone: 301-739-8577
Contact: Angela Zeger, Parking Sys. Super. Ext 479
Cell: 240-382-0028

5. **Parks & Recreation**

Phone: 301-739-8577
Contact: Mark Haddock, Parks and Recreation Manager
Cell: 240-675-3747

(f) When it is necessary to use steel plates at any point during construction, the following minimum requirements shall be met:

- 1) Steel plates are to be no less than 1-inch thick.
- 2) Steel plates are to cover access pit(s) with a 1-foot overlap onto existing pavement on all four sides of access pit(s).
- 3) When only three sides overlap existing roadway, the fourth side shall be supported by a steel I-beam or timber.
- 4) In cases where plates are used to cover extremely large excavations, it will be necessary to install an intermediate support system to prevent deflection.
- 5) Steel plates must be pinned to prevent movement.
- 6) Steel plates must be ramped with cold patch or hot mix asphalt at end of each work shift.
- 7) It will be necessary to recess any steel plates that are placed in the roadway from October 1 through April 15th.
- 8) In cases where two or more steel plates are placed together, they shall be welded together.

(g) If an adjustment is required to facilities, it is necessary that the existing facilities remain in service until the new construction is complete and placed in service. The Contractor shall prepare a plan to keep the facilities in service and submit copies to the Project Engineer and the utility owner for approval at least 10 business days prior to the start of work. Also, when adjustments are required, establishment of lead times is necessary to meet the applicable utility schedule and coordination with the Contractor's work operation. All adjustments shall be done in conformance with the pertinent utility owners prior to adjustment of any facility. The Contractor shall request the Utility to accept in writing all adjustments upon completion of work and arrange a field meeting between the Utility, the Contractor, and the Engineer.

CONTRACT PROVISION BUY AMERICA

This section only applies to projects partially or totally financed with Federal funds.

The prime contractor or its subcontractors shall comply with Infrastructure Investment and Jobs Act (IIJA) Title IX – Build America, Buy America (BABA) Act. Pub. L. No. 117-58, §§ 70901-52.

Materials used for the utility work and permanently incorporated into the project, including all materials/items supplied by the Utility Company, shall comply with the Buy America preference requirements including:

(A) All iron and steel used in the project are produced in the United States.

This means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

(B) All manufactured products used in the project are produced in the United States.

This means the manufactured product was manufactured in the United States, and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation.

In accordance with 23 CFR Part 635.410, FHWA currently has a general applicability waiver on manufactured products that do not contain steel and iron components. Therefore, this 55 percent standard for manufactured products that do not contain steel and iron components, does not apply on projects funded under Title 23 U.S.C.

(C) All construction materials are manufactured in the United States.

This means that all manufacturing processes for the construction material occurred in the United States. Common construction materials used in public works infrastructure projects are or consist primarily of non-ferrous metals, plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables), glass (including optic glass), lumber, and drywall.

The term 'construction materials' shall not include cement and cementitious materials, aggregates such as stone, sand, or gravel, or aggregate binding agents (including asphalt cement) or additives; or any material composed of or derived from these items.

Items that consist of two or more of the listed materials that have been combined together through a manufacturing process, and items that include at least one of the listed construction materials combined with a material that is not listed through a manufacturing process, shall be treated as manufactured products, rather than as construction materials.

The prime contractor or its subcontractors shall also comply with Section 165 of the Surface Transportation Assistance Act of 1982 as amended by Section 1041(a) and 1048(a) of the intermodal Surface Transportation Efficiency Act of 1991 with regard to the furnishing and coating of iron and steel products.

The prime contractor or its subcontractor shall supply certifications to the Project Engineer from the manufacturer of all costing, iron or steel products which document that the steel and iron have been manufactured and the coatings for iron or steel have been applied by the manufacturer in the United States. The Project Engineer shall forward copies of the certifications to the Office of Materials Technology for review and approval prior to such items being incorporated into the permanent work. Certifications shall extend to the materials utilized in manufactured and fabricated products purchased by the Contractor.

Products manufactured of foreign steel or iron materials may be used, provided the cost of such products as they delivered to the project does not exceed 0.1% of the total contract amount or \$2,500.00, whichever is greater. If a supplier or fabricator wishes to use a partial fabrication process where domestic and foreign source components are assembled at a domestic location, the "as delivered cost" of the foreign components should include any transportation, assembly and testing costs required to install them in the final product.

This applies to all iron, steel and coating materials used for utility work incorporated into the project including materials/items supplied by the Utility Company.

MEASUREMENT AND PAYMENT. Working around or protecting the utilities, regardless of ownership and cooperation with the owners of the utilities and with other contractors will not be measured but the cost will be incidental to other items in the Contract Documents.

Revised 6/8/23



CITY OF HAGERSTOWN, MARYLAND

Engineering Department

Utility Coordination Certification

DATE: 09/21/2023

MDOT SHA CONTRACT NUMBER: WA061B51


FAP NUMBER: AC-TAP-3(910)E

PROJECT DESCRIPTION: City Park Train Hub Locomotive Refurbishment & Pavilion Replacement

The below certifies that Utility Coordination was consistent with MDOT SHA policies and procedures.

***Please note: No Utility Coordination was required. No Utilities will need relocations. No excavation will be required. No surface features will be impacted.**

The Section 875 - Utility Statement included in this contract provides utility names and contact information, if needed, for all utilities found to be within the limits of this right-of-way.



Jim Bender, P.E.
City Engineer

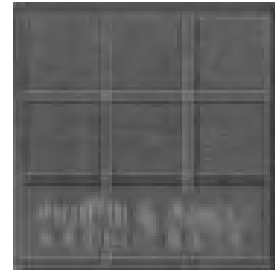
Telephone: 301-739-8577 ext. 125

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**ARCHITECTURAL
SPECIFICATIONS**

**City Park Train Hub
Locomotive Refurbishment &
Pavilion Replacement**

At Hagerstown Railroad Museum
City of Hagerstown, Maryland
730 City Park Drive
Hagerstown, Maryland 21740



September 6, 2022

PAA Proj. #19-35

**100% Documents
MDOT BID 62-219
City Contract: 20-CPTH-33
State Highway Contract: TBD
F.A.P. Contract: TBD**

SECTION 00 11 20

PROJECT DIRECTORY

Project: City Park Train Hub
Locomotive Refurbishment &
Pavilion Replacement

End User: Hagerstown City Park Railroad Museum
730 City Park Drive
Hagerstown, MD 21740

Owner's Representative: Rodney Tissue, Director Parks and Engineering
City of Hagerstown, Maryland
1 East Franklin Street
Hagerstown, MD 21740
(301) 739-8577

Architect: Kevin W. Kneer, RA
Proffitt & Associates Architects
49 South Carroll Street
Frederick, MD 21701
(301) 662-8532

Preservation Consultant: Ted Wickert
Strasburg Rail Road Company
301 Gap Road
Ronks, PA 17572
(717) 687-8421

Civil Engineer: Gordon Poffenberger, PE
Fox & Associates, Inc.
981 Mt. Aetna Road
Hagerstown, MD 21740
(301) 733-8503

Structural Engineer: Jeff Miller, PE
ADTEK Engineers, Inc.
150 South East Street, Suite 201
Frederick, MD 21701
(301) 662-4408

Mechanical/Electrical Engineer: Chris Mills, PE
CJL Engineering Company, Inc.
5285 Westview Drive, Suite 203
Frederick, MD 21701
(301) 695-9424

General Contractor: To be determined

SECTION 00 11 23

LIST OF DRAWINGS

GENERAL

62-219-001	A0.1	Cover Sheet	09/06/22
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CIVIL

62-219-002	1 of 7	Cover Sheet	09/02/22
62-219-003	2 of 7	Existing Conditions Plan	09/02/22
62-219-004	3 of 7	Site Plan/Grading Plan/E.S.C. Plan	09/02/22
62-219-005	4 of 7	Stormwater Management Plan	09/02/22
62-219-006	5 of 7	Site and E.S.C. Notes & Details	09/02/22
62-219-007	6 of 7	Stormwater Management Notes & Details	09/02/22
62-219-008	7 of 7	Drainage Area Map	09/02/22

ARCHITECTURAL

62-219-009	A1.1	Locomotive Pavilion Floor Plan	09/06/22
62-219-010	A1.2	Locomotive Pavilion Roof Plan & Details	09/06/22
62-219-011	A3.1	Locomotive Pavilion North & East Elev.	09/06/22
62-219-012	A3.2	Locomotive Pavilion South & West Elev.	09/06/22
62-219-013	A4.1	Locomotive Pavilion Sections	09/06/22
62-219-014	A5.1	Locomotive Pavilion Sections & Details	09/06/22
62-219-015	A6.1	Locomotive Pavilion Framing Plan & Sect.	09/06/22

STRUCTURAL

62-219-016	S1	Locomotive Pavilion Structural Plan	09/06/22
62-219-017	S2	Locomotive Pavilion Structural Sections	09/06/22
62-219-018	S3	Locomotive Pavilion Structural Notes	09/06/22

ELECTRICAL

62-219-019	SE.1	Site Plan	09/06/22
62-219-020	E.1	Floor Plan – New Work – Power	09/06/22
62-219-021	E.2	Floor Plan – New Work – Lighting	09/06/22
62-219-022	E.3	Electrical Specifications	09/06/22

- END OF SECTION 00 11 23 -

SECTION 01 11 00

SUMMARY OF WORK

The New Pavilion and Locomotive Rehabilitation Project for the City of Hagerstown consists of new construction of a pavilion to more prominently display the historic Western Maryland Locomotive #202 which will also to be cosmetically restored as part of this project.

The work is comprised of two main work scopes:

Work Scope "A" – General Contract and New Pavilion

Work Scope "B" – Locomotive Rehabilitation

WORK SCOPE "A" – GENERAL CONTRACT AND NEW PAVILION

Work is described herein and in other specification sections as well as on the drawings. Prequalification is not required for construction of the pavilion. The successful bidder will be responsible for administering a subcontract for the locomotive rehabilitation work defined in Work Scope "B".

General Trades –

General trades work includes but is not limited to selective demolition of the existing pavilion, replacement of the display track at the new pavilion, construction of the new steel and timber pavilion, and installation of access stair/platform to locomotive cab.

Site Work –

Site work consists of earthwork, preparation of the building pad above grade, drainage pipe installation including trenching/backfill, electric utility installation including trenching/backfill, and paved concrete sidewalks, ramps, and stairs.

Selective Demolition –

Selective demolition includes removal of a portion of the existing locomotive pavilion and patching repairing of same.

Foundation and Structural –

The pavilion project includes installing concrete footings and concrete slab on grade to support the pavilion structure. The pavilion is comprised of structural steel and wood timber framing.

Finishes –

Pavilion finishes include painting and coatings over wood and metal.

Hazardous and ACM Materials –

Removal of hazardous and ACM materials (asbestos) is required at the locomotive only and is further described in Section 01 11 05 Supplemental Summary of Work - Work Scope "B" - Locomotive Rehabilitation.

Plumbing –

The pavilion project does not include any plumbing work to convey potable water or sanitary waste.

Mechanical –

The pavilion project does not include any mechanical work.

Electrical –

Electrical work includes new underground electrical service from the museum building to the locomotive pavilion, associated panels, power distribution, and exterior lighting fixtures.

Schedule –

Work is scheduled to be completed during the summer of 2023.

Permits and Authorization –

The City of Hagerstown will apply for and obtain the general building permit and site grading permits. The contractor shall be responsible for securing all other trade permits.

Warranty –

Contractor shall warrant all new construction and materials associated with the pavilion beginning upon final acceptance of the project for a minimum period of two years to correct defects in materials and/or workmanship. This shall not preclude longer warranty periods noted elsewhere in individual sections.

WORK SCOPE "B" – LOCOMOTIVE REHABILITATION SUBCONTRACT

Work is described in Section 01 11 05 Supplemental Summary of Work – Work Scope "B" - Locomotive Rehabilitation. This work shall be performed as a sub-contract to Work Scope "A" The following firms are prequalified and are eligible to perform locomotive restoration as a sub-contractor on this project:

Steam Operations Corporation – Birmingham, AL 35210
Contact: Scott Lindsey (205) 908-6104
www.steamoperations.com

Steam Services of America – Sylva, NC 28779
Contact: Robert Franzen (828) 226-5214
www.steamservicesofamerica.com

City Park Train Hub
Locomotive Refurbishment &
Pavilion Replacement
City of Hagerstown, MD

01 11 00-2
Summary of Work

Proj No: 19-35

FMW Solutions – Duluth, MN 55812
Contact: (423) 425-9753
<https://www.fmwsolutions.com/>

Diversified Rail Services – Ringgold, GA 30736
Contact: Gary Bensman (512) 657-3230

Additional Restoration Firms can be approved as Sub-contractors for use on this project by the City of Hagerstown upon approval of completed prequalification documents. Bidders shall submit prequalification documents for review per Section 00 20 25 Prequalification Requirements.

- END OF SECTION 01 11 00 -

Line Code	City of Hagerstown - Train Hub SCHEDULE OF VALUES					
	WORK SCOPE "A" - GENERAL CONTRACT AND NEW PAVILION					
	Updated 06/09/22					
	CSI Division		Item/Description	Bid Calculations		
Number	Name	Unit		Qty	Cost	
001	1	General Conditions	Month	8		
002			Dumpster/Portable Toilet	Month	8	
003				General Conditions \$ -		
004	2	Sitework and Selective Demolition	Remove 1 bay of existing pavilion structure	LS	1	
005			Remove and salvage railroad signal equipment	LS	1	
006			Remove existing asphalt walkways	LF	310	
007			Remove existing trees	EA	4	
008			Fill existing culvert with stone or lean concrete	LS	1	
009			Remove track at new pavilion - salvage rail and ties	LS	1	
010			Reinstall track with new ballast, ties, and painted	LS	1	
011			Install sediment control devices	LS	1	
012			Earthwork excavation - rock excluded	CY	50	
013			Earthwork fill - off-site material required	CY	175	
014			Excavate for new culvert, install pipe, and backfill	LF	75	
015			Final grade and top soil	LS	1	
016			Seeding	LS	1	
017			Install submerged gravel wetland structures including gabion weir, precast conc. inlets, trashrack, and underdrains	LS	2	
018			Landscaping			
019			Install underground rain leaders	LF	275	
020	Safety Fence	LF				
021		Sitework and Selective Demolition \$ -				
022	3	Concrete	Concrete footings	EA	12	
023			Concrete slab with stone base and turndown edge	SF	3500	
024			Sidewalks with stone base, curbs, and steps	SF	1040	
025			Detectable warning pads at conc. Ramps	EA	2	
026		Concrete \$ -				
027	4	Masonry				
028						
029		Masonry \$ -				
030	5	Metals	Steel columns with bent plate saddles	LF	12	
031			Splice plates and brackets	LS	1	
032			Painted steel stairs with diamond plate treads	Per RISER	12	
033			Painted steel guardrails & handrails	LF	100	
034			Galvanized steel removable hand rails	LF	18	
035		Metals \$ -				
036	6	Carpentry	Timber trusses	EA	6	
037			Timber beams	EA	30	
038			Wood rafters	EA	42	
039			T&G wood roof deck	SF	3880	
040			Custom wood brackets	EA	48	
041			Wood fascia and trim	LF	480	
042			Bird spikes	LF	360	
043			Fasteners for wood construction	LS	1	
044		Carpentry \$ -				
045	7	Envelope	Standing seam metal roof	SF	3880	
046			Flashing and trim	LS	1	
047			Snow guards and roof accessories	EA	220	
048			Gutters and downspouts	LF	220	
049		Envelope \$ -				
050	8	Doors and Windows	Clerestory windows	SF	480	
051						
052		Doors and Windows \$ -				
053	9	Finishes	Painting of steel and wood structure	LS	1	
054			Clear coat finish of wood structure	LS	1	
055		Finishes \$ -				
056	10	Specialties	Signage	LS	1	
057			Fire extinguishers	EA	2	
058				Specialties \$ -		
059	11	Equipment				
060				N/A		
061	12	Furnishings				
062						
063						
064				Furnishings \$ -		

065	13	Special Construction	N/A			
066						
067						
068	14	Conveying Systems	N/A			
069						
070						
071	15	Mechanical	N/A			
072						
073						
074	16	Electrical	Relocate existing pole light and power line	Hagerstown Light Dept (No cost to proj)	\$ -	
075			Building lighting and controls	EA	32	
076			Power distribution and devices	EA	6	
077			Subpanel to new pavilion	EA	1	
078						
			Electrical		\$	

Total	
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City of Hagerstown - Train Hub SCHEDULE OF VALUES

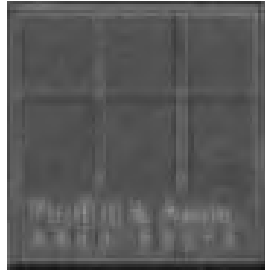
WORK SCOPE "B" - LOCOMOTIVE REHABILITATION

Updated 06/09/22

01 11 05 Specification Reference	Item/Description	Bid Calculations			
		Qty	Cost		
PREPARATION WORK ASSOCIATED WITH REHABILITATION					
A	1	Hazardous Materials Abatement - Remove insulation and wrappings	1		
	2	Disassembly, classification, and storage of engine components	1		
	3	Degrease all surfaces identified to be repainted	1		
	4	Prepare metallic surfaces for repainting	1		
	5	Preparation wood surfaces for repainting	1		
ADDRESS MISSING COMPONENTS					
B	1	Smokebox Front Grab Iron with 3 Stanchions and 2 End Caps	Custom Fabrication and Castings with Powder Coating	1	
	2	Smokebox Top Grab Iron with 6 Stanchions and 2 End Caps	Custom Fabrication and Castings with Powder Coating	1	
	3	Headlight and Classification Light Conduits	Custom Fabrication with Conventional Painting	1	
	4	Boiler Top Check Valve	New Cast Aluminum Facsimile	1	
	5	Feedwater Piping	Custom Fabrication with Conventional Painting	2	
	6	Sand Pipes	Custom Fabrication with Conventional Painting	4	
	7	Boiler Jacket and Spacers	Custom Sheet Metal Fabrication with Conventional Painting	1	
	8	Right Pilot Wheel Fender	Custom Fabrication with Conventional Painting	1	
	9	Builder's Plate	Surplus Casting	1	
	10	Backhead Valves and Handles	Surplus Casting	13	
	11	Gauge Cocks and Gauge Cock Funnel	Surplus Casting	1	
	12	Steam Heat Reducing Valve	Surplus Casting	1	
	13	Boiler Pressure Gauge	Custom Photo Lamination on Steel Plate	1	
	14	Boiler Water Level Glass	Custom Photo Lamination on Steel Plate	1	
	15	Oil Can Tray	Custom Sheet Metal Fabrication with Conventional Painting	1	
	16	Engineer's and Fireman's Seat	Custom Wood and Upholstery	2	
	17	Boiler Grab Iron with 1 Stanchion and 1 End Cap	Custom Fabrication with Conventional Painting	1	
PRESERVED COMPONENTS					
C	A	Engine Numbers	Custom Resin Castings	1	
	B	Brass Stars	Custom Resin Castings	1	
	C	Classification Lights	Reinstall original item	1	
	D	Compressed Air Cooling Coil	Reinstall original item	1	
	E	Brass Bell	Retain installed item and repaint	1	
	F	Brass Whistle	Surplus item	1	
	G	Steam Generators	Reinstall original item	1	
	H	Air Brake Gauge	Custom Photo Lamination on Steel Plate	1	
	I	Train Air Brake Gauge	Custom Photo Lamination on Steel Plate	1	
	J	Engine Air Brake Gauge	Custom Photo Lamination on Steel Plate	1	
	K	Boiler Pressure Gauge	Custom Photo Lamination on Steel Plate	1	
	L	Air Brake Gauge	Custom Photo Lamination on Steel Plate	1	
	M	Smokebox Door Dogs	Reinstall original item	12	

REHABILITATION SCOPE					
D	I	Electrify, Replace Headlight Lens and Number Boards	Lexan with Silk Screen Numerals	2	
	II	Refinish Side Rods and Valve Gear	Recondition and Repaint	1	
	III	Repaint Locomotive, Cab, and Tender	Includes Stenciling and Striping	1	
Total					

01 11 05 SUPPLEMENTAL SUMMARY OF WORK –
LOCOMOTIVE REHABILITATION



**Cosmetic Restoration of
WESTERN MARYLAND RAILWAY LOCOMOTIVE # 202
at the Hagerstown Railroad Museum – Hagerstown City Park
Proj. No. 19-35**

INTRODUCTION and HISTORICAL BACKGROUND



Listed on the National Register of Historic Places, Locomotive # 202 is the cornerstone attraction of the Hagerstown Railroad Museum and Hagerstown City Park. The Locomotive was built for the Western Maryland Railway in 1912 by the Baldwin Locomotive Works in Philadelphia, PA along with seven sister locomotives of the K-2 class. It was donated in 1953 to the Children of the City of Hagerstown by the railroad and Locomotive # 202 is the only remaining example of a main line steam engine in existence from the Western Maryland. Over the years as a museum display, the 202 has received careful stewardship including keeping it under cover, but recently the appearance has suffered and it is in great need of cosmetic restoration.

As part of this project, the Locomotive has been evaluated by an expert from the Strasburg Rail Road Company in Pennsylvania and much of their first person report is included herein as the basis for the scope of work for the rehabilitation effort. The work scope items are outlined below (in suggested order from start to finish) and are identified to the greatest extent possible in the color-coded photo overlays attached to the end of

01 11 05 SUPPLEMENTAL SUMMARY OF WORK –
LOCOMOTIVE REHABILITATION

this report. Work is classified herein and identified by Red, Green, or Blue alphanumeric designations to the corresponding items on the photos.

**WORK SCOPE B – LOCOMOTIVE #202
COSMETIC RESTORATION**

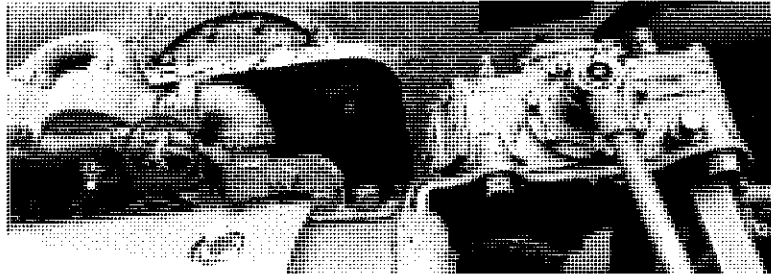
A. PRE-RESTORATION ACTIVITIES AND RESPONSIBILITIES

1. Responsibilities - The restoration Contractor shall be responsible for all means and methods of the restoration work within the guidelines established in this scope of work document.
2. Schedule - Prior to restoration work, the Contractor shall submit a restoration work plan and schedule for review and approval by the City and the Design Team. The plan will list all major steps in the work with time frame (start/finish) projected on the schedule.
3. Submittals – Prior to restoration work, the Contractor shall submit product submittals for all materials to be used in the work for approval by the City and the Design Team. These shall include but not be limited to cleaning and restoration products, metals/woods/synthetics and other restoration materials, paints and other finish materials. Submittals for all materials shall include product data, samples, and color selections where appropriate. Submittals for all chemical products shall include MSDS information.
4. Warranty – Contractor shall warrant all new materials and workmanship associated with the locomotive for a period of two years to correct defects in materials and/or workmanship.

B. PREPARATION WORK ASSOCIATED WITH RESTORATION

1. Hazardous Materials Abatement – The Contractor (or his Subcontractor) shall remove asbestos insulation and wrappings as noted in specification Section 02 26 00 and the companion hazardous materials report prepared by Triad Engineering. The boiler lagging (insulation) is modern and is composed of fiberglass. As a large portion of the boiler is concealed by sheet metal, there may be remnants of insulation that may contain asbestos that shall be abated if encountered. In addition, there are small diameter lines and cables on the engine that are wrapped in fabric tape insulation which tests positive for ACM (asbestos contain materials) as noted in the report and shall be abated.

01 11 05 SUPPLEMENTAL SUMMARY OF WORK –
LOCOMOTIVE REHABILITATION



Example of fabric tape insulation that contains asbestos.

As noted in the report, it is not anticipated that abatement of lead based paint will be required for this project.

2. Disassembly – Contractor shall photograph, index, and catalog components and their locations. Organize components and sub-assemblies including fasteners, clamps, etc. and keep secure and protected from the weather. The Contractor shall be responsible for determining the extent of removal and include the associated costs in his bid. It is expected that the Contractor will remove only those components necessary to accomplish the work items listed herein including but not limited to replacement of the boiler jacket and repainting of the side rods. The Contractor shall ensure that all components are properly reinstalled on the locomotive.
3. Clean and Degrease – Contractor shall clean and degrease all surfaces identified to be repainted. Apply “Chesterton 292” degreaser (or similar product) with a garden sprayer, then hot rinse it off with a heated pressure washer. **AVOID** driving dirt and water into the bearings and moving parts to the greatest extent possible to prevent damage to concealed surfaces. For detailed cleaning/degreasing around bearings and moving parts, remove build-up with putty knives, rags, and “Totally Awesome” degreaser (or similar product).
4. Prepare Metallic Surfaces for Repainting – Prior to painting, Contractor shall examine and treat all areas of sheet and cast metal identified to be repainted. Treatment shall include:
 - a. Scraping and needle scaling of loose paint and rusted metal. **DO NOT** use sandblast equipment on any part of the locomotive as this can seriously harm the bearings and operable parts of the locomotive.
 - b. Sanding areas where secure paint abuts scrapped paint to produce a smooth transition under the finish coat.
 - c. Sanding areas at lettering and striping to produce a smooth transition and prevent telescoping of old lettering and striping through the new finish coat.
 - d. After degreasing and sanding, wipe with “Wil-Bond” surface conditioner (or similar product) and tack cloth the portion immediately about to be painted. Apply a primer compatible with the finish paint (per the paint supplier’s instructions).

01 11 05 SUPPLEMENTAL SUMMARY OF WORK –
LOCOMOTIVE REHABILITATION

5. Prepare Wood Surfaces for Repainting – Prior to painting, Contractor shall examine and treat areas of wood identified to be painted. Treatment shall include:
 - a. Scraping of loose paint.
 - b. Repair/replace damaged wood.
 - c. Sanding areas where secure paint abuts scrapped paint to produce a smooth transition under the finish coat.

C. ADDRESS MISSING COMPONENTS

1. Electrical System and Lighting

Headlight and Classification Light Conduits (See Item 3, Fig. 3) – Replacements to be fabricated from bent steel pipe and painted to match the boiler jacket. These conduits shall be compliant with NEC (National Electric Code) and functional to convey wiring from new the control panel at the stairs to the locomotive cab to the lights.

2. Grab Irons and Railings

Smokebox Front Grab Iron (See Item 1, Figs. 1, 2, and 3) – Replacements for missing stanchions and end caps to be fabricated from cast iron and curved grab iron to be fabricated from bent steel pipe. All to be powder coated to simulate polished brass.

Smokebox Top Grab Iron (See Item 2, Figs. 2 and 3) – Replacements for missing stanchions and end caps to be fabricated from cast iron and curved grab iron to be fabricated from bent steel pipe. All to be powder coated to simulate polished brass.

It's likely that several of the handrail stanchions are missing and will need replaced. The Contractor shall include fabrication of 6 new stanchions – or – purchase of 6 surplus replacements in his bid.



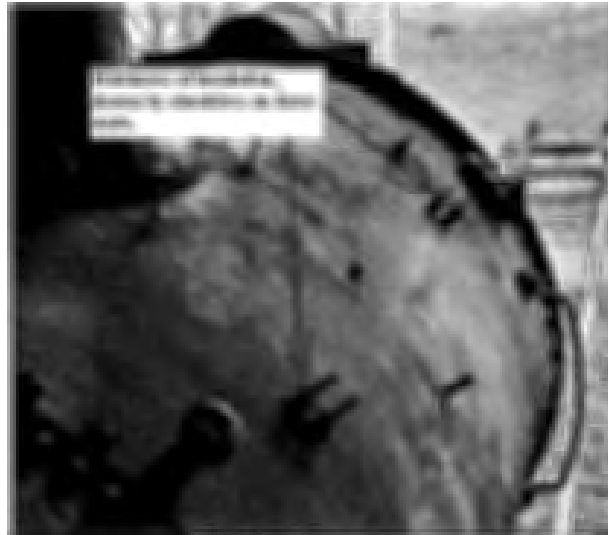
Loose handrail stanchion.

3. Numbers and Decorations

01 11 05 SUPPLEMENTAL SUMMARY OF WORK –
LOCOMOTIVE REHABILITATION

Builder's Plate (See Item 9, Fig. 3) – Contractor shall include fabrication of a facsimile – or – purchase of surplus replacement in his bid.

4. Boiler Jacket (See Item 7, Figs. 2 and 3) – Contractor shall remove the remaining sheet metal jacketing, and fiber glass (and other) insulation from the boiler (sheet metal jacket in cab at backhead to remain). Prior to replacement, the Contractor shall apply a coat of protective paint to the boiler to aid in its long-term preservation. Then replace the jacket with new 18 gauge steel sheet metal with PVC pipe (or other spacers) to hold the jacket the proper distance from the boiler and allow air flow. Spacers shall be placed to adequately support the jacket and prevent dents especially at the top where foot traffic can occur. Note that the 202 has a jacketed smokebox and the thickness of the insulation there is shown by the studs still present on the smokebox. For the base bid, the Contractor shall include new jacketing for the top half of the boiler (above the running boards) and the full circumference of the smokebox. Provide a hem in the jacket to receive a future full jacket under the boiler.

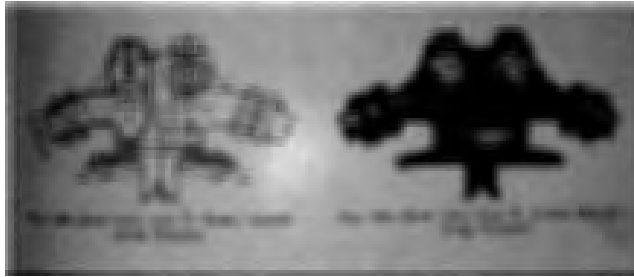


Thickness of old insulation on #202's smokebox.

5. Boiler Piping and Valves

Boiler Top Check Valve (See Item 4, Figs. 2 and 3) – Contractor shall include fabrication of an aluminum replacement in his bid.

01 11 05 SUPPLEMENTAL SUMMARY OF WORK –
LOCOMOTIVE REHABILITATION



A typical boiler top check valve. This is a bronze casting, weighing perhaps 150 lb.



The mounting flange for the check valve, and brackets of the feedwater pipes.

Feedwater Piping (See Item 5, Figs. 2 and 3) – Contractor shall fabricate replacements from bent steel pipe and painted to match the boiler jacket.

6. Accessories and Piping

Sand Pipes (See Item 6, Figs. 2 and 3) – Some of the sand piping is stored loose under the locomotive and shall be reused. Replacements for missing piping shall be fabricated from bent steel pipe and painted to match the boiler jacket.

Pilot Wheel Fender (See Item 8, Fig. 3) – Replacement shall be fabricated from heavy sheet steel using remaining fender on the opposite side as a template. Fender shall be painted out with the locomotive.

Boiler Grab Iron (See Item 17, Fig. 3) - Replacements for missing grab iron shall be fabricated from bent steel pipe and painted to match the boiler jacket.

7. Cab and Boiler Backhead

Valves and Valve Handles (See Items 10, Fig. 4) – Contractor shall include purchase of surplus replacements in his bid.

01 11 05 SUPPLEMENTAL SUMMARY OF WORK –
LOCOMOTIVE REHABILITATION

Gauge Cock and Gauge Cock Funnel (See Item 11, Fig. 4) – Contractor shall include purchase of a surplus replacement in his bid.

Steam Heat Reducing Valve (See Item 12, Fig. 4) - Contractor shall include purchase of a surplus replacement in his bid.

Boiler Pressure Gauge (See Item 13, Fig. 4) - Contractor shall include fabrication of facsimile with photos of the gauge face laminated onto sheet metal or PVC pipe fittings with brackets to attach to the jacket on the backhead.

Boiler Water Level Glass (See Item 14, Fig. 4) - Contractor shall include purchase of a surplus replacement in his bid.

Oil Can Tray (See Item 15, Fig. 4) – Contractor shall fabricate a replacement from sheet steel painted to match the boiler jacket.

Engineer's and Fireman's Seat (See Item 16, Fig. 4) – Contractor shall fabricate a replacement from wood and upholstery painted to match the remainder of the cab.

D. PRESERVED COMPONENTS

1. Numbers and Decorations

Engine Numbers (See Item A, Figs. 1, 2, and 3) – These are preserved in the museum and will not be reinstalled on the locomotive. Contractor shall fabricate facsimiles from cast resin or cast metal then paint and apply to the locomotive.

Brass Stars (See Item B, Figs. 1, 2, and 3) – These are preserved in the museum and will not be reinstalled on the locomotive. Contractor shall fabricate facsimiles from cast resin or cast metal then paint and apply to the locomotive.

2. Bells and Whistles

Brass Bell (See Item E, Figs. 2 and 3) – The bell currently displayed on the locomotive shall remain. Contractor shall clean and repaint the underside of the bell and clapper. Restrung the mechanism to remain operational from the cab.

Brass Whistle (See Item F, Figs. 2 and 3) – This is preserved in the museum and will not be reinstalled on the locomotive. Contractor shall include purchase of a surplus replacement in his bid.

3. Electrical System and Lighting

01 11 05 SUPPLEMENTAL SUMMARY OF WORK –
LOCOMOTIVE REHABILITATION

Classification Lights (See **Item C**, Figs. 1, 2, and 3) – These are preserved in the museum and will not be reinstalled on the locomotive. Contractor shall include purchase of surplus replacements in his bid.

Steam Generators (See **Item G**, Fig. 3) – These are preserved in the museum and will be painted and reinstalled by the Contractor on the Locomotive.

4. Cab and Boiler Backhead

Gauges (See **Items H, I, J, K, L**, Fig. 4) – These are preserved in the museum and will not be reinstalled on the locomotive. Contractor shall include fabrication of facsimiles with photos of the gauge face laminated onto sheet metal or PVC pipe fittings with brackets to attach to the jacket on the backhead.

5. Miscellaneous

Compressed Air Cooling Coil (See **Item D**, Fig. 1) – This is preserved on the museum grounds and will be painted and reinstalled by the Contractor on the Locomotive.

Smoke Box Door Dogs (See **Item M**, Fig. 1) – These are preserved in the museum and will be painted and reinstalled by the Contractor on the Locomotive.

E. REHABILITATION SCOPE

1. Electrical System and Lighting

Headlight and Number Boards (See **Item I**, Figs. 1, 2, and 3) – To prevent permanent damage to the artifact, the Contractor shall remove the glass and replace with a lexan facsimile with silkscreened number boards. All lights on the locomotive shall be rewired to make them operable and controlled from the panel box situated below the stairs to the locomotive cab.

2. Running Gear

Side Rods and Valve Gear (See **Item II**, Figs. 2 and 3) Contractor shall clean, degrease, and polish the rods with power tools, belt sanders, flapper wheels, 3M pads, etc. After degreasing and sanding, wipe with “Wil-Bond” surface conditioner (or similar product) and tack cloth the portion immediately about to be painted. Apply a primer compatible with the finish paint (per the paint supplier’s instructions) then paint the rods with silver/aluminum paint.

01 11 05 SUPPLEMENTAL SUMMARY OF WORK –
LOCOMOTIVE REHABILITATION



Aluminum paint still in place on the left radius rod.

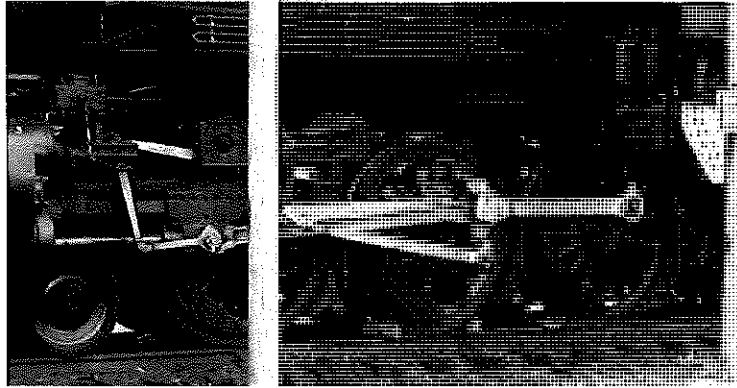
3. Paint:

All sheet and cast metal components – Contractor shall complete final prep as noted above and then paint with “Interlux Brightside” one-part polyurethane by spray method. Contractor shall be responsible for establishing a controlled painting environment under the existing shelter by tenting the sides of the structure to prevent weather, wind, rain, from affecting the finishing of the locomotive.

F. ALTERNATES

1. Full boiler jacket – In addition to the base bid partial replacement of the boiler jacket described above, the Contractor shall submit separate pricing for installing a full boiler circumference boiler jacket from cab to smokebox.
2. Powder Coat Running Gear – In lieu of painting the rods as they are on the locomotive, the Contractor shall remove the rods from the locomotive, polish them as noted above, have them powder coated clear, and reapply them to the locomotive. The 202 will need to be moved short distances to get the rods into positions to remove them and heavy tools will be needed to do the work of removing them.

01 11 05 SUPPLEMENTAL SUMMARY OF WORK –
LOCOMOTIVE REHABILITATION



#202's rods with an authentic in-service appearance from several years ago.

The following wrench sizes will be needed to remove the driving rods:

Eccentric rod small end; 1-15/16"

Eccentric rod crankpin; 2-3/4"

Eccentric crank clamp; 1-5/8", 2-1/8", 2-1/4"

Wristpin; 4-1/2"

Knuckle pin; 3-3/4", 3-7/8"

#3 Crankpin cap; 3-3/4"

The nuts to remove the front crankpin caps are on the inside face of the wheels, so are not known. Similarly, the valve gear parts are held in place by various size nuts and taper pins that are unknown.

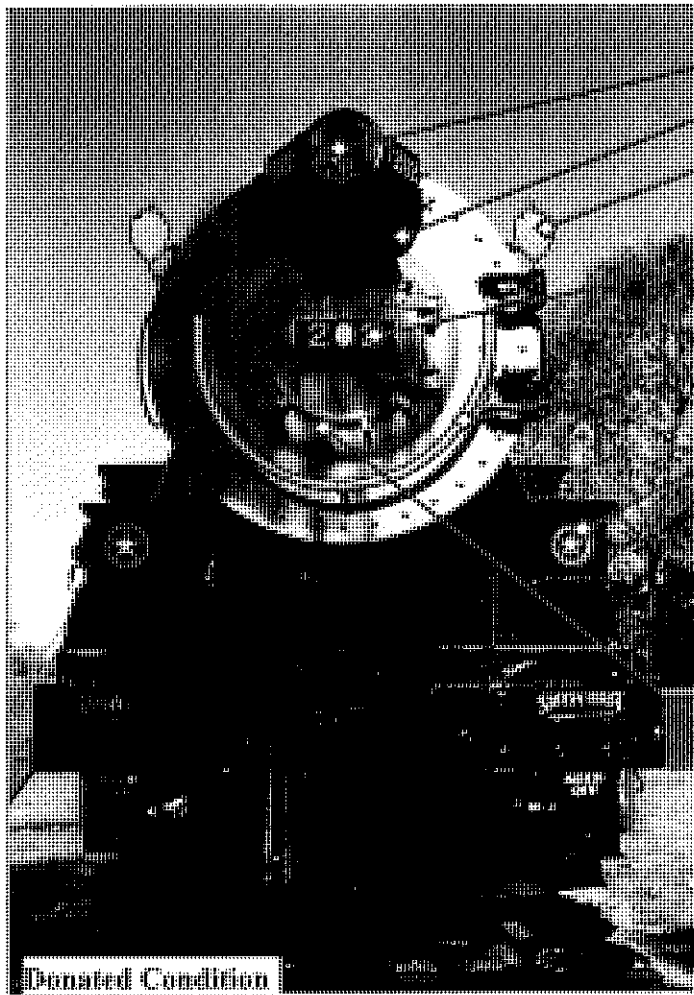
Once powder coated, the rods shall be wrapped, protected, and treated very carefully to avoid chipping the powder coat. Keep protective wrapping intact to the greatest extent possible when lifting or prying on them during reassembly. After assembly is complete and the protective wrapping is removed, carefully examine the rods to ensure there are no breaches in the coating. Any deformities in the coating shall be repaired immediately with a compatible clear coat.

3. Upgrade Paint – In lieu of the base bid one part polyurethane paint described above, the Contractor shall submit separate pricing for upgrading the paint to "Imron 3.5 HG" high gloss polyurethane to be applied by a painting professional.

END OF REPORT

Western Maryland Railway # 202 - Front

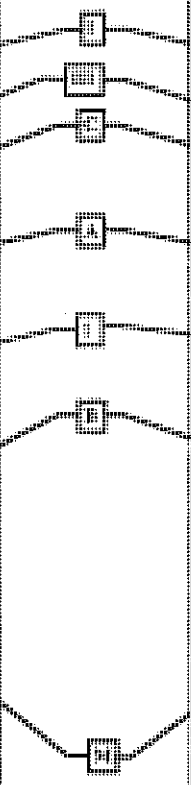
181



Dated Condition



Current Condition



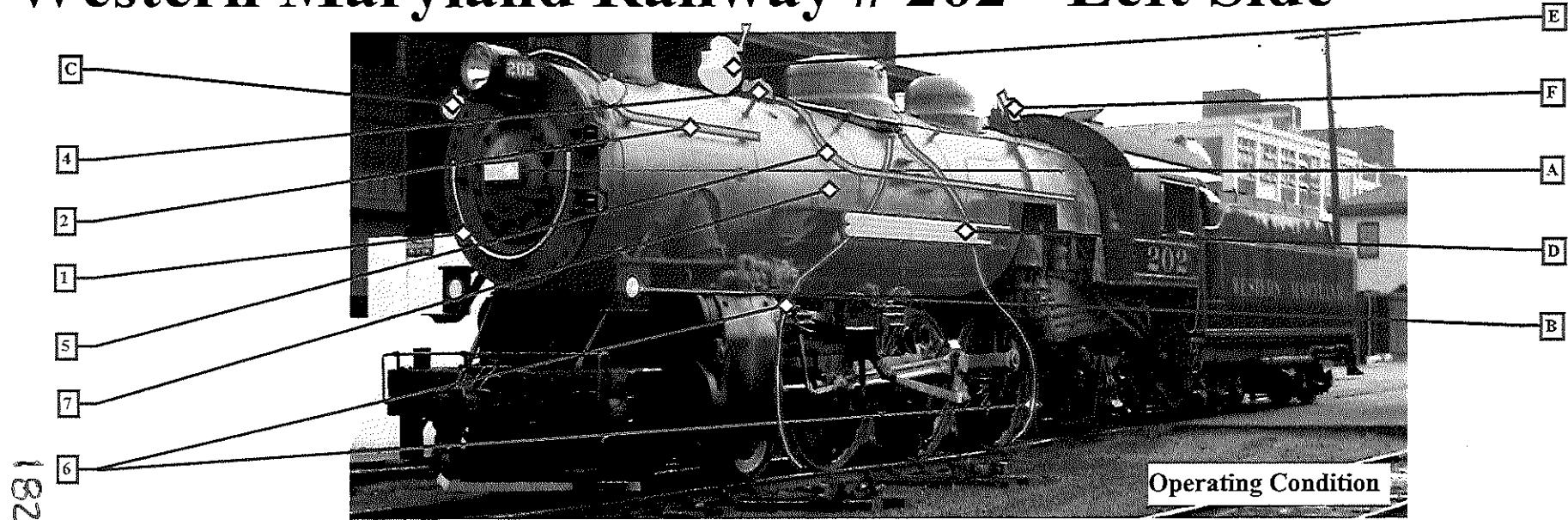
Missing Components
 I - Horn Straps (Not From Quid Inc.)

Preserved Components
 A - Engine Number
 B - Horn Straps (II)
 C - Classification Light (I)
 M - Smoke Box Door Hogs (II)

Rehabilitation Scope
 I - Remove and open headlight lens and engine number - replace with brass handmike
 III - Repair Locomotive and Tender

Figure 1

Western Maryland Railway # 202 - Left Side



- Missing Components**
- 1 - Brass Smoke Box Front Grab Iron
 - 2 - Brass Smoke Box Top Grab Iron
 - 4 - Boiler Top Check Vavle
 - 5 - Feed Water Piping (Left Side)
 - 6 - Sand Pipes (2)
 - 7 - Boiler and Smoke Box Jacket

- Preserved Components**
- A - Engine Numbers
 - B - Brass Stars (2)
 - C - Classification lights (2)
 - D - Compressed Air Cooling Coil
 - E - Brass Bell
 - F - Brass Whistle

- Action Item**
- I - Remove and store headlight lens and engine numbers - replace with lexan facsimiles
 - II - Polish Side Rods and Valve Gear
 - III - Repaint Locomotive and Tender

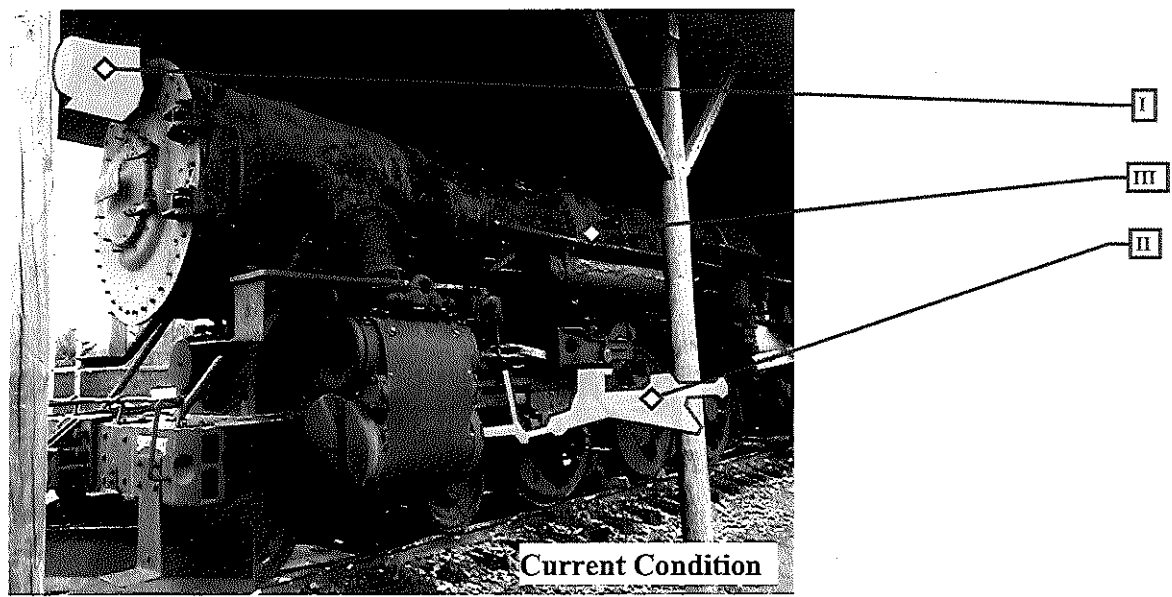


Figure
2

Western Maryland Railway # 202 - Right Side

183



Donated Condition

- Missing Components**
- 1 - Brass Smoke Box Front Grab Iron
 - 2 - Brass Smoke Box Top Grab Iron
 - 3 - Headlight and Classification Light Conduit (Right Side)
 - 4 - Bronze Boiler Top Check Valve
 - 5 - Feed Water Piping (Right Side)
 - 6 - Sand Pipes (2)
 - 7 - Boiler Jacket
 - 8 - Pilot Wheel Fender (Right Side)
 - 9 - Builder's Plate (Right Side)
 - 17 - Boiler Grab Iron (Right Side)

- Preserved Components**
- A - Engine Numbers
 - B - Brass Stars (2)
 - C - Classification Lights (2)
 - E - Brass Bell
 - F - Brass Whistle
 - G - Steam Generators (2)

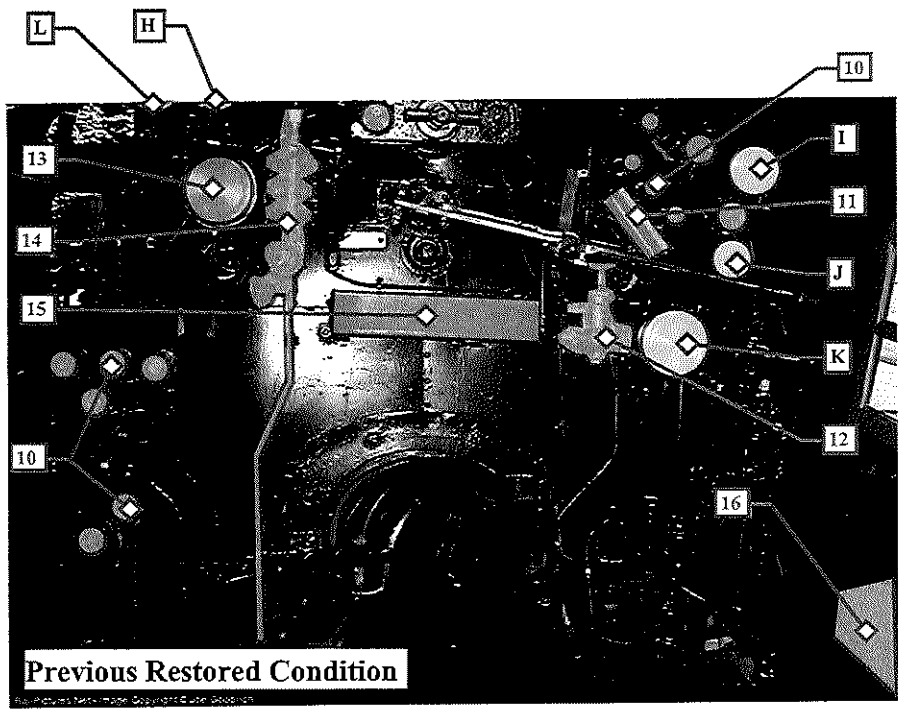
- Action Item**
- I - Remove and store headlight lens and engine numbers - replace with lexan facsimiles
 - II - Polish Side Rods and Valve Gear
 - III - Repaint Locomotive and Tender



Current Condition

**Figure
3**

Western Maryland Railway # 202 - Boiler Backhead



184

- Missing Components**
- 10 - Valves/Handles (13)
 - 11 - Gauge Cocks and Gauge Cock Funnel
 - 12 - Steam Heat Reducing Valve
 - 13 - Boiler Pressure Gauge
 - 14 - Water Level Glass
 - 15 - Oil Can Tray
 - 16 - Engineer's Seat and Fireman's Seat

- Preserved Components**
- H - Air Brake Gauge
 - I - Train Air Brake Gauge
 - J - Engine Air Brake Gauge
 - K - Boiler Pressure Gauge
 - L - Air Brake Gauge

- Rehabilitaion Scope**
- III - Repaint Locomotive, Cab, and Tender

Figure
4

SECTION 01 31 00
PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. Coordination Drawings.
 - 2. Administrative and supervisory personnel.
 - 3. Project meetings.
 - 4. Request for Information (RFI)
- B. Related Sections include the following:
 - 1. Division 1 Section "Construction Progress Documentation" for preparing and submitting Contractor's Construction Schedule.
 - 2. Division 1 Section "Execution Requirements" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
 - 3. Division 1 Section "Closeout Procedures" for coordinating Contract closeout.
- C. Definitions
 - 1. Request for Interpretation (RFI) – A request from the Contractor seeking a clarification of the Contract Documents

1.3 COORDINATION

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different specification sections that depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.
 - 4. Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.

5. Coordinate installation of owner furnished equipment.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
1. Preparation of Contractor's Construction Schedule.
 2. Preparation of the Schedule of Values.
 3. Installation and removal of temporary facilities and controls.
 4. Delivery and processing of submittals.
 5. Progress meetings.
 6. Pre-installation conferences.
 7. Project closeout activities.
 8. Startup and adjustment of systems.
- D. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to the conservation of energy, water, and materials.
1. Salvage materials and equipment involved in the performance of, but not necessarily incorporated into the work. Refer to other Sections for disposition of salvaged materials that are designated as Owner's property.

1.4 SUBMITTALS

- A. Coordination Drawings: Prepare Coordination Drawings where limited space availability necessitates maximum utilization of space for efficient installation of different components or where coordination is required for installation of products and materials fabricated by separate entities.
1. Content: Project-specific information, drawn accurately to scale. Do not base Coordination Drawings on reproductions of the Contract Documents or standard printed data. Include the following information, as applicable:
 - a. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
 - b. Indicate required installation sequences.
 - c. Indicate dimensions shown on the Contract Drawings and make specific note of dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Architect for resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.
 2. Sheet Size: At least 18 by 24 inches but no larger than 30 by 40 inches.
 3. Number of Copies: Submit four (4) copies of each submittal. The Architect will return two (2) copies.

- a. Submit six (6) copies where Coordination Drawings are required for operation and maintenance manuals. Architect will retain two (2) copies; the remainder will be returned. Mark up and retain one (1) returned copy as a Project Record Drawing.
4. Refer to individual Sections for Coordination Drawing requirements for Work in those Sections.

- B. Key Personnel Names: Within seven (7) calendar days of starting construction operations, submit a list of key personnel assignments, including superintendent, subcontractors, and other personnel in attendance at Project site. Identify all key individuals and their duties and responsibilities; list addresses and telephone numbers, including home, office and cell telephone numbers for Contractor's Project Manager and Project Superintendent. These telephone numbers must be provided so that an immediate response can be received by the Owner for Project or Work related emergencies. Provide names, addresses, and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project.
1. Post copies of list in Project meeting room, in temporary field office, and by each temporary telephone. Keep list current at all times.

1.5 PROJECT MEETINGS

- A. General: Owner will schedule and conduct Progress Meetings Project site, unless otherwise indicated. The Contractor will schedule and conduct at the Project site pre-installation meetings and conferences required to complete the construction activities.
1. Attendees: Inform subcontractors and others involved, and individuals whose presence is required, of date and time of each meeting. Notify the Owner and Architect of absences at least three (3) calendar days in advance of Progress Meetings. Notify the Owner and Architect of attendance requirement at coordination meetings or functional tests at least three (3) calendar days in advance of the event.
- B. Preconstruction Conference: Owner will schedule a preconstruction conference at a time convenient to Owner, Architect, and Contractor and no later than fourteen (14) calendar days after the execution of the Agreement. Owner will hold the conference at the Project site or another convenient location.
- C. Pre-Installation Meetings: The Contractor will schedule pre-installation meetings as required by the contract documents and at a time convenient to Owner, Architect, and Contractor. The Contractor will provide no less than fourteen (14) calendar days advance notice of the meeting location, date, and time. The Contractor will conduct the meeting to review responsibilities, personnel assignments, and coordination requirements with all relevant subcontractors.
- D. Progress Meetings: Owner will conduct progress meetings at biweekly intervals and will coordinate dates of meetings with preparation of payment requests.
1. Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.
 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.

- a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - 1) Review schedule for activities to be completed before next Progress Meeting.
- b. Review present and future needs of each entity present, including the following:
 - 1) Status of submittals. Contractor will distribute copies of the Submittal Log monthly.
 - 2) Access.
 - 3) Work hours.
 - 4) Hazards and risks.
 - 5) Progress cleaning.
 - 6) Quality and work standards.
 - 7) Status of correction of deficient items.
 - 8) Field observations.
 - 9) Requests for interpretations (RFIs). Contractor will distribute copies of the RFI Log monthly.
 - 10) Status of proposal requests.
 - 11) Pending changes.
 - 12) Status of Change Orders.
 - 13) Documentation of information for payment requests.
3. Minutes: Architect will record the meeting minutes.
4. Reporting: Architect will distribute minutes of the meeting to each party present and to parties who should have been present.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 31 00

SECTION 01 32 00
CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
 - 1. Preliminary Construction Schedule.
 - 2. Contractor's Construction Schedule.
 - 3. Submittals Schedule.
- B. Related Sections include the following:
 - 1. Division 1 Section "Payment Procedures" for submitting the Schedule of Values.
 - 2. Division 1 Section "Project Management and Coordination" for submitting and distributing meeting and conference minutes.
 - 3. Division 1 Section "Submittal Procedures" for submitting schedules and reports.
 - 4. Division 1 Section "Quality Requirements" for submitting a schedule of tests and inspections.

1.3 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
- B. Milestone: A key or critical point in time for reference or measurement.

1.4 SUBMITTALS

- A. Submittals Schedule: Submit five (5) copies of the submittals schedule to the Architect within fourteen (14) calendar days after the pre-construction meeting.
- B. Contractor shall provide a Submittal Log with the Submittal Identification Numbers at the pre-construction meeting for the Architect's review and approval.
- C. Arrange the following information in a tabular format:
 - 1. Scheduled date for first submittal.
 - 2. Specification Section number and title.
 - 3. Submittal Identification Number from the Submittal Log

4. Submittal category (action or informational).
 5. Name of subcontractor.
 6. Description of the Work covered.
 7. Scheduled date for Architect's final release or approval.
- D. Preliminary Construction Schedule: Submit five (5) copies of the preliminary construction schedule to the Architect in accordance with paragraph 2.3.A below.
1. Acceptance of the preliminary construction schedule will not constitute approval of Schedule of Values.
- E. All submittals shall include an electronic copy, in addition to the copies noted above.

1.5 COORDINATION

- A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.
- B. Coordinate Contractor's Construction Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.
1. Secure time commitments for performing critical elements of the Work from parties involved.
 2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

PART 2 - PRODUCTS

2.1 SUBMITTALS SCHEDULE

- A. Preparation: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, resubmittal, ordering, manufacturing, fabrication, and delivery when establishing dates.
1. Coordinate Submittals Schedule with Contractor's Construction Schedule.
 2. Include the Submittal Identification Number in the description on the Submittals Schedule.

2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. Time Frame: Extend the schedule from the date established for the Notice-to-Proceed to the date of Final Completion.
1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- B. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice-to-Proceed, Substantial Completion, and Final Completion.

2.3 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Schedule Method: Submit a comprehensive, fully-developed, Construction Schedule ten (10) calendar days prior to the construction start date established in the Notice to Proceed. Base schedule on the Preliminary Construction Schedule and whatever updating and feedback was received from the Owner and Architect.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.
- C. Sequence: The Construction Schedule shall show the sequence and interdependence of activities required for complete performance of the work. The Contractor shall be responsible for assuring all work sequences are logical and show a coordinated plan of the work. Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.
- D. Activities: Each activity on the Construction Schedule shall include:
 - 1. Concise description of the work represented by the activity; and
 - 2. Activity durations in whole work days with a maximum of ten (10) work days. Durations greater than ten (10) work days may be used for non-construction activities (mobilization, submittal preparation, curing, etc.), and other activities mutually agreeable between Owner and Contractor.
- E. Joint Review, Revision, and Acceptance: Within seven (7) calendar days of receipt of the Contractor's proposed Construction Schedule, the Architect shall evaluate the schedule for compliance with this specification, and notify the Contractor of its findings.
- F. Updates: The Construction Schedule shall be updated on a monthly basis. The Construction Schedule update shall be submitted in conjunction with the pay application.

PART 3 - EXECUTION

3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue monthly schedules with applications for payment.
 - 1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.

END OF SECTION 01 32 00

**SECTION 01 33 00
SUBMITTAL PROCEDURES**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.
- B. Related Sections include the following:
1. Division 1 Section "Project Management and Coordination" for submitting Coordination Drawings.
 2. Division 1 Section "Construction Progress Documentation" for submitting schedules and reports, including Contractor's Construction Schedule and the Submittals Schedule.
 3. Division 1 Section "Quality Control" for submitting test and inspection reports.
 4. Division 1 Section "Closeout Procedures" for submitting warranties.
 5. Division 1 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
 6. Division 1 Section "Operation and Maintenance Data" for submitting operation and maintenance manuals.
 7. Divisions 2 through 16 Sections for specific requirements for submittals in those Sections.

1.3 DEFINITIONS

- A. Action Submittals: Written and graphic information that requires Architect's responsive action.

1.4 SUBMITTAL PROCEDURES

- A. General: Electronic copies of CAD Drawings of the Contract Drawings will be provided upon request by Architect for Contractor's use in preparing submittals.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that requires sequential activity.
 2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.

- a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

- C. Submittals Schedule: Comply with requirements in Division I Section "Construction Progress Documentation" for list of submittals and time requirements for scheduled performance of related construction activities.

- D. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals in advance of the Work to permit processing, including resubmittals.
 - 1. Initial Review: Allow fourteen (14) calendar days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
 - 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
 - 3. Resubmittal Review: Allow fourteen (14) calendar days for review of each resubmittal.
 - 4. Sequential Review: Where sequential review of submittals by Architect's consultants, Owner, or other parties is indicated, allow twenty-one (21) calendar days for initial review of each submittal.

- E. Identification: Place a permanent label or title block on each submittal for identification.
 - 1. Indicate name of firm or entity that prepared each submittal on label or title block.
 - 2. Provide a space approximately 6 by 8 inches on label or beside title block to record Contractor's review and approval markings and action taken by Architect.
 - 3. Include the following information on label for processing and recording action taken:
 - a. Project name.
 - b. Date.
 - c. Name and address of Contractor.
 - d. Name and address of subcontractor.
 - e. Name and address of supplier.
 - f. Name of manufacturer.
 - g. Submittal number or other unique identifier, including revision identifier.

- F. Deviations: Highlight, encircle, or otherwise specifically identify deviations from the Contract Documents on submittals.

- G. Additional Copies: Unless additional copies are required for the final submittal, and unless Architect observes noncompliance with provisions in the Contract Documents, the initial submittal may serve as final submittal.

- H. Transmittal: Package each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. The Architect will discard submittals received from sources other than Contractor's Project Manager.
 - 1. Transmittal Form: Provide locations on form for the following information:

- a. Project name.
- b. Date.
- c. Destination (To:).
- d. Source (From:).
- e. Names of subcontractor, manufacturer, and supplier.
- f. Submittal Number or Identifier.
- g. Submittal purpose and description.
- h. Specification Section number and title.
- i. Drawing number and detail references, as appropriate.
- j. Transmittal number.
- k. Submittal and transmittal distribution record.
- l. Remarks.
- m. Signature of transmitter.

- I. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
 1. Note date and content of previous submittal.
 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
 3. Resubmit submittals until they are marked "No Exception Taken" or "Approved as Noted".
- J. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- K. Use for Construction: Use only final submittals with mark indicating "No Exception Taken", or "Approved as Noted" by Architect.

1.5 CONTRACTOR'S USE OF ARCHITECT'S CAD FILES

- A. General: At Contractor's written request, copies of Architect's CAD files will be provided to Contractor for Contractor's use in connection with Project, subject to the following conditions:
 1. Electronic drawings will be in the AutoCAD form for the convenience of the Contractor in the preparation of shop drawings. Electronic drawings shall not be considered to be contract documents, and the Contractor shall be responsible for the verification of all dimensions and interfaces between systems. Reproductions of CAD files submitted as shop drawings shall be rejected. CAD files provided may contain revisions after the date of the contract documents, which may or may not be flagged, and may contain information on frozen or "off" layers that has been superseded or discarded during project development, as well as information beyond the limits of drawing sheet layouts.
 2. Contractor shall pay Architect time and printing costs (Not to exceed \$200) to reproduce Architect's files.
 3. Contractor must sign the Architect's Limitation of Liability Release Form in order to receive the CAD files.

PART 2 - PRODUCTS

2.1 ACTION SUBMITTALS

- A. General: Prepare and submit Action Submittals required by individual Specification Sections.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 - 1. If information must be specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
 - 2. Mark each copy of each submittal to show which products and options are applicable.
 - 3. Include the following information, as applicable:
 - a. Manufacturer's written recommendations.
 - b. Manufacturer's product specifications.
 - c. Manufacturer's installation instructions.
 - d. Standard color charts.
 - e. Manufacturer's catalog cuts.
 - f. Wiring diagrams showing factory-installed wiring.
 - g. Printed performance curves.
 - h. Operational range diagrams.
 - i. Mill reports.
 - j. Standard product operation and maintenance manuals.
 - k. Compliance with specified referenced standards.
 - l. Testing by recognized testing agency.
 - m. Application of testing agency labels and seals.
 - n. Notation of coordination requirements.
 - 4. Submit Product Data before or concurrent with Samples.
 - 5. Number of Copies: Submit six (6) copies of Product Data, unless otherwise indicated.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
 - 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Dimensions.
 - b. Identification of products.
 - c. Fabrication and installation drawings.
 - d. Roughing-in and setting diagrams.
 - e. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
 - f. Shopwork manufacturing instructions.
 - g. Templates and patterns.
 - h. Schedules.
 - i. Design calculations.
 - j. Compliance with specified standards.

- k. Notation of coordination requirements.
 - l. Notation of dimensions established by field measurement.
 - m. Relationship to adjoining construction clearly indicated.
 - n. Seal and signature of professional engineer if specified.
 - o. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.
2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 30 by 40 inches.
 3. Number of Copies: Submit six (6) copies of Shop Drawings, unless otherwise indicated.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
 - E. Contractor's Construction Schedule: Comply with requirements specified in Division 1 Section for Construction Manager's action.
 - F. Submittals Schedule: Comply with requirements specified in Division 1 Section for Construction manager's action.
 - G. Application for Payment: Comply with requirements specified in Division 1 Section "Price & Payment Procedures."
 - H. Schedule of Values: Comply with requirements specified in Division 1 Section "Price & Payment Procedures."
 - I. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
 1. Name, address, and telephone number of entity performing subcontract or supplying products.
 2. Number and title of related Specification Section(s) covered by subcontract.
 3. Drawing number and detail references, as appropriate, covered by subcontract.
 - J. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
 - K. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with requirements specified in Division 1 Section 01770 Closeout Procedures.
 - L. Design Data: Prepare written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

- M. **Manufacturer's Instructions:** Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of manufacturer. Include the following, as applicable:
1. Preparation of substrates.
 2. Required substrate tolerances.
 3. Sequence of installation or erection.
 4. Required installation tolerances.
 5. Required adjustments.
 6. Recommendations for cleaning and protection.
- N. **Insurance Certificates and Bonds:** Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, if any, and term of the coverage.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with an approval stamp, stating that the submittal has been reviewed by the Contractor and is in compliance with the contract documents, before submitting to Architect.
- B. **Approval Stamp:** Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number or identifier, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT'S AND CONSTRUCTION MANAGER'S / ACTION

- A. **General:** Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.
1. **Action Submittals:** Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken.
- B. **Architect's Responsibility**
1. The Architect will review each submittal only for conformance with design concepts and compliance with the Contract Documents. The Architect will not be responsible for reviewing the quantities or verifying dimensions. The Architect will mark each submittal to indicate an appropriate action, and then return the submittal.

2. Action Stamp: The Architect will stamp each submittal with a self-explanatory action stamp. The stamp will be appropriately marked to indicate the action required by the Contractor.
- C. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- D. Partial submittals are not acceptable, will be considered non-responsive, and will be returned without review.
- E. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

END OF SECTION 01 33 00

SECTION 01 45 00

QUALITY CONTROL

PART 1 - GENERAL

1.1 REFERENCES

- A. Reference Standards per Division 1. Comply with following:
 - 1. ASTM D3740- Practice for Evaluation of Agencies Engaged in Testing and/or inspection of Soil and Rock as Used in Engineering Design and Construction.
 - 2. ASTM E329- Standard Recommended Practice for inspection and Testing Agencies for Concrete, Steel, and Bituminous Materials as used in Construction.
 - 3. Any other testing standards specified in individual sections.

1.2 QUALITY ASSURANCE

- A. Laboratory: Accredited to operate in State of Maryland.
- B. Laboratory: Carry \$1,000,000 professional liability insurance.

1.3 SELECTION AND PAYMENT

- A. Contractor shall employ and pay for services of independent testing laboratory to perform inspection and testing as directed. Costs for these services shall be included in the contract Lump Sum bid price.

1.4 SUBMITTALS

- A. Laboratory: After each inspection and test, promptly distribute copies of test and inspection reports made by testing laboratories as follows:
 - 1 copy- Contractor
 - 1 copy- Applicable Supplier or Subcontractor
 - 1 copy- Owner
 - 1 copy- Applicable Engineer
 - 1 copy- Architect
 - Other copies as directed.
 - 1. Test Reports: Include date issued, Project title and number, name of inspector, date and time of sampling or inspection, identification of product and specifications section, location in the Project, type of inspection or test, date of test, results of test, and conformance with Contract Documents.
 - 2. When requested by Architect, provide interpretation of test results.

1.5 RESPONSIBILITIES

A. Testing Laboratory

1. Test samples submitted by Contractor as requested by the Testing Laboratory.
2. Provide qualified personnel at site after due notice; cooperate with Architect and Contractor in performance of services.
3. Perform specified inspection, sampling, and testing of products in accordance with specified requirements.
 - a. Services: Performed in accordance with requirements of governing authorities and with Reference Standards.
4. Ascertain compliance of materials and mixes with requirements of Contract Documents.
5. Promptly notify Architect and Contractor of observed irregularities or nonconformance of work or products.
6. Perform additional inspections and tests required by Owner.
7. Attend preconstruction conferences and progress meetings.

B. Contractor

1. Notification: Notify testing laboratory at least 72 hours in advance of time for need for testing.
2. Furnish required samples without charge and give sufficient notice of placing of orders to permit testing.
3. Cooperate with testing laboratory personnel and provide access to work.
4. Provide incidental labor and facilities to provide access to work to be tested, to obtain and handle samples at site or at source of products to be tested, to facilitate tests and inspections, and for storage and curing of test samples.
5. Do not use materials or equipment represented by samples until tests, if required, have been made and materials or equipment found to be acceptable.
6. Do not incorporate any product into work which becomes unfit for use after acceptance thereof.
7. Equipment Testing and Demonstrations: Provide fuel, accessories, and tools required to operate equipment for tests and demonstrations.

C. Limits on Testing Laboratory Authority

1. May not release, revoke, alter, or enlarge on requirements of Contract Documents.
2. May not approve or accept any portion of the Work.
3. May not assume any duties of Contractor.
4. Has no authority to stop work.

1.6 TESTING AND INSPECTIONS - GENERAL

- A. Testing and Inspection: Materials or equipment proposed to be used may be tested or inspected at any time during their preparation or use. Products may be sampled either prior to shipment or after being received at site of work.
 1. Specific information concerning testing methods, sample sizes, etc., is included under applicable sections of Specifications.
 2. Any modification of, or elaboration on, these test procedures included for specific materials under their respective sections in Specifications shall take precedence over these procedures.

1.7 TESTING AND INSPECTIONS PAID FOR BY THE CONTRACTOR

- A. Control Tests and Inspections of Fill and Backfill: At such times and in such numbers as specified in Section 02300 - Earthwork, with Geotechnical Report and as required by local building authority.
- B. Control Tests and Inspections of Asphalt Paving Base and Finish Courses: At such times and in such numbers as specified in Section 02510 – Asphaltic Concrete Paving.
- C. Control Tests and Inspections of Concrete Work: At such times and in such numbers as specified in Sections 03300 - Cast-In-Place Concrete, and as required by local building authority.
- D. Control Tests and Inspections of Masonry Mortar and Grout: At such times and in such numbers as specified in Sections 04100 - Mortar and Masonry Grout, and 04300 - Unit Masonry System and as required by local building authority.
- E. Control Tests and Inspections of Welding and Bolted Joints: At such times and in such numbers as specified in Section 05120 - Structural Steel, Section 05210 – Steel Joists, Section 05311 – Steel Deck, and Section 05400 – Cold Formed Metal Framing and as required by local building authority.

1.8 OTHER TESTING AND INSPECTION

- A. Following Testing and Inspection: Performed at expense of Contractor:

1. Other Tests and Inspections: Other tests and inspections required by Contract Documents not listed in article above.
 2. Tests and inspections required by applicable codes and local public agencies having jurisdiction over Work.
 3. Additional tests and re-inspections required because of tests or inspections that fail subject to following conditions:
 - a. Quantity and Nature of Tests: Determined by Architect.
 - b. Tests: Taken in presence of Architect.
 - c. Proof of Noncompliance: Contractor liable for corrective action which Architect feels is required including complete removal and replacement of defective material.
 4. Material Substitution: Tests of materials or equipment offered as substitute for specified item on which test may be required in order to prove its compliance with Specifications.
- B. Contractor: May have tests performed on material and equipment for his own information and job control so long as Owner does not assume responsibility for costs or for giving them consideration when appraising quality of materials.

1.9 MOCK-UPS

- A. Mock-ups: When required by individual sections, erect complete, full scale mock-up of assembly at Project site at location as directed.
 1. Remove at completion of Project when accepted by Architect, unless otherwise specified.

1.10 CONTRACTOR'S QUALITY CONTROL SYSTEM

- A. General: Maintain quality control over suppliers, manufacturers, products, service, site conditions, and workmanship to produce work of specified quality.
 1. Workmanship: Comply with industry standards except when more restrictive tolerances or specified requirements require more rigid standards for more precise workmanship.
 2. Perform work by persons qualified to produce workmanship of specified quality.
- B. Quality Control: Establish system to perform sufficient inspection and tests of all items of work, including that of subcontractors, to ensure conformance to Contract Documents for materials, workmanship, construction, finish, functional performance and identification.

1. Control System: Establish for all construction except where Contract Documents provide for specific compliance tests by testing laboratories and engineers employed by Owner.
 2. Control System: Specifically include all testing required by various sections of Specifications.
- C. Quality Control System: Means by which Contractor assures himself that construction complies with requirements of Contract Documents.
1. Controls: Adequate to cover all construction operations and keyed to proposed construction Schedule.
- D. Records: Maintain correct records on appropriate form for all inspections and tests performed, Instructions received from Architect and actions taken as result of those instructions.
1. Records: Include evidence that required inspections or tests have been performed (including type and number of inspections or tests, nature of defects, causes for rejection, etc.) proposed or directed remedial action, and corrective action taken.
 2. Document inspections and tests as required by each section of Specifications.

1.11 INSTALLATION - GENERAL

A. Examination

1. Verification of Conditions: Require installer/applicator/erector of each major unit of work to inspect substrate to receive work and conditions under which work is to be performed.
2. Installer/Applicator/Erector
 - a. Verify layout of work before beginning installation.
 - b. Report unsatisfactory conditions to General Contractor in writing with copy to Architect.
 - c. Do not proceed with work until unsatisfactory conditions have been corrected to satisfaction of installer.
 - d. Beginning of work means acceptance of existing conditions by applicator.
3. Pre-installation Conferences per Division 1.

- B. Manufacturer's Instructions: Where installations include manufactured products, comply with manufacturer's applicable printed instructions and recommendations for installation,

to extent that these instructions and recommendations are more explicit or more stringent than requirements specified or indicated.

- C. Attachment: Provide attachment and connection devices and methods for securing work to withstand stresses, vibration, and racking.
 - 1. Secure work true to line and level, and within specified tolerances, or if not specified, industry recognized tolerances.
 - 2. Allow for expansion and building movement.
 - 3. Physically separate, provide electrical insulation, or provide protective coatings to prevent galvanic action or corrosion between dissimilar metals.
 - 4. Exposed Joints
 - a. Provide uniform joint width.
 - b. Arrange joints to obtain best visual effect.
 - c. Refer questionable visual-effect choices to Architect for final decision.
- D. Measurements and Dimensions: Recheck as integral step of starting each installation.
- E. Climatic Conditions and Project Status: Install each unit of work under conditions to ensure best possible results in coordination with entire project.
 - 1. Isolate each unit of work from incompatible work as necessary to prevent deterioration.
 - 2. Coordinate enclosure of work with required inspections and tests to minimize necessity of uncovering work for those purposes.
- F. Mounting Heights: Where not indicated, mount individual units of work at industry recognized standard mounting heights for particular application indicated.
 - 1. Comply with ADA mounting height requirements.
 - 2. Refer questionable mounting heights choices to Architect for final decision.
- G. Manufacturer's Field Service and Reports: When specified in individual sections, require manufacturer's to provide qualified personnel to inspect field conditions, conditions of surfaces and installation, quality of workmanship, to make appropriate recommendations and ensure that specified warranties and bonds shall be provided.
 - 1. Manufacturer's Representative: After each inspection, submit written report to installer, Contractor, and Architect listing observations and recommendations.

PART 2 – PRODUCTS (NOT USED)

City Park Train Hub
Locomotive Refurbishment &
Pavilion Replacement
City of Hagerstown, MD

01 45 00-6
Quality Control

Proj No: 19-35

204

PART 3 – EXECUTION (NOT USED)

- END OF SECTION 01 45 00 -

SECTION 01 73 29

CUTTING AND PATCHING

PART 1 - GENERAL

1.1 Scope:

1. This Section establishes general requirements pertaining to cutting, fitting and patching of the Work required to:
 1. Make the several parts fit properly;
 2. Uncover work to provide for installing, inspecting, or both, of ill-timed work;
 3. Remove and replace work not conforming to requirements of the Contract Documents; and
 4. Remove and replace defective work.
 5. Remove and patch existing construction for the completion of contract work.

1.2 Related work:

1. Documents affecting work of this Section include, but are not necessarily limited to, the General Conditions and Sections in Division 1 of these Specifications.
2. In addition to other requirements specified, upon the Architect's request uncover work to provide for inspection by the Architect of covered work, and remove samples of installed materials for testing, to verify conformance with the Contract Documents.
3. Do not cut or alter work performed under separate contracts without the Architect's written permission.

1.3 Quality Assurance:

1. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
2. Avoid unnecessary or excessive cutting. Where cutting of a finished surface is required, make cuts neatly along true lines so they will be concealed by finished work and where they will be least conspicuous.

1.4 Submittals:

1. Request for Architect's consent:
 1. Prior to cutting which effects structural safety, submit a written request to the Architect for permission to proceed with cutting. Also obtain written approval from the local building officials, if required by the local building code.

2. Should conditions of the Work, or schedule, indicate a required change of materials or methods for cutting and patching, so notify the Architect and secure his written permission and the required Change Order prior to proceeding.

Notices to the Architect:

3. Prior to cutting and patching performed pursuant to the Architect's instructions, submit cost estimate to the Architect. Secure the Architect's approval of cost estimates and type of reimbursement before proceeding with cutting and patching.
4. Submit written notice to the Architect designating the time the Work will be uncovered, to provide for the Architect's observation.

PART 2 - PRODUCTS

- 2.1 For replacement of items removed, use materials complying with pertinent Sections of these Specifications and closely matching the aesthetic value of the existing material.

PART 3 - EXECUTION

3.1 Payment of Costs:

1. The Owner will reimburse the Contractor for cutting and patching performed pursuant to a written Change Order, after claim for such reimbursement is approved by the Owner. The Contractor shall perform other cutting and patching needed to comply with the Contract Documents at no additional cost to the Owner.
2. Payment of costs for cutting and patching performed due to ill-timed or defective work will be at no additional cost to the Owner.

3.2 Surface Conditions:

1. Inspection:
 1. Inspect existing conditions, including elements subject to movement or damage during cutting, excavating, patching and backfilling.
 2. After uncovering the work, inspect conditions affecting installation of new Work.
2. Discrepancies:
 1. If uncovered conditions are not as anticipated, immediately notify the Architect and secure needed directions.
 2. Do not proceed until unsatisfactory conditions are corrected.

3.3 Preparation Prior to Cutting:

1. Provide required protection including, but not necessarily limited to, shoring, bracing, and support to maintain structural integrity of the Work.

3.4 Performance:

1. The Contractor shall be responsible for any cutting, fitting and patching that may be required to complete his Work except as otherwise specifically provided in the Contract Documents. The contractor shall not endanger any Work of any other Contractor except with the written consent of the Architect.
2. Perform fitting and adjusting of products to provide finished installation complying with the specified tolerances and finishes.

3.5 Cleanup:

1. Remove all debris, rubbish, and materials resulting from cutting and patching operations. Transport materials and legally dispose of off site.

END OF SECTION

SECTION 01 74 00

CLEANING

PART 1 - GENERAL

1.1 Scope:

- A. Work included: Throughout the construction period, maintain the buildings and site in a standard of cleanliness as described in this Section.

1.2 Related Work:

- A. Documents affecting work of this Section include, but not necessarily limited to, Sections in Division 1 of these Specifications.
- B. In addition to standards described in this Section, comply with requirements for cleaning as described in pertinent other Sections of these Specifications.

1.3 Quality Assurance:

- A. Conduct daily inspection, and more often if necessary, to verify that requirements for cleanliness are being met.
- B. In addition to the standards described in this Section, comply with pertinent requirements of governmental agencies having jurisdiction.

PART 2 - PRODUCTS

2.1 Cleaning Material And Equipment:

- A. Provide required personnel, equipment, and materials needed to maintain the specified standard of cleanliness.

2.2 Compatibility:

- A. Use only the cleaning materials and equipment which are compatible with the surface being cleaned, as recommended by the manufacturer of the material.

PART 3 - EXECUTION

3.1 Progress Cleaning

A. General:

1. Retain stored items in an orderly arrangement allowing maximum access, not impeding traffic or drainage, and providing required protection of materials.
2. Do not allow accumulation of scrap, debris, waste materials, and other items not required for construction of this work.
3. At least twice each month, and more often if necessary, completely remove all scrap, debris, and waste materials from the job site.

4. Provide adequate storage for all items awaiting removal from the job site, observing requirements for fire protection and protection of the ecology.
5. Contractor shall use sweeping compound inside building to control dust.

B. Site:

1. Daily, and more often if necessary, inspect the site and pick up all serap, debris, and waste materials. Remove such items to the place designated for their storage.
2. Weekly, and more often if necessary, inspect all arrangements of materials stored on the site. Restack, tidy or otherwise service arrangements to meet the requirements of subparagraph 3.1-A-1 above.
3. Maintain the site in a neat and orderly condition at all times.
4. Keep grass and other herbage cut to a maximum height of six inches (6") over the entire project site.

C. Structures:

1. Weekly, and more often if necessary, inspect the structures and pick up all serap, debris, and waste materials. Remove such items to the place designated for their storage.
2. Daily, sweep interior spaces clean.
 - 1 "Clean," for the purpose of this subparagraph, shall be interpreted as meaning free from dust and other material capable of being removed by use of reasonable effort and a hand-held broom.
3. As required preparatory to installation of succeeding materials, clean the structures or pertinent portions thereof to the degree of cleanliness recommended by the manufacturer of the succeeding material, using equipment and materials required to achieve the necessary cleanliness.
4. Following the installation of finish floor materials, clean the finish floor daily (and more often if necessary) at all times while work is being performed in the space in which finish materials are installed.
 - 1 "Clean," for the purpose of this subparagraph, shall be interpreted as meaning free from foreign material which, in the opinion of the Architect, may be injurious to the finish floor material.

D. Waste Disposal:

1. Dispose of waste at legal disposal area away from the site.
2. Burning or burying of rubbish and waste materials on site is not permitted.
3. Store volatile waste in accordance with applicable codes and regulations and remove from site daily. Disposal of volatile fluid wastes (such as mineral spirits, oil or paint thinner) in storm or sanitary sewer systems or into streams or waterways will not be

permitted.

4. Separate recyclables and dispose of materials as provided for in the overall project Construction Waste Management Plan.

3.2 Final Cleaning

- A. "Clean," for the purpose of this Section, and except as may be specifically provided otherwise, shall be interpreted as meaning the level of cleanliness generally provided by skilled cleaners using commercial quality building maintenance equipment and materials. A separate third-party professional cleaning service shall be employed by the contractor for the purpose of completing final cleaning prior to turning the building over to the owner
- B. Prior to completion of the Work, remove from the job site all tools, surplus materials, equipment, scrap, debris, and waste. Conduct final progress cleaning as described in Paragraph 3.1 above.
- C. Site:
 1. Unless otherwise specifically directed by the Architect, broom clean paved areas on the site and public paved areas adjacent to the site.
 2. Completely remove resultant debris.
- D. Structures:
 1. Exterior:
 1. Visually inspect exterior surfaces and remove all traces of soil, waste materials, smudges, and other foreign matter.
 2. Remove all traces of splashed materials from adjacent surfaces.
 3. If necessary to achieve a uniform degree of cleanliness, hose down the exterior of the structure.
 4. In the event of stubborn stains not removable with water, the Architect may require light sandblasting or other cleaning at no additional cost to the Owner.
 2. Interior:
 1. Visually inspect interior surfaces and remove all traces of soil, waste materials, smudges, and other foreign matter.
 2. Remove all traces of splashed material from adjacent surfaces.
 3. Remove paint drippings, spots, stains, and dirt from finished surfaces; then, wash.
 4. Glass: Remove excess glazing compound and paint. Wash, polish, or squeegee dry to remove all visible streaks. Exterior windows should be cleaned after the completion of sodding or seeding.

- 5 Ceramic Tile:
 - (1 Wall Tile: Remove spots, dirt, and paint; then, wash.
 - (2 Floor Tile: Remove spots, dirt and paint; then, machine strip and rinse with neutral cleaner.
 - 6 Floors: Refer to the specific flooring sections for finishes and procedures.
 - 7 Cabinetwork: Vacuum/dust all interior and exterior surfaces.
 - 8 Aluminum: Remove all temporary protective covering and clean and polish.
- E. Schedule final cleaning as approved by the Architect to enable the Owner to accept a completely clean Work.
6. Cleaning During Owner's Occupancy:
1. Should the Owner occupy the Work or any portion thereof prior to its completion by the Contractor and acceptance by the Owner, responsibilities for interim and final cleaning shall be as determined by the Architect in accordance with the General Conditions of the Contract.

- END OF SECTION 01 74 00 -

SECTION 01 78 00

CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
1. Inspection procedures.
 2. Operation and maintenance manuals.
 3. Warranties.
 4. Instruction of Owner's personnel.
 5. Extra Stock.
- B. Related Sections include the following:
1. Division 1 Section "Payment Procedures" for requirements for Applications for Payment for Substantial and Final Completion.
 2. Division 1 Section "Execution Requirements" for progress cleaning of Project site.
 3. Divisions 2 through 16 Sections for specific closeout and special cleaning requirements for products of those Sections.

1.2 SUBSTANTIAL COMPLETION

- A. Date of Substantial Completion: Contract duration minus thirty (30) calendar days.
- B. When the Contractor considers the Work is substantially complete, the Contractor will submit a written notice to the Architect at least 14 calendar days prior to the last day of the contract duration.
- C. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
1. Contractor's written notice to the Architect and the Department of Construction Management & Inspection requesting Substantial Completion Inspection shall have Certificate of Occupancy enclosed with request.
 2. The Contractor must prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete. This punch list must be distributed with the meeting invitation for the substantial completion inspection. The Architect and Owner will agree to the value of the punch list items. In the event there is a dispute as to the value, the Owner's decision is final.
 3. Advise Owner of pending insurance changeover requirements.
 4. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.

5. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
6. Prepare and submit Project Record Documents, operation and maintenance manuals, Final Completion construction photographs, damage or settlement surveys, property surveys, and similar final record information.
7. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
8. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
9. Complete startup testing of systems.
10. Submit test/adjust/balance records.
11. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
12. Advise Owner of changeover in heat and other utilities.
13. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
14. Complete final cleaning requirements, including touchup painting.
15. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

D. Inspection: Submit a written request for inspection for Substantial Completion.

1.3 FINAL COMPLETION

A. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, the Owner will either proceed with inspection or notify Contractor of unfulfilled requirements. The Owner 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.

1.4 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

A. Preparation: Submit three copies 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, starting with exterior areas first and proceeding from the front door.
2. Organize items applying to each space by major element, including categories for ceiling, 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 Construction Manager.
 - e. Name of Contractor.
 - f. Page number.

1.5 PROJECT RECORD DOCUMENTS

- A. General: Do not use Project Record Documents for construction purposes. Protect Project Record Documents from deterioration and loss. Provide access to Project Record Documents for Architect's reference during normal working hours.

1.6 OPERATION AND MAINTENANCE MANUALS

- A. Assemble a complete set of operation and maintenance data indicating the operation and maintenance of each system, subsystem, and piece of equipment not part of a system. Include operation and maintenance data required in individual Specification Sections and as follows:

- 1. Operation Data:

- a. Emergency instructions and procedures.
- b. System, subsystem, and equipment descriptions, including operating standards.
- c. Operating procedures, including startup, shutdown, seasonal, and weekend operations.
- d. Description of controls and sequence of operations.
- e. Piping diagrams.

- 2. Maintenance Data:

- a. Manufacturer's information, including list of spare parts.
- b. Name, address, and telephone number of Installer or supplier.
- c. Maintenance procedures.
- d. Maintenance and service schedules for preventive and routine maintenance.
- e. Maintenance record forms.
- f. Sources of spare parts and maintenance materials.
- g. Copies of maintenance service agreements.
- h. Copies of warranties and bonds.

- B. Organize operation and maintenance manuals into suitable sets of manageable size. Bind and index data in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, with pocket inside the covers to receive folded oversized sheets. Identify each binder on front and spine with the printed title "OPERATION AND MAINTENANCE MANUAL," Project name, and subject matter of contents.

1.7 WARRANTIES

- A. Submittal Time: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
- B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.

1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch (115-by-280-mm) paper.
2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.

- C. Provide additional copies of each warranty to include in operation and maintenance manuals.
- D. Product warranties start on date established by architect for Substantial Completion. Owner may request a later starting date on specific equipment that has been identified as incomplete on Substantial Completion date. Such extension shall be made in writing to Contractor by Architect.

1.8 REINSPECTION FEES

- a. Should the status of the completion of work require re-inspection by the Owner or Architect due to failure of the Contractor to comply with claims on the initial, substantial, or final inspections, the Owner will deduct the amount of the Architect's fees and costs for re-inspection from the final payment to the Contractor.

1.9 CLOSEOUT SUBMITTALS

- A. Evidence of compliance with requirements of governing authorities
- a. Certificate of Occupancy
 - b. Certificates of inspection required for Mechanical, electrical, and plumbing systems
 - c. Certificate of inspections for conveying systems
 - d. Operation and Maintenance manuals
 - e. Warranties and Bonds
 - f. Evidence of payment and release of Liens
 - g. Consent of Surety to Final Payment

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.

PART 3 - EXECUTION

3.1 DEMONSTRATION AND TRAINING

- A. Instruction: Instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
 - a. Provide instructors experienced in operation and maintenance procedures.
 - b. Provide instruction at mutually agreed-on times. For equipment that requires seasonal operation, provide similar instruction at the start of each season.
 - c. Schedule training with Owner with at least seven (7) calendar days' advance notice.
 - d. Coordinate instructors, including providing notification of dates, times, length of instruction, and course content.

- B. Program Structure: Develop an instruction program that includes individual training modules for each system and equipment not part of a system, as required by individual Specification Sections. For each training module, develop a learning objective and teaching outline. Include instruction for the following:
 - a. System design and operational philosophy.
 - b. Review of documentation.
 - c. Operations.
 - d. Adjustments.
 - e. Troubleshooting.
 - f. Maintenance.
 - g. Repair.

3.2 EXTRA STOCK

- A. Extra Stock: All "extra material" is to be boxed or packaged; each package is to be clearly labeled.

END OF SECTION 01 78 00

**SECTION 01 78 23
OPERATIONS AND MAINTENANCE DATA**

PART 1 - GENERAL

1.1 Scope:

1. To aid the continued instruction of operation and maintenance personnel, and to provide a positive source of information regarding the products incorporated into the Work, furnish and deliver the data described in this Section and in pertinent other Sections of these Specifications.

1.2 Related Work:

1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
2. Required contents of submittals also may be amplified in pertinent other Sections of these Specifications.

1.3 Quality Assurance:

1. In preparing data required by this Section, use only personnel who are thoroughly trained and experienced in operation and maintenance of the described items, completely familiar with the requirements of this Section, and skilled in technical writing to the extent needed for communicating the essential data.

1.4 Submittals:

1. Comply with pertinent provisions of Section 01330 - Submittal Procedures and 01770 - Closeout Procedures.
2. Submit one copy of completed data in final form at time of Substantial Completion inspection. Copy will be returned after final inspection or acceptance, with comments.
3. Submit four (4) copies of approved data in final form at least fifteen (15) working days before Final Application for Payment.

PART 2 - PRODUCTS

- 2.1 Where instruction Manuals are required to be submitted under other Sections of these Specifications, prepare in accordance with the provisions of this Section.

2.2 Format:

1. Size: 8-1/2" x 11"
2. Paper: White bond, at least 20 lb weight
3. Text: Neatly written or printed at maximum 12 cpi.

4. Drawings: 11" in height preferable; bind in with text; foldout acceptable but fold to fit within the Manual and provide a drawing pocket inside rear cover or bind in with text.
5. Flysheets: Separate each portion of the Manual with neatly prepared flysheets briefly describing contents of the ensuing portion; flysheets may be in color.
6. Binding: Use commercial quality 3-ring binders with durable and cleanable plastic covers. The maximum ring size will be 3 inches. When multiple binders are used, correlate the data into related consistent groupings.
7. Measurements: Provide all measurements in U.S. standard units such as feet-and-inches, lbs, and cfm; where items may be expected to be measured within ten years in accordance with metric formulae, provide additional measurements in the "International System of Units" (SI).
8. Digital Media: Provide one copy of all information in the manual as scanned digital format as requested by owner.
9. Provide front and back covers for each Manual, using durable material approved by the Architect, and clearly identified on or through the cover with at least the following information:

OPERATING AND MAINTENANCE INSTRUCTIONS
 (_____)
 (name and address of Work _____)
 (_____)
 (name of Contractor _____)
 (_____)
 (general name of this Manual _____)
 (_____)
 (space for approval signature of _____)
 (the Architect and approval data _____)

10. Contents: Include at least the following:
 1. Neatly typewritten index near the front of the Manual, giving immediate information as to location within the Manual of all emergency information regarding the installation. Install labeled divider tabs based on index.
 2. List of all Contractors, Subcontractors and suppliers with complete name of firm, subsidiary, etc.; address, telephone number, and principal contact person.
 3. Complete instructions regarding operation and maintenance of all mechanical and electrical systems equipment involved including lubrication, disassembly, and reassembly.
 4. Complete nomenclature of all mechanical and electrical system parts and

equipment.

5. Complete nomenclature and part number of all replaceable parts, name and address of nearest vendor, and all other data pertinent to procurement procedures.
6. Complete operating, maintenance, cleaning and product data for every finish material and product contained in the finished project, including, but not limited to the following:
 - a. Painting
 - b. Acoustical Treatment & Ceiling Systems
7. Copy of all guarantees and warranties issued.
8. Manufacturers' bulletins, cuts, and descriptive data, where pertinent, clearly indicating the precise items included in this installation and deleting, or otherwise clearly indicating, all manufacturers' data with which this installation is not concerned.
9. Exact size of glass, type of coatings and tint for each window for re-glazing requirements.
10. Interior finish color schedules.
11. Such other data as required in pertinent Sections of these Specifications.
12. Attach envelopes containing all extra small parts and keys for items appropriate in size to fit binder. Items too large to fit in binder shall be turned over to Owner as per Section 01787.

PART 3 - EXECUTION

3.1 Preliminary:

1. Prepare a preliminary draft of each proposed Manual.
2. Show general arrangement, nature of contents in each portion, probable number of drawings and their size, and proposed method of binding, covering and digital format.
3. Secure the Architect's approval prior to proceeding.

3.2 Final:

1. Complete the Manuals in strict accordance with the approved preliminary drafts and the Architect's review comments.

3.3 Revisions:

1. Following the indoctrination and instruction of operation and maintenance personnel, review all proposed revisions of the Manual with the Architect.

2. If the Contractor is required by the Architect to revise previously approved Manuals due to circumstances beyond the Contractor's control, compensation will be made as provided for under "Changes" in the General Conditions.

- END OF SECTION 01 78 23 -

SECTION 01 78 39

PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 Scope:

- A. Throughout the progress of the Work, maintain an accurate record of changes in the Contract Documents, as described in Paragraph 2.1 below.
- B. Upon completion of the Work, transfer the recorded changes to a set of Final Project Record Documents, as described in Paragraph 2.2 below.

1.2 Related Work:

- A. Documents affecting work of this Section include, but not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
- B. Other requirements affecting Project Record Documents may appear in pertinent other Sections of these Specifications.

1.3 Quality Assurance:

- A. Delegate the responsibility for maintenance of Record Documents to one person on the Contractor's staff as approved by the Architect.
- B. Accuracy of records:
 - 1. Thoroughly coordinate changes within the Record Documents, making adequate and proper entries on each page of Specifications and each sheet of Drawings and other Documents where such entry is required to show the change properly.
 - 2. Accuracy of records shall be such that future search for items shown in the Contract Documents may rely reasonably on information obtained from the approved Project Record Documents.
 - 3. Make entries within 72 hours after receipt of information that the change has occurred.
- C. Product Handling:
 - 1. Maintain the Job Set of Record Documents completely protected from deterioration and from loss and damage until completion of the Work and transfer of all recorded data to the final Project Record Documents.
 - 2. In the event of loss of recorded data, use means necessary to again secure the data to the Architect's approval.

3. Such means shall include, if necessary in the opinion of the Architect, removal and replacement of concealing materials. In such case, provide replacements to the standards originally required by the Contract Documents.
4. Submittals:
 1. Comply with pertinent provisions of Division 1 Submittals Section.
 2. The Architect's approval of the current status of Project Record Documents may be a prerequisite to the Architect's approval of requests for progress payment and request for final payment under the Contract.
 3. Prior to submitting each request for progress payment, secure the Architect's approval of the current status of the Project Record Documents.
 4. Prior to submitting request for final payment, submit the final Project Record Documents to the Architect and secure his approval.

PART 2 - PRODUCTS

2.1 Job Set:

- A. Promptly following receipt of the Owner's Notice to Proceed, secure from the Architect at no charge to the Contractor one complete set of all Documents comprising the Contract.

2.2 Final Project Record Documents:

- A. The purpose of the Final Project Record Documents is to provide factual information regarding all aspects of the Work, both concealed and visible, to enable future modifications of the Work to proceed without lengthy and expensive site measurement, investigation, and examination. The document set includes:
 1. Final Record Drawings: At a time nearing completion of the Work, contractor shall print a clean bond set of all Drawings in the Contract. Transfer all information from Job Set to Final Record Drawings as per Paragraph 3.2-B below.
 2. Specifications: At a time nearing completion of the Work prepare all Specification Sections received from the Architect as per Paragraph 2.1 and 3.1 with all revisions and addenda added. See Paragraph 3.2-C below.
 3. Submittal Set: At a time nearing completion of the Work, as per Division 1 Submittals Section, prepare all approved submittal documents for review including all revisions if any. See Paragraph 3.2-C below.
 - a. Collect all approved submittal documents and prepare an index including the following information:
 - (1) CSI Specification Section
 - (2) Date approved
 - (3) Submittal number
 - (4) Brief description

- b. The index shall be organized per CSI Specification Section.

PART 3 - EXECUTION

3.1 Job Set:

- A. Immediately upon receipt of the Job Set described in Paragraph 2.1 above, identify each of the Documents with the title, "RECORD DOCUMENTS - JOB SET."
- B. Preservation:
 - 1. Considering the Contract completion time, the probable number of occasions upon which the Job Set must be taken out for new entries and for examination, and the conditions under which these activities will be performed, devise a suitable method for protecting the Job Set to the approval of the Architect.
 - 2. Do not use the Job Set for any purpose except entry of new data and for review by the Architect, until start of transfer of data to Final Project Record Documents.
 - 3. Maintain the Job Set at the site of Work as that site is designated by the Architect.
- C. Making entries on Drawings
 - 1. Using an erasable colored pencil (not ink or indelible pencil), clearly describe the change by graphic line and note as required.
 - 2. Date all entries.
 - 3. Call attention to the entry by a "cloud" drawn around the area or areas affected.
 - 4. In the event of overlapping changes, use different colors for the overlapping changes.
- D. Make entries in the pertinent other Documents as approved by the Architect.
- E. Conversion of schematic layouts:
 - 1. In some cases on the Drawings, arrangements of conduits, circuits, piping, ducts, and similar items, is shown schematically and is not intended to portray precise physical layout.
 - a. Final physical arrangement is determined by the Contractor, subject to the Architect's approval.
 - b. However, design of future modifications of the facility may require accurate information as to the final physical layout of items which are shown only schematically on the Drawings.
 - 2. Show on the Job Set of Record Drawings, by dimension accurate to within one inch, the centerline of each run of items such as are described in subparagraph 3.1-E-1 above.
 - a. Clearly identify the item by accurate note such as "cast iron drain," "galv. water," and the like.
 - b. Show, by symbol or note, the vertical location of the item ("under slab," "in

ceiling plenum," "exposed," and the like).

c. Make all identification sufficiently descriptive that it may be related reliably to the Specifications.

3. The Architect may waive the requirements for conversion of schematic layouts where, in the Architect's judgment, conversion serves no useful purpose. However, do not rely upon waivers being issued except as specifically issued in writing by the Architect.

3.2 Final Project Record Documents:

A. Approval of recorded data prior to transfer:

1. Following creation of the drawing set described in Subparagraph 2.2-A-1 above, and prior to start of transfer of recorded data thereto, secure the Architect's approval of all recorded data.
2. Make required revisions.

B. Transfer of data to Drawings:

1. Carefully transfer change data shown on the Job Set of Record Drawings to the corresponding drawing sheets, coordinating the changes as required.
2. Clearly indicate at each affected detail and other Drawing a full description of changes made during construction, and the actual location of items described in subparagraph 3.1-E-1 above.
3. Call attention to each entry by drawing a "cloud" around the area or areas affected.
4. Make changes neatly, consistently, and with the proper media to assure longevity and clear reproduction.

C. Transfer of data to other Documents:

1. If the Documents other than Drawings have been kept clean during progress of the Work, and if entries thereon have been orderly to the approval of the Architect, the Job Set of those Documents other than Drawings will be accepted as final Record Documents.
2. If any such Document is not so approved by the Architect, secure a new copy of that Document from the Architect at the Architect's usual charge for reproduction and handling, and carefully transfer the change data to the new copy to the approval of the Architect.

D. Review and submittal:

1. Submit the completed set of Final Project Record Documents to the Architect as described in Paragraph 3.2-A through C above.
2. Participate in review meetings as required.
3. Make required changes and deliver the Final Project Record Documents to the

Architect within 30 calendar days of substantial completion.

4. Submittal of Final Project Record Documents shall be in the following formats:

- a. Final record drawings: One copy redlined bond drawings and scanned digital format. The original prescanned documents shall be black print on bond.
- b. Specifications: One copy 20 lb bond white paper and scanned digital format.
- c. Submittal documents: Scanned digital format.

E. Changes Subsequent to Acceptance:

1. The Contractor has no responsibility for recording changes in the Work subsequent to Final Completion, except for changes resulting from work performed under Warranty.

- END OF SECTION 01 78 39 -

SECTION 02 11 20

HAZARDOUS MATERIAL REMOVAL

PART 1 – GENERAL

1.1 RELATED DOCUMENTS:

A. The provisions of the Contract Documents apply to this section.

1.2 SUMMARY

A. This section includes all work necessary for asbestos abatement, including: handling, containment, removal, and disposal of any asbestos-containing material generated by the work.

B. The scope of work in this section includes the removal of asbestos-containing insulation on the locomotive around elbows, valves, and fittings. Areas of mitigation are both exposed and concealed under boiler jacket sheet metal.

1.3 DEFINITIONS

A. Definitions and explanations here are neither complete nor exclusive of all terms used in the contract documents.

B. Abatement: Procedures to control fiber release from asbestos-containing materials (ACM). Included removal, enclosure, repair, encapsulation, demolition, and renovation activities.

C. Air monitoring: The process of collecting and analyzing air samples to determine the number of fibers present per cubic centimeter of air during a specific period of time.

D. Amended water: Water to which a surfactant has been added.

E. Asbestos-containing material (ACM): Any material containing more than 1% (one percent) of asbestos of any type or mixture.

F. Authorized Person or Visitor: The building Owner, Owner's representative or a representative of any regulatory or other agency having jurisdiction over the project.

G. Barrier: Any surface that seals the work area to inhibit the movement of fibers.

H. Building Owner: The Owner or its authorized representative.

I. Competent Person: One who is capable of identifying existing and predictable asbestos hazards in the surroundings or working condition and who has authorization to take prompt corrective measure to eliminate them as specified in 29 CFR 1910.12(b). For Class I and II asbestos work, one who is specially trained in a training course, which meets the criteria of EPA's Model Accreditation Plan (40 CFR 763) for a supervisor. One who has required certification and training as required by the Code of Maryland.

J. Containment Barrier: An air tight barrier, consisting of walls, floors and/or ceiling of sealed 6-mil polyethylene sheeting, surrounding and sealing the outer perimeter of the work area.

K. Critical Barrier: The barrier responsible of the work area from adjacent spaces, typically constructed of polyethylene sheeting secured in place at penetration such as doors, windows or any other opening into the work area.

L. Class I Asbestos Work: Activities involving the removal of thermal systems insulation (TSI) and surfacing ACM and presumed ACM.

M. Class II Asbestos Work: Activities involving the removal of ACM which is not

thermal systems insulation or surfacing material.

N. Class III Asbestos Work: Repair and maintenance operations, in which ACM, including TSI and surfacing materials, is likely to be disturbed.

O. Class IV Asbestos Work: Maintenance and custodial activities during which employees contact ACM and presumed ACM and activities to clean up waste and debris containing ACM and presumed ACM.

P. Differential Pressure: A local exhaust system capable of maintaining a minimum pressure differential of minus 0.02 inches of water column relative to adjacent unsealed areas.

Q. Decontamination Facility: The main entrance/exit airlock system used for all personnel entry and exit to the work area and for equipment and asbestos waste transport from the work area. A system for permitting ingress and egress with minimum air movement between a contaminated area and an uncontaminated area, consisting of a clean room, a shower room, and an equipment room (dirty room), separated from each other and from the work area by curtained doorways.

R. Enclosure: The construction of an air-tight, impermeable, permanent barrier around ACM to control the release of asbestos fibers into the air.

S. Engineering Controls: Methods to keep hazardous air levels down so that a minimum reliance is placed on respirators to protect workers, such as the use of wet methods, High-Efficiency Particulate Air (HEPA) vacuums, and prompt cleanup.

T. Fibers per Cubic Centimeter of Air (f/cc): Standard measurement units used to measure the level of asbestos contamination in the air.

U. Fixed Object: A unit of equipment or furniture in the work area that cannot be removed from the work area.

V. Friable ACM: Material that contains more than one percent asbestos that can be crumbled, pulverized, or reduced to powder by hand pressure when dry.

W. Full Containment: Those engineering control techniques described in 29 CFR 1926.1101 for Class I and II asbestos removal, renovation, and demolition operations.

X. HEPA Filter: A filter which removes from the air 99.97% or more of monodispersed dioctyl phthalate (DOP) particles having a mean diameter of 0.3 micrometer. Each HEPA filter shall bear a UL 586 label to indicate ability to perform under specified conditions.

Y. Intact ACM: The ACM has not crumbled, been pulverized, or otherwise deteriorated so that the asbestos is no longer likely to be bound with its matrix.

Z. Lockdown: The procedure of applying a protective coating of sealant to a surface form, which ACM has been removed.

AA. Moveable Object: A unit or equipment or furniture in the work area that can be removed from the work area.

BB. Permissible Exposure Limit (PEL): 0.1 fibers per cubic centimeter of air as an 8-hour time weighted average measured in the breathing zone as defined by 29 CFR 1926.1101 or other federal legislation having legal jurisdiction for the protection of workers health.

CC. Personal Air Sampling: Air sample collected with a special battery-powered portable pump unit, which is fitted onto the body of the monitored person. The collection device (filter cassette) is located within the individual's breathing zone.

DD. Personal Monitoring: Sampling of the asbestos fiber concentrations within the breathing zone of a person.

EE. Phase Contrast Microscopy (PCM): A bright field microscope equipped with a

phase ocular and condenser. The National Institute for Safety and Health (NIOSH) 7400 specifies PCM for fiber counting. PCM is not specific for asbestos fibers.

FF. Plasticize: To cover floors, walls, and ceilings with plastic sheeting.

GG. Polarized Light Microscopy (PLM): Microscopy with dispersion staining utilizing light microscopy and refractive indices to identify type of asbestos

HH. Polyethylene Sheeting: Strong plastic barrier material usually transparent and made flame-resistant in compliance with NFPA 241.

II. Regulated Area: An area established by the abatement asbestos contractor to demarcate areas where Class I, II, and III asbestos work is conducted, and any adjoining area where debris and waste from such asbestos work accumulate; and a work area within which airborne concentrations of asbestos, exceed or there is a reasonable possibility they may exceed the PEL.

JJ. Surfactant: A chemical wetting agent added to water to improve penetration, thus reducing the quantity of water required for a given operation or area. An equivalent wetting agent must have a surface tension of at most 2.9 Pa (29 dynes per square centimeter) when tested in accordance with ASTM D 1331.

KK. Transmission Electron Microscopy (TEM): TEM is used for the purpose of fiber counting and has the analytical capacity of identifying asbestos fibers.

LL. Time Weighted Average (TWA): An 8-hour time weighted average airborne concentration of asbestos fibers.

MM. Wet Cleaning: The process of thoroughly eliminating asbestos contamination from building surfaces and objects by using cloths, mops, or other cleaning utensils which have been dampened with amended water or diluted removal encapsulant.

NN. Work Area: Area where asbestos related work or removal operations are performed which is defined and isolated to prevent the spread of asbestos dust, fibers or debris, and the entry of unauthorized personnel. Work area is a Regulated Area as defined by OSHA regulation 29 CFR 1926. Also called containment area.

1.4 REGULATORY REQUIREMENTS

A. In addition to the requirements of this specification, all work shall be done in strict accordance with those applicable laws, ordinances, criteria, rule, and regulations of the Federal and State of Maryland authorities governing asbestos abatement, including removing, handling, storing, transporting, and disposing of asbestos waste materials. The publications listed below form a part of this specification. All work shall conform to the following regulations/guidelines. The most recent edition of any relevant regulation, standard, document, or code shall be in effect. Where specification requirements and documents vary, the most stringent requirements shall apply. Submit matters of interpretation of standards to appropriate administrative agencies for resolution before starting the work.

B. State of Maryland

1. Code of Maryland Regulations (COMAR) 26.11.21 Control of Asbestos Regulation

C. Codes of Federal Regulations:

1. 29 CFR 1926.1101 Construction Industry Standard for Asbestos
2. 29 CFR 1910.1001 General Industry Standard and Appendix A - I
3. 29 CFR 1910.134 Respiratory Protection
4. 29 CFR 1910.145 Accident Prevention Signs and Tags

5. 29 CFR 1910.1200 Hazard Communication
6. 29 CFR 1926.55 Gases, Vapors, Fumes, Dust, and Mists
7. 40 CFR 61 Subpart A: General Provisions
8. 40 CFR 61 Subpart M: EPA, National Emission Standards for Hazardous Air Pollutants (NESHAP) Asbestos.
9. 40 CFR 763 Asbestos Hazard Emergency Response Act (AHERA)
10. 49 CFR 178 Shipping Container Specification

D. Underwriters Laboratories (UL):

1. UL 586 High-efficiency Particulate Air (HEPA) Filter Unit.

1.5 SUBMITTALS

A. Qualification Statement and Documentation:

1. Licensing and Training: The asbestos abatement contractor and all personnel involved in performing asbestos abatement and disposal operations are required to be trained and licensed in the State of Maryland prior to the time of the initial job assignment and in accordance with 29 CFR 1926.1101.
2. Asbestos Contractor Qualifications: The asbestos contractor shall be a firm of established reputation, which is regularly engaged in asbestos abatement and which maintains a regular force of workmen skilled in asbestos abatement, and shall have performed similar work on previous projects.
 - a. Asbestos contractors performing work must be licensed to perform asbestos work in the State of Maryland and provide evidence of licensure.
 - b. The asbestos contractor shall submit a written Respiratory Protection Plan meeting the requirements of OSHA 29 CFR 1910.134.
 - c. The asbestos contractor shall submit a list of any asbestos regulatory citations, penalties, damages paid, and/or legal actions taken against the company in the last three years. Provide copies and all information need for verification.
 - d. The asbestos contractor shall have a Competent Person/Supervisor present at all times when asbestos work on this contract is in progress. The Competent Person/Supervisor shall be thoroughly familiar and experience with asbestos removal and related work and shall be familiar with and shall enforce the use of all safety procedures and equipment. He shall be knowledgeable of all EPA, OSHA, and COMAR regulations.
3. Worker Qualifications:
 - a. Submit employee training certification signed and dated by the approved training facility stating that the employee has received required training satisfying 29 CFR 1926.1101.
 - b. Submit a copy of the employees' current Maryland asbestos abatement accreditation card.
 - c. Submit a written certification of medical examinations signed by a licensed physician indicating that each worker and supervisor has met or exceeded all of the medical prerequisites specified herein and in 29 CFR 1910.134, as prescribed by law.
 - d. Submit a written certification of a current qualitative or quantitative respirator fit test conducted in accordance with 29 CFR 1910.134.

B. The asbestos contractor shall secure all necessary permits and notification in conjunction with the asbestos removal, hauling, and disposal of ACMs and asbestos-contaminated wastes as required by Federal and COMAR regulations. Submit two copies of all required permits and hazardous waste manifests to the Owner in a timely manner. Notify the Regional Office of the EPA in accordance with Federal regulation.

C. Hazardous Waste Management Plan:

1. Names and qualifications of each asbestos contractor that will be transporting, storing, treating, and disposing of ACM waste.
2. Written evidence that the disposal facility is approved for asbestos disposal by the U.S. EPA, state and local regulatory agencies. Include the facility name, location and a 24-hour point of contact.
3. After every disposal operation of asbestos-contaminated waste provide copied of waste shipment records and hazardous waste manifest signed and dated by an agent of the EPA licensed hazardous waste disposal facility, certifying the amount of asbestos material delivered, within seven days after delivery. Submit Certificate of Disposal.

D. Rental Equipment Notification: If rental equipment is to be used during asbestos abatement, in work area, or to handle, dispose of, and transport asbestos contaminated waste, notify the rental agency in writing stating the intended use of the equipment. Furnish a copy of the written notification, signed by the rental company to the Owner.

E. Submit certification that vacuums, HEPA filters, temporary ventilation equipment, and any other equipment required to contain airborne fibers meet ANSI Z9.2-79

1.6 FIELD VERIFICATION:

A. Asbestos contractor shall examine the building to verify existing conditions. As-built plans are included in this specification. All drawing and dimensions are subject to field verification by the asbestos contractor prior to start of work or before ordering products. Asbestos contractor shall report any differences in dimensions and conditions to the Owner. The Owner shall verify the actual count after the abatement work is performed.

1.7 SCHEDULE

A. Signs notifying the public of abatement work shall be posted no sooner than June 8, 2012 and the actual work area will be available to the asbestos contractor on June 14, 2012. The asbestos contractor shall coordinate abatement schedule with the general contractor so all work associated with this project is completed by August 10, 2012.

PART 2 – MATERIALS AND EQUIPMENT

2.1 PERSONNEL PROTECTION EQUIPMENT

A. Respirators: The asbestos contractor and/or the Competent Person shall be responsible for determining the type of respirators to be utilized according to 29 CFR 1910.134 and 29 CFR 1926.110. Select respirators from those approved by NIOSH. Workers shall be provided with personally issued, individually identified respirators.

1. Provide personnel engaged in the removal of asbestos materials with a powered air purifying respirator (PAPR) when conducting Class I asbestos removal for which a negative exposure assessment (NEA) has not been conducted.
2. Single use and disposable respirators shall not be used.

B. Disposable Protective Clothing: Provide full body (including head and foot)

covering consisting of material impenetrable by asbestos fibers (Tyvek or approved equal) in sizes adequate to accommodate movement without tearing.
C. Appropriate safety equipment as required by OSHA shall be provided to all workers and authorized personnel. All equipment shall meet American National Standards Institute (ANSI) and American Society for Testing and Materials (ASTM) E 849 requirements. Equipment includes but is not limited to hard hats, eye protection, safety shoes, and disposable PVC gloves.

2.2 EQUIPMENT

A. ANSI Z9.2-79. No air movement system or air equipment shall discharge asbestos fibers outside the work area.

1. Vacuum Equipment: HEPA vacuum equipment with a filter system capable of collecting and retaining asbestos fibers. Filters shall be 99.97 percent efficient for retaining fibers 0.3 microns or larger.

2. Air Movement Equipment: All air movement equipment utilized during abatement activities shall be equipped with a HEPA filtration system.

3. Negative Pressure Equipment: Local exhaust system capable of maintaining a negative air pressure of 0.51-mm (0.02-inch) of water in the asbestos control area. In no case shall the building ventilation system be used as the local exhaust system for the asbestos control area.

B. Disposable mops, rags, and sponges shall be used for all wet wiping and cleaning activity.

C. Scaffolds, ladders, and hand tools (cutters, brushes, utility knives, wire saws, etc.) shall be provided as needed.

2.3 PLASTIC SHEETING

A. Six-mil thickness minimum and used in widths selected to minimize the frequency of joints.

B. Disposal bags shall be six-mil polyethylene, double bagged, with pre-printed labels as required by EPA regulation 40 CFR.61, 49 CFR 178 and 29 CFR 1926.1101.

2.4 TAPE

A. For use under dry and wet conditions, capable of being cleaned off of surfaces without permanent marks or damage to building equipment and surfaces.

2.5 SIGNS AND LABELS

A. Warning signs as required by and conforming to 29 CFR 1926.1101, 29 CFR 1910.145 and COMAR regulations. The abatement contractor shall post the Maryland Project Notification Signs a minimum of three days before the start of asbestos abatement activities in accordance with COMAR regulations.

B. Warning labels to be affixed to all asbestos materials, scrap, waste, debris, and other products contaminated with asbestos conforming to 29 CFR 1926.1101.

2.5 SURFACTANT

A. Wetting agent (surfactant) 50/50 mixture of polyoxyethylene ether and polyoxyethylene ester, or equivalent mixed in a proportion of one fluid ounce to five gallons of water or as specified by manufacturer. (An equivalent surfactant shall be understood to mean a material with a surface tension of 29 dynes/cm as tested in its properly mixed concentration, using ASTM method D1331-56 "Surface and Interfacial Tension of Solutions of Surface Active Agents".)

2.6 ENCAPSULANT

A. Encapsulant shall conform to current EPA requirements, shall contain no toxic or hazardous substances as defined in 29 CFR 1926.59 and shall be compatible with the substrate. The encapsulant shall be fire resistant; negligible affect on fire resistance

rating over 3 hours (tested with fireproofing over encapsulant applied directly to steel member) ASTM E 119. All encapsulant shall be applied with an airless sprayer.

2.7 OTHER MATERIALS

A. Provide all other materials required for temporary construction including lumber, plywood, etc.

PART 3 – EXECUTION

3.1 PREPARATION OF WORK AREA

A. Post warning signs at all regulated areas and approaches to asbestos control areas to comply with OSHA 1910.1001(g)(1), 29 CFR 1926.1101, and as directed by the Owner's Representative.

B. Shut down and lock out all heating, cooling, and air-conditioning system components that supply or pass through the work area. Remove all heating, ventilation, and air conditioning system filters, pack in sealable plastic bags (sixmil minimum) for disposal in the approved waste disposal site, and replace with new filters upon completion of the abatement. Any openings created by the removal of HVAC filters shall be sealed prior to the start of work using six-mil plastic sheeting taped securely in place.

C. Seal off all openings to the work area, such as corridors, doorways, windows, vents, ducts, grilles, diffusers, switch and outlet boxes, and lighting fixtures with plastic sheeting sealed with tape.

D. Disconnect electrical service when wet removal is performed and provide temporary electrical service with verifiable ground fault interrupter (GFI) protection prior to the use of any water.

E. The enclosed work areas shall be defined as an asbestos regulated area and all asbestos worker protection and work practices shall be performed in conformance with the general safety and health provisions of 29 CFR 1910.1001, 29 CFR 1910.20 and 29 CFR 1926.1101. If a conflict arises, the more stringent application shall apply until a determination is made by the Owner's Representative.

F. Perform preparation work without damage or contamination of adjacent work.

G. Pre-Cleaning:

1. Do not disturb ACM during the pre-cleaning phase. Do not use dry sweeping or vacuuming without HEPA filters.

2. Pre-clean items to be removed from work area, using HEPA vacuum equipment and/or wet cleaning methods. Remove cleaned items to a temporary location or designated area as directed by Owner's Representative.

3. For objects or equipment which cannot be moved and must remain in or adjacent to the work area, pre-clean using HEPA vacuum equipment and/or wet cleaning methods, and enclose with plastic sheeting sealed with tape. Protect items remaining in or adjacent to the work area with temporary barricades, covers, or pads as necessary to prevent damage.

H. Cover all floors and then all walls in the work area with plastic sheeting taped securely in place.

I. Obtain approval of the finished primary containment from the Owner's Representative prior to starting any actual asbestos removal work (this work may be delegated in writing to the Owner's Representative's industrial hygienist).

J. Maintenance of Enclosure System: Visually inspect enclosure systems at the beginning of each work period. Use smoke methods daily to test effectiveness of

sealed doorways. Repair damaged plastic.

3.2 LOCAL EXHAUST SYSTEM:

A. Install and maintain a minimum pressure differential in the work area relative to adjacent, unsealed areas. The local exhaust system shall vent out of the building and away from any public access or ventilation system intakes. The local exhaust system shall be sufficient to maintain four complete air changes per hour in the work area. Utilization of the existing HVAC system as the local exhaust system is forbidden.

3.3 DECONTAMINATION FACILITY

A. Decontamination Facility: Throughout asbestos removal, the asbestos contractor will maintain a working decontamination facility at the point of access to the containment. At a minimum, the decontamination facility will consist of a clean changing area, a shower area, and a contaminated changing area that will be constructed according to 29 CFR 1926.1101. Access to work areas shall be through decontamination areas only. Existing rooms, temporary framed rooms, specially constructed portable temporary rooms, or a combination may be used. Line each room within the decontamination facility with plastic sheeting and seal joints with tape, as specified for work area preparation. Access between contaminated and uncontaminated areas shall be through an airlock, and access between any two rooms shall be through an airlock.

3.4 FRIABLE ASBESTOS-CONTAINING MATERIAL REMOVAL USING GLOVE BAG TECHNIQUES

- A. A variance to conduct Class I asbestos removal via glove bag techniques must be approved in writing by the MDE prior to beginning such work.
- B. Remove all suspended ceiling tiles and grid directly beneath the entire length of TSI (pipe insulation) and dispose of as asbestos waste.
- C. Install each glove bag so that it completely covers the circumference of pipe or other structure where the work is to be done.
- D. Glove bags shall be used only once, and shall not be moved.
- E. Glove bags shall be smoke tested for leaks and any leaks shall be sealed prior to removal.
- F. Glove bags shall not be used on surfaces which exceed 150 degrees Fahrenheit.
- G. Before beginning the operation, loose and friable materials adjacent to the glove bag operation shall be wrapped in two layers of six-mil thickness polyethylene plastic or otherwise rendered intact.
- H. At least two persons shall perform glove bag removal operations.
- I. Wet the asbestos material to be removed with a fine spray of amended water, wetting agent, or surfactant during removal, cutting, or other handling. As the ACM is being removed, the material should be kept as damp as possible via a low-pressure water stream to minimize asbestos fiber dispersion. Wet the material through to substrate without causing excess dripping.
- J. After cleaning twice with a damp cloth, all surfaces from which ACM has been removed shall be treated with an encapsulant to permanently bind any remaining asbestos fibers to prevent them from becoming airborne before removing the glove bag.
- K. Glove bags shall not be removed from the pipe until visually inspected for asbestos residue by the Owner's Technical Representative. The asbestos contractor shall collapse the glove bag using a HEPA vacuum and remove the bags from the pipes. Glove bags will be immediately sealed and placed in labeled asbestos waste bags for disposal.
- L. After removal of the glove bags, clean the remaining ceiling grid using a HEPA equipped

vacuum and the tops of all ceiling tiles within the work area. Wet wipe all remaining ceiling grid.

M. Maintain the surfaces of the regulated area free of accumulation of asbestos fibers. Give meticulous attention to restricting the spread of dust and debris; keep waste from being distributed over the general area. Use approved industrial HEPA vacuum cleaners to collect dust and small scrap. The blowing down of the space with compressed air is forbidden. Equip personnel engaged in cleanup of asbestos scrap and waste with necessary respiratory equipment and protective clothing.

N. Using an airless sprayer, apply a coating of encapsulation throughout the area above the suspended ceiling tiles.

3.5 ENTRY AND EXIT PROCEDURES

A. Contractor personnel and or authorized visitors shall enter and exit the work area only through the worker decontamination facility system.

B. Upon entry and exit to work area, all personnel shall sign log located in the clean room.

C. Decontamination and work procedures shall be conspicuously posted in the equipment room and clean room.

D. Personnel Protection: Personnel Protection procedures shall follow the approved Asbestos Hazard Abatement Plan, approved Respiratory Protection Program, and as specified herein.

1. Personnel shall be fully protected with respirators and protective clothing before the first disturbance of contaminated materials and until final cleanup is completed. Respirator face pieces shall not be removed in the work area or in the equipment room. Workers on scaffolding shall tie respirator airline securely to scaffold.

2. Persons wearing beards shall not be allowed to enter the work area.

3. Eating, drinking, applying cosmetics, smoking, and chewing gum or tobacco is prohibited in the work area.

3.6 AIR MONITORING

A. Sampling of airborne concentrations of asbestos fibers, as well as area and clearance sampling, shall be performed by the Owner's Representative in accordance with methods prescribed by Maryland, OSHA, and U.S. EPA AHERA regulations.

B. Throughout removal, disposal, and clean-up, ambient air monitoring will be conducted to measure the asbestos fiber levels within work areas and adjacent areas.

C. Personal air samples shall be the responsibility of the asbestos contractor. Monitoring may be duplicated at the discretion of the Owner's Representative. If the duplicate air sampling results differ from those results obtained by the asbestos contractor, the Owner's Representative will determine which results predominate.

D. At no time shall airborne concentrations of asbestos of fibers meet or exceed an 8-hour time weighted average of 0.01 f/cc of air outside of the work area. If sampling outside the containment shows airborne levels meet or exceed 0.01 f/cc, stop all work, correct the condition (s) causing the increase, and notify the Owner immediately. If an asbestos fiber release occurs outside of the asbestos control area, stop work immediately and divert all available work forces to correct the condition to the satisfaction of the Owner, including clearance sampling, prior to resumption of work.

3.8 SITE INSPECTION

A. While performing asbestos engineering control work, the asbestos contractor shall be subject to on-site inspections by OSHA and U.S. EPA inspectors, local building/health officials, and the Owner's Representative. If the work is found to be in violation of this specification by any of these officials, the asbestos contractor shall stop work immediately. The Owner's Representative will issue a stop work order to be in effect immediately and until the violation is resolved. All related costs, including standby time required to resolve the violation, shall be at the asbestos contractor's expense.

3.9 FINAL ENCAPSULATION

A. Prior to removal of plastic barriers and after pre-clearance cleanup of gross contamination, the Owner's Representative will conduct a final visual inspection of all areas affected by the removal in accordance with ASTM E 1368. A post-removal encapsulant shall then be spray applied to all areas exposed in the removal area only with approval of the Owner's Representative.

B. Insure that complete removal of ACM from the substrate has been accomplished.

C. Wet-clean and HEPA vacuum all surfaces within enclosure, including structural members, building components, plastic sheeting on walls and floors, and coverings of non-removal items, to eliminate all visible residues using U.S. EPA approved methods. Do not allow contaminated water to excessively accumulate inside the regulated areas.

D. Owner's Representative will conduct a visual inspection of the work area for any remaining visible debris and residue, and may require re-cleaning if necessary at the asbestos contractor's expense.

E. After the substrate has completely been cleaned of all visible debris and has dried, asbestos waste containers are completely removed from the enclosure, and has passed a thorough inspection of visible residual contamination by the Owner's Representative, application of the encapsulant can begin.

1. Encapsulant shall be spray-applied to the substrate using an airless sprayer. At the same time, the outer layer of polyethylene should be misted with a coat of lockdown material.

2. The HEPA-filtered negative pressure system and air filtration systems shall remain in service during application of encapsulant.

3.10 FINAL CLEARANCE CRITERIA

A. All final clearance sampling will be conducted by the Owner's Representative in accordance with U.S. EPA AHERA regulations.

3.11 DISPOSAL OF ASBESTOS AND ASBESTOS WASTE

A. Secure necessary permits in conjunction with asbestos disposal and hauling. Provide timely notification of such actions, as may be required by Federal, State, regional, and local authorities. Notify the Regional Office of the U.S. EPA and provide copies of the notification to the Owner ten days prior to the commencement of the work in accordance with 40 CFR 61.

B. Procedure for disposal and hauling of asbestos waste shall comply with 40 CFR 61-Subpart M. Dispose and transport asbestos-containing waste to an approved authorized site in accordance with requirements of NESHAP, applicable state/local guidelines and regulations, and U.S. EPA requirements.

C. The asbestos contractor shall provide the Owner's Representative a copy of all chain-of-custody forms, hazardous waste manifests, haulers receipts or landfill receiving tickets resulting from the disposal of the asbestos waste.

3.12 RE-ESTABLISHMENT OF OBJECTS AND SYSTEMS

A. When asbestos removal is complete, all asbestos waste is removed from the work

site, and final cleanup is complete, the Owner's Representative will attest that the area is safe before the signs can be removed.

B. Replace removed objects as directed by Owner.

C. Reestablish HVAC, mechanical, and electrical systems. Install new HVAC filters and dispose of old filters as asbestos-contaminated waste.

END OF SECTION

According to federal regulations, lead-based paint is 0.5% lead or 5,000 milligram of lead per kilogram of paint chips. Based on the analytical results, none of the tested paint chips classify as lead paint. The lead paint analysis results are attached as **Appendix 2**.

This letter has been prepared specific to the site and client requested scope of services by Triad for the use of the addressee under the terms and limitations of our proposal and professional services agreement. No other warranty, either written or implied, is applicable to this project.

Sincerely,

TRIAD ENGINEERING, INC.



Timothy J. Kellerman
Senior Environmental Scientist



Nicholas J. Wolfe, P.G.
Regional Manager

Attachments

Attachment 1 – Asbestos PLM Analysis Results
Attachment 2 – Lead Paint Analysis Results

Attachment 1 – Asbestos PLM Analysis Results



The Identification Specialists

Analysis Report
prepared for
Triad Engineering, Inc.

Report Date: 12/13/2019

Project Name: Locomotive

Project #: 03-19-0897

SanAir ID#: 19062566



NVLAP LAB CODE 200870-0

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888.895.1177 | 804.897.1177 | fax: 804.897.0070 | IAQ@SanAir.com | SanAir.com

241



SanAir ID Number

19062566

FINAL REPORT

12/13/2019 1:30:44 PM

Name: Triad Engineering, Inc.
Address: 10541 Teays Valley Road
Scott Depot, WV 25560
Phone: 304-755-0721

Project Number: 03-19-0897
P.O. Number:
Project Name: Locomotive
Collected Date: 12/5/2019
Received Date: 12/9/2019 9:05:00 AM

Dear Pat Upham,

We at SanAir would like to thank you for the work you recently submitted. The 12 sample(s) were received on Monday, December 09, 2019 via FedEx. The final report(s) is enclosed for the following sample(s): 1A, 1B, 1C, 2A, 2B, 2C, 3A, 3B, 3C, 4A, 4B, 4C.

These results only pertain to this job and should not be used in the interpretation of any other job. This report is only complete in its entirety. Refer to the listing below of the pages included in a complete final report.

Sincerely,

Sandra Sobrino
Asbestos & Materials Laboratory Manager
SanAir Technologies Laboratory

Final Report includes:

- Cover Letter
- Analysis Pages
- Disclaimers and Additional Information

Sample conditions:

- 12 samples in Good condition.

242



SanAir ID Number
 19062566
 FINAL REPORT
 12/13/2019 1:30:44 PM

Name: Triad Engineering, Inc.
 Address: 10541 Teays Valley Road
 Scott Depot, WV 25560
 Phone: 304-755-0721

Project Number: 03-19-0897
 P.O. Number:
 Project Name: Locomotive
 Collected Date: 12/5/2019
 Received Date: 12/9/2019 9:05:00 AM

Analyst: Powers, Griffin

Asbestos Bulk PLM EPA 600/R-93/116

SanAir ID / Description	Stereoscopic	Components		Asbestos Fibers
	Appearance	% Fibrous	% Non-fibrous	
1A / 19062566-001 Boiler Insulation	White Non-Fibrous Homogeneous	5% Cellulose	95% Other	None Detected
1B / 19062566-002 Boiler Insulation	White Non-Fibrous Homogeneous	5% Cellulose	95% Other	None Detected
1C / 19062566-003 Boiler Insulation	White Non-Fibrous Homogeneous	5% Cellulose	95% Other	None Detected
2A / 19062566-004 Glass-Wool "Like" Insulation	White Fibrous Homogeneous	90% Glass	10% Other	None Detected
2B / 19062566-005 Glass-Wool "Like" Insulation	White Fibrous Homogeneous	90% Glass	10% Other	None Detected
2C / 19062566-006 Glass-Wool "Like" Insulation	White Fibrous Homogeneous	90% Glass	10% Other	None Detected
3A / 19062566-007 Wire Insulation	Black Non-Fibrous Homogeneous		80% Other	20% Chrysotile
3B / 19062566-008 Wire Insulation				Not Analyzed
3C / 19062566-009 Wire Insulation				Not Analyzed
4A / 19062566-010 Cementious Material-Front Bumper	Pink Non-Fibrous Homogeneous		100% Other	None Detected

Analyst: *Griffin Powers*

Approved Signatory: *Johnathan Wilson*

Analysis Date: 12/13/2019

Date: 12/13/2019

243



SanAir ID Number
19062566
 FINAL REPORT
 12/13/2019 1:30:44 PM

Name: Triad Engineering, Inc.
Address: 10541 Teays Valley Road
 Scott Depot, WV 25560
Phone: 304-755-0721

Project Number: 03-19-0897
P.O. Number:
Project Name: Locomotive
Collected Date: 12/5/2019
Received Date: 12/9/2019 9:05:00 AM

Analyst: Powers, Griffin

Asbestos Bulk PLM EPA 600/R-93/116

SanAir ID / Description	Sample Color		Composition	
	Appearance	% Fibrous	% Non-Fibrous	Asbestos Fibers
4B / 19062566-011 Cementitious Material-Front Bumper	Pink Non-Fibrous Homogeneous		100% Other	None Detected
4C / 19062566-012 Cementitious Material-Front Bumper	Pink Non-Fibrous Homogeneous		100% Other	None Detected

Analyst: *Vivian Keller*

Approved Signatory: *Johnathan Wilson*

Analysis Date: 12/13/2019

Date: 12/13/2019

244

Disclaimer

The final report cannot be reproduced, except in full, without written authorization from SanAir. Fibers smaller than 5 microns cannot be seen with this method due to scope limitations. The accuracy of the results is dependent upon the client's sampling procedure and information provided to the laboratory by the client. SanAir assumes no responsibility for the sampling procedure and will provide evaluation reports based solely on the sample and information provided by the client. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Samples are held for a period of 60 days.

For NY state samples, method EPA 600/M4-82-020 is performed.

Polarized- light microscopy is not consistently reliable in detecting asbestos in floor covering and similar non-friable organically bound materials. Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Asbestos Certifications

NVLAP lab code 200870

City of Philadelphia: ALL-460

PA Department of Environmental Protection Number: 68-05397

California License Number: 2915

Colorado License Number: AL-23143

Connecticut License Number: PH-0105

Massachusetts License Number: AA000222

Maine License Number: LB-0075

New York ELAP lab ID: 11983

Rhode Island License Number: AAL-126

Texas Department of State Health Services License Number: 300440

Commonwealth of Virginia 3333000323

Washington State License Number: C989

West Virginia License Number: LT000566

Vermont License: AL166318

Revision Date: 11/30/2017

245



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 www.sanair.com

**Asbestos
Chain of Custody**

SanAir ID Number <i>19002906</i>

Company: Triad Engineering, Inc.	Project #: 03-19-0897	Collected by: Patrick Upham
Address: 1075D Sherman Ave	Project Name: Locomotive	Phone #: 301-797-6400
City, St., Zip: Hagerstown, MD 21740	Date Collected: 12/5/2019	Fax #: 301-797-2424
State of Collection: MD Account#: 2565	P.O. Number:	Email: pupham@triadeng.com

Bulk			Air			Soil/Vermiculite		
ABB	PLM EPA 600/R-93/116	<input checked="" type="checkbox"/>	ABA	PCM NIOSH 7400	<input type="checkbox"/>	ABSE	PLM EPA 600/R-93/116 (Qual.)	<input type="checkbox"/>
	Positive Stop	<input checked="" type="checkbox"/>	ABA-2	OSHA w/ TWA*	<input type="checkbox"/>	ABSP	PLM CARB 435 (LOD <1%)	<input type="checkbox"/>
ABEPA	PLM EPA 400 Point Count	<input type="checkbox"/>	ABTEM	TEM AHERA	<input type="checkbox"/>	ABSP1	PLM CARB 435 (LOD 0.25%)	<input type="checkbox"/>
ABB1K	PLM EPA 1000 Point Count	<input type="checkbox"/>	ABATN	TEM NIOSH 7402	<input type="checkbox"/>	ABSP2	PLM CARB 435 (LOD 0.1%)	<input type="checkbox"/>
ABBEN	PLM EPA NOB	<input type="checkbox"/>	ABT2	TEM Level II	<input type="checkbox"/>			
ABBCH	TEM Chatfield	<input type="checkbox"/>						
ABBTM	TEM EPA NOB	<input type="checkbox"/>						
Water			New York ELAP			Dust		
ABHE	EPA 100.2	<input type="checkbox"/>	PLM NY	PLM DO@600/M4,82,020	<input type="checkbox"/>	ABWA	TEM Wipe ASTM D-6480	<input type="checkbox"/>
			ABEPA2	NY ELAP 198.1	<input type="checkbox"/>	ABDMV	TEM Microvac ASTM D-5755	<input type="checkbox"/>
			ABENY	NY ELAP 198.6 PLM NOB	<input type="checkbox"/>	Matrix	Other	<input type="checkbox"/>
			ABBNY	NY ELAP 198.4 TEM NOB	<input type="checkbox"/>			<input type="checkbox"/>

Turn Around Times	3 HR (4 HR TEM) <input type="checkbox"/>	6 HR (8HR TEM) <input type="checkbox"/>	12 HR <input type="checkbox"/>	24 HR <input type="checkbox"/>
	2 Days <input type="checkbox"/>	3 Days <input type="checkbox"/>	4 Days <input type="checkbox"/>	5 Days <input checked="" type="checkbox"/>

Special Instructions

Sample #	Sample Identification/Location	Volume or Area	Sample Date	Flow Rate*	Time* Start - Stop
1A,B,C	White boiler insulation	N/A	12/5/2019	N/A	N/A
2A,B,C	Glass-wool "like" insulation				
3A,B,C	Wire insulation				
4A,B,C	Pinkish cementious material - front bumper				

Relinquished by	Date	Time	Received by	Date	Time
			<i>all</i>	<i>12-09-19</i>	<i>9:05am</i>

Attachment 2 – Lead Paint Analysis Results



The Identification Specialists

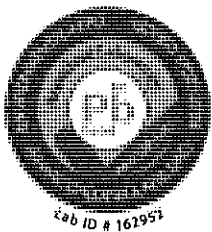
Analysis Report
prepared for
Triad Engineering, Inc.

Report Date: 12/16/2019

Project Name: 202 Locomotive

Project #: 03-19-0897

SanAir ID#: 19062564



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SanAir ID Number
19062564
FINAL REPORT
12/16/2019 8:44:44 AM

Name: Triad Engineering, Inc.
Address: 10541 Teays Valley Road
Scott Depot, WV 25560
Phone: 304-755-0721

Project Number: 03-19-0897
P.O. Number:
Project Name: 202 Locomotive
Collected Date: 12/5/2019
Received Date: 12/9/2019 9:05:00 AM

Dear Pat Upham,

We at SanAir would like to thank you for the work you recently submitted. The 7 sample(s) were received on Monday, December 09, 2019 via FedEx. The final report(s) is enclosed for the following sample(s): G-1, Y-1, R-1, S-1, B-1, B-2, B-3.

These results only pertain to this job and should not be used in the interpretation of any other job. This report is only complete in its entirety. Refer to the listing below of the pages included in a complete final report.

Sincerely,

Abisola Kasali
Metals Laboratory Director
SanAir Technologies Laboratory

Final Report Includes:

- Cover Letter
- Analysis on Test Family AA
- Disclaimers and Additional Information

Sample conditions:

- 7 samples in Good condition.

249



SanAir ID Number
 19062564
 FINAL REPORT
 12/16/2019 8:44:44 AM

Name: Triad Engineering, Inc.
 Address: 10541 Teays Valley Road
 Scott Depot, WV 25560
 Phone: 304-755-0721

Project Number: 03-19-0897
 P.O. Number:
 Project Name: 202 Locomotive
 Collected Date: 12/5/2019
 Received Date: 12/9/2019 9:05:00 AM

Analyst: Baird, Marti
 Test Method: SW846/M3050B/7000B

Lead Paint Analysis

PAINT Sample	Description	µg Pb In Sample	Sample Size (grams)	Calculated RL	Sample Results	Sample Results
19062564 - 1	G-1 Green Paint Chip	< 10	0.1073	93.2	<93.2 µg/g (ppm)	<0.009 % By Weight
19062564 - 2	Y-1 Yellow Paint Chip	< 10	0.103	97.1	<97.1 µg/g (ppm)	<0.010 % By Weight
19062564 - 3	R-1 Red Paint Chip	< 10	0.0841	118.9	<118.9 µg/g (ppm)	<0.012 % By Weight
19062564 - 4	S-1 Silver Paint Chip	467	0.1099	91	4251 µg/g (ppm)	0.425 % By Weight
19062564 - 5	B-1 Flat Black (Heavy) Paint Chip	22	0.1026	97.5	217.6 µg/g (ppm)	0.022 % By Weight
19062564 - 6	B-2 Flat Black (Thin) Paint Chip	< 10	0.1167	85.7	<85.7 µg/g (ppm)	<0.009 % By Weight
19062564 - 7	B-3 Black Glossy Textured Paint Chip	10	0.1068	93.6	95.4 µg/g (ppm)	0.010 % By Weight

Method Reporting Limit <10 µg/0.1 g paint

Signature: *Marti Baird*
 Date: 12/10/2019

Reviewed: *Abisa G. G. G.*
 Date: 12/10/2019

250



SanAir ID Number
19062564
FINAL REPORT
12/16/2019 8:44:44 AM

Name: Triad Engineering, Inc.
Address: 10541 Teays Valley Road
Scott Depot, WV 25560
Phone: 304-755-0721

Project Number: 03-19-0897
P.O. Number:
Project Name: 202 Locomotive
Collected Date: 12/5/2019
Received Date: 12/9/2019 9:05:00 AM

251

Disclaimer

SanAir Technologies Laboratory, Inc. participates in the Environmental Lead Accreditation Program (ELAP) administered by AIHA-LAP, LLC (Lab ID162952). Refer to our accreditation certificate or www.aihaaccreditedlabs.org for an up to date list of the Fields of Testing for which we are accredited. SanAir also participates in the State of New York's DOH-ELAP (Lab Id 11983), and has met the EPA's NLLAP program standards.

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Lead Exposure Limits

Paint

0.5% by weight	HUD definition of lead based paint
1.0 mg/cm ²	
5000 ppm	



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 sanair.com

**Metals & Lead
 Chain of Custody**
 Form 70, Revision 10, 05/18/18

SanAir ID Number

19062564

Company: Triad Engineering	Project #: 03-19-0897	Phone #: 3017976400
Address: 1075 Sherman Ave	Project Name: 202 Locomotive	Phone #:
City, St., Zip: Hagerstown, MD	Date Collected: 12/5/2019	Fax #:
Samples Collected By: Triad	P.O. Number:	Email: pupham@triadeng.com
Account #: 2565	U.S. State Collected in: MD	Email:

Matrix Types

Metals Analysis Types

<input type="checkbox"/> Air (ug/m ³)	Total Concentration of Lead <input checked="" type="checkbox"/>	ICP-total concentration of metals (please list metals):					
<input type="checkbox"/> Wipe (ug/n ²)	Total Concentration of RCRA 8 Metals <input type="checkbox"/>						
<input checked="" type="checkbox"/> Paint <input type="checkbox"/> Soil <input type="checkbox"/> Bulk (ug/g or ppm)	TCLP for Lead <input type="checkbox"/>						
<input type="checkbox"/> Other:	TCLP for RCRA 8 Metals <input type="checkbox"/>						
Turn Around Time	Same Day <input type="checkbox"/>	1 Day <input type="checkbox"/>	2 days <input type="checkbox"/>	3 Days <input type="checkbox"/>	4 Days <input type="checkbox"/>	<input checked="" type="checkbox"/> Standard (5 day)	Other Test: <input type="checkbox"/>

Sample #	Collection Date & Time	Sample Identification/Location	Flow Rate	Start Time	Stop Time	Volume (L) Area (Sq ft)
G-1		Green Paint Chip				
Y-1		Yellow Paint Chip				
R-1		Red Paint Chip				
S-1		Silver Paint Chip				
B-1		Flat Black (Heavy) Paint Chip				
B-2		Flat Black (Thin) Paint Chip				
B-3		Black Glossy Textured Paint Chip				

Special Instructions

Relinquished by	Date	Time	Received by	Date	Time
			CEL	12-01-19	01:00 PM

If no technician is provided, then the primary contact for your account will be selected. Unless scheduled, the turnaround time for all samples received after 3 pm EST will be logged in the next business day. Weekend or holiday work must be scheduled ahead of time and is charged at 150% of the 3hr TAT or a minimum charge of \$150. A courier charge will be applied for same day and one-day turnaround times for offsite work. SanAir covers Standard Overnight FedEx shipping. Shipments billed to SanAir with a faster shipping rate will result in additional charges.

253

SECTION 00 21 10

SELECTIVE DEMOLITION

A. GENERAL

1. DESCRIPTION:

1.1 Requirements of the General Conditions, Supplementary Conditions and Division 1 of these specifications apply to this Section.

1.2. Include all labor, materials, appliances and services necessary to complete all demolition work required by the drawings and/or described in this specification.

1.3 Demolition includes the complete removal of selected building components, as indicated on the drawings, and proper disposal, off site, of all demolished materials.

1.3.1 See Division 15000 for Mechanical portion, and Division 16000 for Electrical portion of demolition.

2. QUALITY ASSURANCE:

2.1 All work of this Section shall be carefully executed without damage to adjacent construction shown to remain for post construction occupancy.

2.2 All materials scheduled to be relocated or reinstalled shall be removed, cleaned, and stored in such manner that they are not damaged. This includes but is not limited to air diffuser/return grilles, speakers, cameras, and fire alarm devices shown to be removed and reinstalled on the drawings.

2.3 All equipment removed as part of this Contract, and selected by the Owner to be stored for future use by the Owner, shall be delivered to the Owner's storage area.

2.4 Maintain all legal means of egress for adjacent and affected occupied areas during all demolition activities.

3. CONDITION OF STRUCTURES:

3.1 The Owner assumes no responsibility for the actual condition of structures to be demolished.

3.2 Conditions existing at the time of inspection for bidding purposes will be maintained by the Owner insofar as practicable. However, variations within the structure may occur due to work completed by the construction of earlier phases of this Project, and/or by Owner's removal and salvage operations prior to the start of the demolition work.

3.3 The Owner will be removing furnishings as required to make the work area accessible for operations.

B. EXECUTION

4. GENERAL:

4.1 Perform demolition in a systematic manner, in accordance with approved submittals.

City Park Train Hub

00 21 10-1

Proj No: 19-35

Locomotive Refurbishment &

Selective Demolition

Pavilion Replacement

City of Hagerstown, MD

254

4.2 Where required to install new finishes. Remove existing materials in a manner to accommodate new finishes including removal of all coatings, grouts, adhesives, and other bonding agents.

4.3 Where existing finishes are to remain and abut adjacent new construction, cut and remove existing materials in a neat fashion with straight edges without chipping or cracking.

5. TRAFFIC:

5.1 Conduct demolition operations and the removal of debris to ensure minimum interference with roads, streets, walks, and other adjacent occupied or used facilities. Do not close or obstruct streets, walks or other occupied or used facilities without permission from the Owner. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.

6. PROTECTION:

6.1 Provide fenced passageways, as required, to ensure the safe passage of persons around the area of demolition. Conduct operations to prevent damage by falling debris or other cause to adjacent buildings, structures, landscaping and other facilities as well as persons.

6.2 Provide dust-tight barriers as required to separate construction/demolition areas from building areas occupied by the Owner during the construction period.

6.3 Cover and protect furnishings that will remain in place during the course of construction.

6.4 Cover and protect floor finishes that will remain in place during the course of construction.

7. DAMAGES:

7.1 Promptly repair damages caused to adjacent facilities by demolition operations, as directed by the Architect and at no cost to the Owner.

8. UTILITY SERVICES:

8.1 Maintain existing utilities, indicated to remain, keep in service, and protect against damage during demolition operations.

8.2 Do not interrupt existing utilities serving occupied or used facilities, except when authorized by the Architect. Provide temporary services during interruptions to existing utilities, as acceptable to the Architect.

9. POLLUTION CONTROLS:

9.1 Use water sprinkling, temporary enclosures, and other suitable methods as necessary to limit the amount of dust and dirt rising and scattering in the air, to the lowest level of air pollution practical for the condition of work. Comply with the governing regulations.

9.2 Clean adjacent structures and improvements of all dust, dirt and debris caused by demolition operations, as directed by the Architect. Return areas to condition existing prior to the start of the work.

10. REMOVAL:

City Park Train Hub
Locomotive Refurbishment &
Pavilion Replacement
City of Hagerstown, MD

00 21 10-2
Selective Demolition

Proj No: 19-35

255

10.1 General: Remove from the site all debris, rubbish and other materials resulting from demolition operations. Storage or sale of materials will not be permitted on the site.

10.2 Burning: Burning of removed materials from demolished structures will not be permitted on the site.

10.3 Removal: Transport all materials, not scheduled to be delivered to the Owner, removed from demolished structures and disposed of off the site.

10.4 Recycling: Where possible/practical the Contractor is encouraged to recycle demolished building materials.

- END OF SECTION -

SECTION 03 30 00

CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.0 SECTION INCLUDES

- A. Cast-in-place concrete for footings and column piers.
- B. Cast-in-place concrete floors and slabs on grade (interior).
- C. Control, expansion, and construction joints associated with concrete work, including joint sealants.
- D. Interior equipment pads.

1.1 RELATED SECTIONS

- A. Section 02325 – Curb & Gutter and Sidewalk - Exterior concrete walks, slabs, curbs, etc.
- B. Section 05120 – Structural Steel - Anchor Bolts & Base Plates

1.2 REFERENCES

- A. ACI 301 - Structural Concrete for Buildings.
- B. ACI 302 - Guide for Concrete Floor and Slab Construction.
- C. ACI 304 - Recommended Practice for Measuring, Mixing, Transporting and Placing Concrete.
- D. ACI 305R - Hot Weather Concreting.
- E. ACI 306R - Cold Weather Concreting.
- F. ACI 308 - Standard Practice for Curing Concrete.
- G. ACI 318 - Building Code Requirements for Reinforced Concrete.
- H. ASTM C31 - Standard Method of Making and Curing Concrete Test Specimens in the Field.
- I. ASTM C94 - Standard Specification for Ready-Mixed Concrete.

1.3 SUBMITTALS

- A. Submit under provisions of Division 1.

- B. Concrete: Submit evidence of the capability of the ready-mixed concrete supplier to meet the requirements of this specification, including compliance with the recommendations of ACI 301, 304, 305, 306, and ASTM C-94. The supplier shall submit applicable mix designs and certifications that meet this specification based on recent laboratory and field test results for each design mix from the supplier's plant. Include letter from insulated concrete form (ICF) manufacturer indicating their acceptance of mix for use in ICF applications.
- C. Concrete Reinforcement: Submit shop drawings for fabrication, bending, and placement of concrete reinforcement in accordance with ACI 315 and CRSI showing bar sizes, spacings, locations, quantities of reinforcing steel and wire fabric, bending and cutting schedules, and supporting and spacing devices.
- D. Manufacturers Information: Submit manufacturers information for welded wire fabric, all admixtures, curing compound, vapor barrier, joint filler, and type of reinforcing support.

1.4 PROJECT RECORD DOCUMENTS

- A. Submit under provisions of Division 1.
- B. Approved set of concrete reinforcement shop drawings.
- C. Within one week after each concrete pour, submit a legible duplicate delivery ticket for each load of concrete, including: Producer's name, delivery date and times (dispatched, delivered and finished), truck number and driver's name, number of yards, mix design, amount of water mixed at plant, amount of water added at site, number of revolutions to total discharge, concrete temperature, air temperature and pertinent weather information, water/cement ratio, slump(s), test cylinder numbers and location of pour.
- D. Concrete cylinder test results shall be submitted to the Engineer within one week after the 7-day and 28-day tests.
- E. As-built locations of embedded utilities.
- F. Maintain one copy of each document on site.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with this specification and the applicable codes and standards under Section 1.2, including CRSI Manual of Standard Practice, ACI 301, and ACI 318.
- B. Inspection Agency: The owner shall retain and pay for all services required herein for an independent Inspection Agency. The Inspection Agency shall not be affiliated, in any way, with any of the subcontractors or suppliers for this project, shall be licensed in the State of Maryland.
- C. The Inspection Agency shall perform the inspection and testing services specified in ACI 301, Chapter 16, with quantities as modified in section "H" below. The requirements of ACI 301, Chapter 16 specify that one strength test consisting of a minimum of six concrete cylinders shall be cast for each 100 cubic yards, or fraction thereof, for each class of concrete placed in any one

day. A set consists of two cylinders tested at 7 days, two cylinders tested at 28 days, and two cylinders retained for later testing if required.

- D. The concrete supplier shall acquire the cement and aggregate from same source for all concrete produced for this project. Fly ash may be obtained from a different source, but must be guaranteed to be compatible with other mix components.
- E. The concrete construction shall conform to ACI 305R when concreting during hot weather and shall conform to ACI 306R when concreting during cold weather.
- F. The Contractor shall submit the concrete mix designs with quantities of materials to achieve the concrete strength requirements and shall be substantiated by field use and laboratory test data. These concrete mix designs shall be submitted two weeks prior to use and approved for each class of concrete and/or concrete supplier. The Contractor and the Concrete Supplier shall submit manufacturer's data and information for Engineer approval for concrete admixtures and curing agents.
- G. Concrete slump, air content, and temperature shall be recorded for the first concrete load to be placed in the day, for each load thereafter, and for each set of concrete cylinders.
- H. A set of concrete cylinders shall be cast for each 50 cubic yards or fraction thereof of each class of concrete, with at least one test for each day that concrete is poured. A set of testing consists of one slump test and five laboratory cured test cylinders. Two cylinders shall be tested at 7 days, two cylinders tested at 28 days, and one cylinder retained for later testing if required. The requirement for the retained cylinder may be waived by the Engineer if sufficient test data is obtained to establish the strength performance of the concrete.
- I. Should the concrete strength by testing fall below the specified strength, the Owner shall have the right to order tests to be made of that portion of structure where questionable concrete has been placed. Tests shall be made at no increase in contract price. In the event tests indicate concrete placed does not conform to contract specifications, measures as provided by the Owner shall be taken to correct deficiencies at no increase in contract price. The Contractor shall also compensate the Owner for Architect/Engineer fees required to correct deficiencies.
- J. At all slab on grade, once the gravel layer has been placed, a plate tamper or small roller shall be used to tighten up the top of the stone layer for the entire surface of the stone.

1.6 QUALIFICATIONS

- A. The concrete specified under this specification shall be supplied by a mixing plant which has been in business in the immediate area for at least five (5) years and has the capability to meet all of the requirements herein.

1.7 COORDINATION

- A. Coordinate work under provisions of Division 1.
- B. Coordinate the placement of formwork, reinforcement, formed openings, control joints, expansion joints, construction joints with the erection of concrete formwork, placement of form and concrete accessories, and placement of concrete.

C. Provisions for Structural Steel:

1. Locate anchor bolt patterns on exact column centers, unless otherwise noted, and incorporate bolts in pour.
2. Locate bearing plates and all other structural components as noted and incorporate into the concrete pour.
3. See the structural drawings and notes for required cover at steel reinforcing.

D. Provisions for Pipes and Conduits:

1. The Contractor is responsible for the coordination of the placement of all items in a concrete pour.
2. Make provisions for the installation of sleeves, pipes, joint devices, conduits, boxes, inserts, hangers, form accessories, and Work of other trades, which shall be placed so that concrete construction shall not be weakened.
3. Minimum concrete coverage must be provided around reinforcing upon completion of the pour.
4. Each trade shall place any and all of the above inserts, but the concrete installer shall be responsible for following above procedure and maintaining position of all inserts until concrete is placed and cured.
5. When conduits or pipes embedded in slabs are of larger outside diameter than 1 ½" or when they come closer than 1 inch from the upper or lower surface of the slab, 14 gauge expanded metal or wire mesh must be laid and extended beyond such conduit or piping at least 8 inches on all sides.
6. Conduits or pipes must be spaced not closer to each other than three diameters on centers, and they must be placed prior to rebar in order to avoid altering the location of reinforcement.
7. Conduits or pipes cannot be tied parallel or close to rebar; maintain 2 inches minimum coverage around all rebar.

PART 2 - PRODUCTS

2.1 CONCRETE MATERIALS

- A. Cement: ASTM C595-03 Blended Hydraulic Cement. Substitute recycled content fly ash (meeting ASTM C618) and/or recycled content blast furnace slag (meeting ASTM C989) for 20% to 30% by weight of Portland cement materials of typical mix.
- B. Fine Aggregates: ASTM C33; Fine aggregate shall consist of clean, sharp, natural sand free from loam, clay lumps or other deleterious materials.

C. Coarse aggregate: ASTM C33; Coarse aggregate shall consist of clean uncoated processed aggregate containing no clay, mud, loam, or deleterious materials. The coarse aggregate should not be larger than one-fifth of the minimum dimension of the member, one-third of the depth of slabs, or three-fourths of the minimum clear spacing between individual or bundled reinforcing bars.

D. Water: Clean, fresh, potable, and not detrimental to concrete.

2.2 ADMIXTURES

A. Air Entrainment: ASTM C260.

B. No other chemical admixtures permitted without approval from the Architect. If the concrete supplier believes that admixtures will be required to meet other specification requirements, then full manufacturer's data and ASTM standard compliance information for each proposed admixture must be submitted for review at the time of mix design submittal. Data on chloride ion content and manufacturer's certification of admixture compatibility (in cases where multiple admixtures are proposed) shall accompany this submittal. All proposed admixtures to be reviewed on a case-by-case basis by the Architect.

2.3 ACCESSORIES

A. Curing Compound: ASTM C-309, Type 1 and shall be compatible with floor finishes.

B. Concrete Sealer: W.R. Meadows, Inc., Vocomp 20 Acrylic Curing and Sealing Compound.

C. Vapor Barrier: 10 mil thick clear polyethylene film, type recommended for below grade application.

D. Expansion Joint Filler: 1/2" thick per ASTM D-1751.

E. Non-Shrink Grout: Premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents; capable of developing minimum compressive strength of 2,400 psi in 48 hours and 7,000 psi in 28 days.

2.4 CONCRETE MIX

A. Concrete: Deliver ready-mix concrete in accordance with ASTM C94, or volumetrically batched concrete in accordance with ASTM C-685.

B. Select proportions for normal weight concrete in accordance with ACI 301.

C. Provide concrete to the following criteria:

Unit	Measurement
Compressive Strength (28 day)	3500 psi
Water/Cement Ratio (maximum)	0.58 by weight
Aggregate Size (maximum)	1.5 inches (footing applications only)

City Park Train Hub
 Locomotive Refurbishment &
 Pavilion Replacement
 City of Hagerstown, MD

03 30 00-5
 Cast-in-Place Concrete

Proj No: 19-35

261

Aggregate Size (minimum)	0.75 inches (all other applications) 0.75 inches (footing applications only)
Air Entrained	0.5 inches (all other applications) Not required in concrete not exposed to weather 5-7 percent (in concrete exposed to weather only)
Admixture - Plus or minus 1%	6% air-entrainment (only in concrete exposed to weather)
Slump	2-4 inches (non-ICF applications) 5.5-6.5 inches (ICF applications)

- D. Concrete mixes shall conform to the approved mix designs.
- E. See structural drawings and notes for additional requirements.
- F. Concrete mix for use with insulated concrete form system must be approved by form system manufacturer.

2.5 CONCRETE REINFORCEMENT

- A. Reinforcing Steel: ASTM A615, Grade 60; deformed billet steel bars.
- B. Welded Wire Fabric (WWF): ASTM A185 - Welded Steel Wire Fabric for Concrete Reinforcement, welded steel wire fabric, WWF 6x6 - W1.4 X W1.4,(6"x 6" mesh with no.10 gauge wire), unless otherwise specified.
- C. Optional Replacement for Welded Wire Fabric in slab on grade: Synthetic polypropylene reinforcing fibers, added at the concrete plant per the fiber manufacturer's recommendations – see the structural specifications for additional information regarding this option.
- D. Steel Wire: ASTM A82 - Cold Drawn Steel Wire for Concrete Reinforcement.
- E. Tie Wire: Minimum 16 gage annealed type.
- F. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for strength and support of reinforcement during concrete placement including bearing pad to prevent vapor barrier puncture.

2.6 FABRICATION

- A. Fabricate concrete reinforcing in accordance with CRSI Manual of Practice.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify existing conditions prior to beginning work.
- B. Verify that reinforcement, embedded utilities, anchors, plates, and other concrete accessories to be cast into concrete are accurately placed, positioned securely, and will not cause hardship in placing concrete.

- C. Verify that all insulated concrete formwork is securely placed, tied, reinforced, and/or braced per the formwork manufacturer's installation manual.

3.2 TESTING:

- A. The Owner will hire a third-party testing agency. The contractor shall coordinate testing with the Owner's testing agency as indicated. Testing shall include, but not be limited to the following:
 - 1. Submit proposed mix design of each class of concrete to Inspection Agency for review prior to commencement of Work.
 - 2. Tests of cement and aggregates may be performed to ensure conformance with specified requirements.
 - 3. Five concrete test cylinders and one slump test will be taken for every 50 cu yds of each class of concrete placed.
 - 4. One additional test cylinder will be taken during cold weather concreting, cured on job site under same conditions as concrete it represents.
 - 5. Slump test, air content, concrete temperature, and air temperature shall be taken for each set of test cylinders taken.
 - 6. Test results to be provided in writing to the Architect, Owner, Structural Engineer, and Contractor.

3.3 PLACEMENT OF REINFORCEMENT

- A. Place support and secure reinforcement against displacement. Do not deviate from required position.
- B. Maintain concrete cover around reinforcing as specified.
- C. Do not displace or damage vapor barrier.
- D. Accommodate placement of formed openings.
- E. Refer to the Structural Drawings for additional notes and requirements.

3.4 PREPARATION

- A. Prepare previously placed concrete by cleaning with steel brush and applying bonding agent in accordance with manufacturer's instructions.
- B. In locations where new concrete is dowelled into existing work, drill holes in existing concrete, insert steel dowels, and pack solid with non-shrink grout.

3.5 PLACEMENT OF CONCRETE

- A. Place concrete in accordance with ACI 301, 304, and 318.
- B. Notify OWNER a minimum of 24 hours prior to placement of concrete.
- C. Ensure reinforcement, inserts, embedded parts, formed expansion and contraction joints are not disturbed during concrete placement.
- D. Install vapor barrier under interior slabs on grade. Lap joints minimum 6 inches and seal watertight by taping edges and ends.
- E. Repair vapor barrier damaged during placement of concrete reinforcing. Repair with vapor barrier material; lap over damaged areas minimum 6 inches and seal watertight.
- F. Separate slabs on grade from vertical surfaces with 1/2 inch thick joint filler. Place joint filler in floor slabs as specified. Set top to required elevations. Secure to resist movement by wet concrete.
- G. Extend joint filler from bottom of slab to within 1/4 inch of finished slab surface. Conform to finish joint sealer requirements.
- H. Install construction joint devices in accordance with manufacturer's instructions and in coordination with floor slab pattern placement sequence. Set top to required elevations. Secure to resist movement by wet concrete. Maintain correct position to allow joint cover to be flush with floor and wall finish. Joints shall be installed in straight lines, unless otherwise indicated on the drawings.
- I. Apply sealants in joint devices in accordance with Section 07900.
- J. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken. Concrete must be adequately protected from freezing and high temperatures at all times during the first 72 hours after placement.
- K. Place concrete continuously between pre-determined expansion, control, and construction joints.
- L. Do not interrupt successive placement; do not permit cold joints to occur.
- M. Place floor slabs in saw cut pattern indicated. Saw cut joints within 24 hours after placing. Use 3/16 inch thick blade, cut into 1/4 depth of slab thickness.
- N. Screed floors and slabs on grade level, maintaining surface flatness of maximum 1/4 inch in 10 ft.
- O. In floors where floor drains are to be installed, slope concrete uniformly towards drains.
- P. Place and consolidate concrete in insulated concrete form walls per the formwork manufacturer's installation guidelines.

3.6 CURING AND PROTECTION

- A. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.

B. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.

C. Cure concrete to requirements of this specification.

3.7 FINISHING

A. Finish formed concrete surfaces to be left exposed with smooth rubbed finish.

B. Finish concrete floor surfaces with steel trowel finish.

C. Allow Architect/Engineer to inspect concrete surfaces immediately upon removal of forms.

D. Excessive honeycomb or embedded debris in concrete is not acceptable. Notify Architect/Engineer upon discovery.

E. Patch imperfections as directed by the Architect with cement mortar immediately after removal of forms.

3.8 TOLERANCES

A. Maximum Variation of Surface Flatness: 1/8 inch in 10 ft.

B. In areas with floor drains, maintain design floor elevation at walls; slope surfaces uniformly to drains at 1/8 inch per foot in 10 feet.

C. Correct surface defects by grinding or removal and replacement of the defective work. Areas requiring corrective work will be identified. Re-measure corrected areas by the same process.

3.9 DEFECTIVE CONCRETE

A. Defective Concrete: Concrete not conforming to required lines, details, dimensions, tolerances or specified requirements.

B. Repair or replacement of defective concrete will be determined by the Architect/Engineer.

C. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express direction of Architect/Engineer for each individual area.

- END OF SECTION 03 30 00 -

SECTION 05 12 00
STRUCTURAL STEEL

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Structural steel framing members and connections.
- B. Base plates and shear stud connectors.
- C. Grouting under base plates.

1.2 RELATED SECTIONS

- A. Section 05 31 10 - Steel Deck
- B. Section 05 40 00 – Cold Form Metal Framing

1.3 REFERENCES

- A. AISC - Code of Standard Practice - Manual of Steel Construction - Allowable Stress Design (ASD).
- B. ASTM A992 - Structural Steel.
- C. ASTM A36 – Miscellaneous Metal Shapes.
- D. ASTM A53 or A501 - Hot-Dipped, Zinc-coated Welded and Seamless Steel Pipe.
- E. ASTM A307 - Carbon Steel Externally Threaded Standard Fasteners.
- F. ASTM A325 - High Strength Bolts for Structural Steel Joints.
- G. ASTM A490 - Quenched and Tempered Alloy Steel Bolts for Structural Steel Joints.
- H. ASTM A500 - Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Round and Shapes.
- I. ASTM A563 - Carbon and Alloy Steel Nuts.
- J. AWS D1.1 - Structural Welding Code.
- K. SSPC (Steel Structures Painting Council) - Painting Manual.
- L. Comply with applicable OSHA, AISC and ASTM publications.

1.4 SUBMITTALS FOR REVIEW

- A. Refer to Division 1 Section - Submittals: Procedures for submittals.
- B. Shop Drawings: Submit shop drawings indicating sizes, spacing, locations of structural members, openings, attachments, fasteners, bolted connections, welded connections with AWS A2.0 welding symbols and net weld lengths. Shop drawings shall be completed under direct supervision of a Professional Structural Engineer experienced in design of this work and licensed in the State of Maryland.

1.5 SUBMITTALS FOR INFORMATION

- A. Refer to Division 1 Section - Submittals: Procedures for submittals.
- B. Manufacturer's Mill Certificate: Certify that products to be provided for this project meet or exceed specified requirements.
- C. Mill Test Reports: Submit reports on products being provided for this project indicating structural strength, destructive and non-destructive test analysis.
- D. Welders Certificates: Certify welders employed on the Work, verifying AWS qualification within the previous 12 months.

1.6 QUALITY ASSURANCE

- A. Fabricate structural steel members in accordance with AISC Code of Standard Practice, and AISC S335. Fabrication and assembly shall be completed in the shop to the greatest extent possible.
- B. Perform Work in accordance with AISC Section 10.
- C. Maintain one copy of each document on site.
- D. Fabricator: Company specializing in performing the work of this section with minimum five years documented experience. Manufacturing facilities shall be located within 500 miles of the project site.
- E. Erector: Company specializing in performing the work of this section with minimum five years documented experience.
- F. Design connections not detailed on the Drawings shall be provided on the shop drawings and completed under direct supervision of a Professional Structural Engineer experienced in design of this work and licensed in the State of Maryland.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Structural Steel Members: W-shapes to meet ASTM A992, Grade 50. All other angles, plates, channels, and miscellaneous steel shapes shall meet ASTM A36 unless noted otherwise. Coordinate all steel with interior utilities to accommodate the extra loads for pipes, ducts, etc. and equipment designed to hang from structural steel or steel joists.

- B. Structural Steel Tubing: ASTM A500, Grade B.
- C. Structural Steel Pipe: ASTM A501 or ASTM A53, Type E or S.
- D. Bolts, Nuts, and Washers: ASTM A307, ASTM A325 bolts, ASTM A490 bolts, and ASTM A563 nuts.
- E. Anchor Bolts: ASTM F1554, Grade 36.
- F. Welding Materials: AWS D1.1; type required for materials being welded.
- G. Grout: Non-shrink type, pre-mixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing additives, capable of developing a minimum compressive strength of 7,000 psi at 28 days.
- H. Shop and Touch-Up Primer: SSPC 15, Type 1, red oxide.

2.2 FABRICATION

- A. Continuously seal joined members by intermittent welds and continuous welds. Grind exposed welds smooth.
- B. Fabricate connections for bolt, nut, and washer connectors.
- C. Develop required camber for members.

2.3 FINISH

- A. Shop prime structural steel members. Do not prime surfaces that will be field welded, in contact with concrete, or high strength bolted.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verification of existing conditions prior to beginning work.

3.2 FIELD QUALITY CONTROL

- A. Per applicable Division 1 section: Field inspection, testing of bolt torquing, welds, torquing of fasteners.

3.3 ERECTION

- A. Allow for erection loads, and for sufficient temporary bracing to maintain structure safe, plumb, and in true alignment until completion of erection and installation of permanent bracing.
- B. Field weld components indicated on shop drawings.
- C. Field connect members with threaded fasteners and torque to required specifications.

- D. Do not field cut or alter structural members without approval of Architect/Engineer.
- E. After erection, prime welds, abrasions, and surfaces not shop primed, except surfaces to be in contact with concrete.
- F. Grout under base plates in accordance with Section 03300. Trowel grouted surface smooth, splay neatly to 45 degrees.

3.4 ERECTION TOLERANCES

- A. Maximum Variation From Plumb: 1/4 inch per overall height.
- B. Maximum Offset From True Alignment: 1/4 inch.
- C. According to AISC guidelines.

- END OF SECTION 05 12 00 -

SECTION 05 50 00

METAL FABRICATIONS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Shop fabricated ferrous metal items.
- B. Welded steel tube hand rails.

1.2 RELATED SECTIONS

- A. Section 03300 - Cast-In-Place Concrete: Placement of metal fabrications in concrete.
- B. Section 04300 - Unit Masonry Systems: Placement of metal fabrications in masonry.
- C. Section 05120 - Structural steel.
- D. Section 09900 - Coatings: Paint finish.

1.3 REFERENCES

- A. ASTM A992 - Structural Steel.
- B. ASTM A53 - Hot-Dipped, Zinc-coated Welded and Seamless Steel Pipe.
- C. ASTM A123 - Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
- D. ASTM A283 - Carbon Steel Plates, Shapes, and Bars.
- E. ASTM A307 - Carbon Steel Bolts and Studs, 60,000 psi Tensile Strength.
- F. ASTM A500 - Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Round and Shapes.
- G. ASTM A501 - Hot-Formed Welded and Seamless Carbon Steel Structural Tubing.
- H. AWS D1.1 - Structural Welding Code.

1.4 SUBMITTALS FOR REVIEW

- A. Shop Drawings: Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, and accessories. Include erection drawings, elevations, and details where applicable. Shop drawings shall be stamped by an Engineer registered in the State of Maryland.
- B. Indicate welded connections using standard AWS A2.0 welding symbols. Indicate net weld lengths.

1.5 QUALIFICATIONS

- A. Prepare Shop Drawings under direct supervision of a Professional Structural Engineer experienced in design of this work and licensed in the State of Maryland.
- B. Welders Certificates: Submit under provisions of Division 1, certifying welders employed on the Work, verifying AWS qualification within the previous 12 months.

PART 2 - PRODUCTS

2.1 MATERIALS - STEEL

- A. Steel Sections: ASTM A992.
- B. Steel Tubing: ASTM A500, Grade B.
- C. Plates: ASTM A283.
- D. Pipe: ASTM A 501 or A53, Grade E or S as noted below, Schedule 40.
- E. Bolts, Nuts, and Washers: ASTM A325 galvanized to ASTM A153 for galvanized components.
- F. Welding Materials: AWS D1.1; type required for materials being welded.
- G. Ladders: ANSI A14.3.
- H. Shop and Touch-Up Primer: SSPC 15, Type 1, red oxide.

2.2 FABRICATION

- A. Fit and shop assemble items in largest practical sections, for delivery to site.
- B. Fabricate items with joints tightly fitted and secured.
- C. Continuously seal joined members by continuous welds.
- D. Grind exposed joints flush and smooth with adjacent finish surface. Make exposed joints butt tight, flush, and hairline. Ease exposed edges to small uniform radius.
- E. Exposed Mechanical Fastenings: Flush countersunk screws or bolts; unobtrusively located; consistent with design of component, except where specifically noted otherwise.
- F. Supply components required for anchorage of fabrications. Fabricate anchors and related components of same material and finish as fabrication, except where specifically noted otherwise.

2.3 FABRICATION TOLERANCES

- A. Squareness: 1/8 inch maximum difference in diagonal measurements.

- B. Maximum Offset Between Faces: 1/16 inch.
- C. Maximum Misalignment of Adjacent Members: 1/16 inch.
- D. Maximum Bow: 1/8 inch in 48 inches.
- E. Maximum Deviation From Plane: 1/16 inch in 48 inches.

2.4 FINISHES - STEEL

- A. Clean surfaces of rust, scale, grease, and foreign matter prior to finishing.
- B. Do not prime surfaces in direct contact with concrete or where field welding is required.
- C. Prime paint items with one coat, unless item is noted to remain unfinished galvanized.
- D. Structural Steel Members: Galvanize after fabrication to ASTM A123. Provide minimum 1.25 oz/sq ft galvanized coating.
- E. Non-structural Items: Galvanized after fabrication to ASTM A123. Provide minimum 1.25 oz/sq ft galvanized coating.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that field conditions are acceptable and are ready to receive work.

3.2 PREPARATION

- A. Clean and strip primed steel items to bare metal where site welding is required.
- B. Supply steel items required to be cast into concrete or embedded in masonry with setting templates to appropriate sections.

3.3 INSTALLATION

- A. Install items plumb and level, accurately fitted, free from distortion or defects.
- B. Provide for erection loads, and for sufficient temporary bracing to maintain true alignment until completion of erection and installation of permanent attachments.
- C. Field weld components indicated on shop drawings.
- D. Perform field welding in accordance with AWS D1.1.
- E. Obtain approval prior to site cutting or making adjustments not scheduled.

- F. After erection, prime welds, abrasions, and surfaces not shop primed or galvanized, except surfaces to be in contact with concrete.
- G. Secure railing to masonry wall with 3/8" double expansion bolts into solid CMU or completely thru-bolts.

3.4 ERECTION TOLERANCES

- A. Maximum Variation From Plumb: 1/4 inch per story, non-cumulative.
- B. Maximum Offset From True Alignment: 1/4 inch.
- C. Maximum Out-of-Position: 1/4 inch.

3.5 SCHEDULE

- A. The following Schedule is a list of principal items only. Refer to Drawing details for items not specifically scheduled.
 - 1. Railings: Provide steel pipe railings as indicated on the drawings, consisting of standard weight, carbon steel pipe complying with ASTM A53, Type E or Type S, Grade A. Exterior rails shall receive galvanized finish.
 - 2. Railings may be bent at corners instead of joining, provided the bends are uniformly formed in jigs, with cylindrical cross section of pipe maintained throughout the entire bend. Joints in railings and between railings and fittings are to be welded and carefully ground smooth.
 - 3. Secure wall-mounted handrails to walls by means of wall brackets, and wall return fitting at handrail ends, as detailed. Grout free-standing railings into concrete a minimum of 6 inches. Finished railings shall clear wall finishes by a minimum of 1 1/2 inches to provide hand room. Wall brackets shall be fitted with fully concealed fasteners. All surfaces shall be smooth to the touch. All wall rails shall return to walls at ends. Free-standing rails shall return to floor or post.
 - 4. Bollards: Steel tube, concrete filled, crowned cap, as detailed; galvanized finish.
 - 5. Lintels: As detailed; prime paint for interior application unless noted otherwise, galvanized for exterior exposure.
 - 6. Truss Plates: 1/4" painted steel plate to be provided on both side of the bridging to truss connections at locations shown on the drawings. Plates shall be fastened to the trusses with 3/8" O.D. lag bolts. Coordinate with truss manufacturer.
 - 7. All other miscellaneous angles, channels, plates and tubes as indicated and required.

- END OF SECTION 05 50 00 -

SECTION 06 10 00
ROUGH CARPENTRY

A. GENERAL

1. DESCRIPTION:

1.1 Requirements of the General Conditions, Supplementary Conditions and Division 1 of these specifications apply to this Section.

1.2 Include all labor, materials, appliances and services necessary to complete all rough carpentry and related work required by the drawings and/or described in this specification.

1.3 Generally: Concealed or temporary wood work; rough and general carpentry duties; necessary wood framing, blocking, sheathing, finishing, trimming and working of wood or wood fibered materials; all rough carpentry, preparatory work, bracing, propping, protection and boxing, all wood framing, grounds, bucks, wood blocking, furring, and all other general carpentry work. All wood plates as shown on the drawings.

1.4 Work by Other Sections: Be advised to examine other Sections of these specifications and Structural Drawings and Notes for items of other work commonly assigned to the carpentry trades including timber trusses, beams, structural wood deck, and dimensional lumber. The Contractor is referred to Section 1 of these specifications concerning division of the specifications.

2. QUALITY ASSURANCE:

2.1 The grades of all lumber shall be as defined by the rules of the recognized association of lumber manufacturers producing the materials herein specified.

2.2 The maximum moisture content of framing lumber at the time of delivery to the job site shall not exceed 15 percent. Store materials at the site in such a manner that will not permit this moisture content to rise above this point.

2.3 Treated lumber: Indicate on each piece of lumber (or bundle, if bundle stock) grade marks, quality marks and trademarks or accompany each shipment with an Association certificate. For water-borne preservatives, include statement that moisture content of treated materials was reduced to a maximum of 15% prior to shipment to project site.

3. PRODUCT DELIVERY AND STORAGE:

3.1 Deliver materials to the job site in undamaged condition. Protect from dampness, impact and other deforming forces before, during and after delivery.

3.2 Store dressed or treated lumber in a well-ventilated enclosure, not exposed to extremes of temperature and humidity, stacked to ensure proper ventilation.

3.3 Receive treated lumber at the site in a good dry condition, having not over 15% of moisture. Store treated lumber at the site in such a manner that will not permit the moisture content to rise above 15%.

3.4 Any lumber which for any reason has deteriorated while on the job due to improper storage (become water logged, warped, etc.) shall be removed from the premises and any grade certificate or stamping be considered "void". The recommendations for storing, protecting and shipping as made by the recognized agencies shall become a part of this specification.

B. PRODUCTS

4. MATERIALS:

4.1 Lumber:

4.1.1 Load Bearing Members: Unless noted to be greater on the drawings, minimum bending stress of not less than 1200 psi, and a modulus of elasticity (E) of 1.2 million psi..

4.1.2 Non-Load Bearing Members: Standard Grade Douglas Fir, Western Larch, Western Hemlock (WWPA or WCLA) or #2 Dimension Southern Pine (SPIB).

4.1.3 Blocking: No. 2 Common Grade of any WWPA or WCLA species or No. 2 Southern Pine Boards (SPIB). Blocking shall include any wood material, without regard to size or length, which is required for the secure fastening, stiffening, anchoring or hanging of other construction materials as indicated on the drawings.

4.1.3.1 Wood blocking or nailers on steel framing shall be bolted thereto. Wood grounds shall also be provided for securing equipment furnished under other Sections of these specifications. Provide block nailers as required for sheet metal work.

4.1.4 Size and Shapes: Nominal sizes shown and specified refer to undressed lumber dimensions. Dress lumber 4 sides (S4S) unless otherwise shown or specified, in accordance with the requirements of the West Coast Lumber Inspection Bureau, Grading and Dressing Rules, worked to shapes and patterns shown. All lumber shall be kiln-dried to a moisture content not to exceed 19 percent.

4.2 Furnish all rough hardware, nails, spikes, bolts, screws, staples, straps, etc., that are required for proper assembly of building components and materials.

4.2.1 All rough hardware for exterior use, exposed to weather or supporting members exposed to weather, including anchor bolts set in masonry shall be hot-dip galvanized.

4.3 All lumber in direct contact with masonry, concrete or earth, or built into roof construction, shall be preservative treated.

4.4 Plywood: Exterior glue CDX plywood, thickness as indicated on the drawings, fire retardant treated as indicated on the drawings and/or as required by local Codes.

5. WOOD PRESERVATIVE TREATMENT: Lumber shall be "Wolmanized" (impregnated in a closed cylinder by vacuum pressure process) in accordance with P5, the specifications for this treatment of the American Wood Preservative Institute with "Wolman" wood preservative CCA in the amount of 0.25 pounds per cu. ft. of wood, minimum retention.

5.1 Where it is found to be necessary to cut "Wolmanized" treated lumber on the job, two coats of prepared concentrated "Wolman" Preservative salts solution shall be brushed on the cut surface.

5.2 Each piece of "Wolmanized" treated lumber shall bear a brand denoting conformance to the standards of the American Wood Preservers' Association and Federal Specification TT-W-550 and TT-W-571, on the concealed face.

5.3 "Wolmanized" lumber shall be kiln dried or air seasoned for a period of not less than 30 days after treatment before being used.

6. ALL lumber provided for this project shall be fire retardant treated.

C. EXECUTION

7. INSPECTION: Inspect all wood and other materials. Sort out and discard damp, warped or damaged material which would not provide consistent substrates or Underwriters Label Construction as herein specified.

8. INSTALLATION:

8.1 Wood blocking shall be installed as indicated on the drawings to provide an integral component for adjacent structural or architectural materials.

8.1.1 Blocking shall be erected true and with tight joints to provide a consistent substrate for surface materials, framing or roof framing. Use the longest lengths practical to minimize jointing.

8.2 Install wood framing as indicated on the drawings. Wood framing shall be erected plumb and true and firmly anchored to supporting structures, as indicated on the drawings, to provide a consistently secure strong substrate for covering work. Install blocking, nailers and bridging as required for secure fastening of surface materials and to minimize the flexibility of framing components. Blocking shall be placed four (4) feet on center maximum. All framing and blocking shall be built so that sheathing or finish work joints shall fall on the center of framing or blocking.

8.3 All wood bucks, blocks, bolts, anchors, etc., shall be furnished and set for building into masonry walls and partitions. All temporary and permanent wood bucks and sub-bucks shall be erected, and all plates, blocking, grounds, furring, stripping, screeds, nailers, etc., shall be securely installed at proper times to suit progress of construction.

8.4 Fit carpentry work to other work. Scribe and cope as required for accurate fit. Set carpentry work accurately to required levels and lines with members plumb and true and accurately cut and fitted. Shim with metal or slate for full-bearing on concrete or masonry substrates. Set true to line and level, plumb, with intersections true to required angle. Build into masonry as work progresses, cutting to fit masonry unit size involved. Anchor to formwork before concrete placement.

8.5 Wood Grounds: Provide wood grounds and blocking of size and shape required for securing trim and attaching other work in place. Set grounds true to line, level or plumb and secure firmly in place. Grounds generally will be dressed square edged, pressure treated and of a thickness required for substantial anchorage and fastening to substrate and remaining flush with adjacent finish surfaces.

- END OF SECTION 06 10 00 -

SECTION 07 61 10

PREFINISHED METAL ROOFING

PART 1 GENERAL

1.1 DESCRIPTION

- A. Furnish all labor, material, tools, equipment, and services for all prefinished roof panels indicated on drawings and in accordance to the contract documents.
- B. Completely coordinate with work of all other trade.
- C. Although such work is not specifically indicated, furnish and install all supplementary or miscellaneous items, trims, appurtenances and devices incidental to or necessary for a sound, secure and complete installation.
- D. See Division 1 for General Requirements

1.2 RELATED SECTIONS

- A. Section 07 92 00 - Joint Sealers.

1.3 REFERENCES

- A. SMACNA: "Architectural Sheet Metal Manual", Sheet Metal and Air Conditioning Contractors National Association, Inc.
- B. AISC: "Steel Construction Manual", American Institute of Steel Construction.
- C. AISI: "Cold Form Steel Design Manual", American Iron and Steel Institute.
- D. ASTM A 792-83-AZ50: "Specifications for Steel Sheet, Aluminum-Zinc Alloy Coated (Galvanized) by the Hot Dip Process, General Requirements (Galvalume)", American Society for Testing and Materials.
- E. ASTM E 1514-93: "Standard Specification for Structural Standing Seam Steel Roof Panel Systems", American Society for Testing and Materials.
- F. UL: "Tests for Uplift Resistance of Roof Assemblies", Underwriters Laboratories, Inc.
- G. ASTM E 1592-95: "Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure statutes or codes.
- H. ASTM E 1680-95: "Standard Test Method for Rate of Air Leakage through Exterior Metal Roof Panel Systems", American Society for Testing and Materials.
- I. ASTM E 1646-95: "Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference", American Society for Testing and Materials.
- J. American Society for Testing and Materials (ASTM):
ASTM A 446 Specification for Aluminum and Aluminum-Alloy Sheet and Plate
ASTM D 1056 Specification for Flexible Cellular Materials, made from Olefin Plastics
ASTM D 3575 Test Methods for Flexible Cellular Materials made from Olefin Polymers
ASTM E 283 Test Method for Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors
ASTM E 330 Test Method for Structural Performance of Exterior Window, Curtain
- K. NRCA (National Roofing Contractors Association) - Roofing Manual.

1.4 PERFORMANCE REQUIREMENTS:

City Park Train Hub
Locomotive Refurbishment &
Pavilion Replacement
City of Hagerstown, MD

07 61 10-1
Prefinished Metal Roofing

Proj No: 19-35

277

- A. Wind Up-Lift: Roof assembly shall provide Class 90 rating when tested in accordance with UL 580, utilizing Products provided under this and other Specification Sections.

1.5 SUBMITTALS

- A. Submit under provisions of Division 1.
- B. Shop Drawings: Indicate material profile, jointing pattern, jointing details, fastening methods, flashings, terminations, and installation details.
- C. Product Data: Provide data on metal types, finishes, characteristics, and roofing system.
- D. Submit specified trade association installation instructions.
- E. Submit two samples 4x6 inch in size illustrating metal roofing mounted on plywood backing illustrating typical standing seam, external corner, internal corner, valley, ridge, junction to vertical dissimilar surface, material, and finish.
- F. Submit two samples 4x6 inch in size illustrating metal finish color.
- G. Submit two samples of each type of fastener specified.

1.6 QUALITY ASSURANCE

- A. Perform work in accordance with manufacturer's and SMACNA standard details and requirements.
- B. Maintain one copy of each document on site.
- C. Test Reports: Provide results of UL Wind Uplift Tests.
- D. Certification: Provide Certification that materials meet specified requirements.

1.7 QUALIFICATIONS

- A. Firm which has experience manufacturing products specified in this section with documented, UL Class 90, tested construction assembly matching the type required for this project. If panels are roll formed at the project site, manufacturer shall provide personnel to operate equipment.
- B. Installer's Qualifications: Field supervisory personnel directing the work shall have a minimum 3 years experience and have been trained and approved by roofing system manufacturer. If required, submit documented references of work experience of similar magnitude and complexity.

1.8 MOCKUP

- A. Provide mockup of sheet metal roofing system under provisions of Section 01400.

- B. Construct one mockup, 5 feet long by 5 feet wide, which includes associated attachments, flashings, joints and junctions, control or expansion joints, terminating items, snow guards.
- C. Locate where directed.
- D. Mockup may remain as part of the Work.

1.8 PRE-INSTALLATION CONFERENCE

- A. Convene one week prior to commencing work of this section, under provisions of Division 1.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to site in manufacturer's unopened containers bearing UL labels on each container.
- B. Protect components from denting, abrasion, and other mechanical abuse, stains, discoloration and corrosion.
- C. Provide protective interleaving between contact areas of exposed surfaces to prevent abrasion during shipment, storage and handling.
- D. Store materials off ground providing for drainage; under cover foreign material contamination, mechanical damage, cement, lime or other corrosive substances.
- E. Handle materials to prevent damage to surfaces, edges and ends of roofing sheets and sheet metal items. Damaged material shall be rejected and removed from site.
- F. Protect panels from wind-related damages.
- G. Inspect materials upon delivery. Reject and remove physically damaged or marred material from project site.

1.10 COORDINATION/INSPECTION

- A. Coordinate work under provisions of Division 1.
- B. Coordinate with the work of Section 04300 for installing flashing reglets.
- C. Verify conditions are adequate to receive work of this section. Provide notice of conditions at variance with contract documents.
- D. Determine that work of other trades will not hamper or conflict with necessary fabrication and storage requirements for preformed metal roofing system.
- E. Ascertain that work of other trades which penetrates the roof or is to be made watertight by the roof is in place and approved prior to installation of roofing.

1.11 WARRANTY

- A. Provide twenty (20) year warranty under provisions of Section 01786, covering refinishing of fluoropolymer coating due to checking, crazing, peeling, chalking, fading or adhesion.
- B. Warranty: Include coverage for water tightness, integrity of seals.
- C. Manufacturer's roof warranty will be complete systems warranty to include all components of the roof.
- D. A non-prorated, non-penal sum manufacturer's roof warranty is required.
- E. Manufacturer's roof warranty will cover the cost of removal and replacement of damaged or wet insulation which is the result of leaks from poor workmanship or failed materials.
- F. The Contractor is responsible to submit and provide components required by the roofing system manufacturer for the specific warranty.

PART 2 PRODUCTS

2.1 PREFINISHED METAL ROOFING:

- A. Manufacturers:
Peterson Roofing: Tite Loc Plus
Metal-Fab Manufacturing, Met-Fab Historic
- B. Materials: ASTM A 446, Grade C, 40 KSI yield, 22 gauge steel, G-90 galvanized, extra smooth finish on one side.
- C. Finish: AAMA 605.2, two coat fluoropolymer, 70 percent resin (Kynar 500/ Hylar 5000) finish; applied over an epoxy-type prime coat.
- D. Color: Architect to select from manufacturers standard colors.
- E. Panel Configurations: Field seamed two inch (2") high standing seam profile, with seams approximately 18 inches (18") on center. Panels full length from eave to ridge. Snap together systems, systems with narrower spacings and seams with separate snap cap are not acceptable. Provide with associated trim for installation applications.

2.2 FLASHING, COPING AND TRIM/GUTTERS AND SPOUTS

- A. Material, Finish, and Color: Same as roof system.
- B. Unless otherwise noted, provide 6" box style gutters and 3"x4" rectangular downspouts.

2.3 UNDERLAYMENT MATERIALS

- A. Ice & Water Shield over entire roof area:

W.R. Grace-Ice&Water Shield
Celotex-WinterGuard
Or approved equal

2.4 ANCHOR CLIPS

- A. Clips shall be manufacturer's standard clip for proposed panel design. Clip must meet U.L. 90 requirements and have provisions for thermal movement along the longitudinal dimension.

2.5 FASTENERS

- A. Concealed Fasteners: Coated corrosion resistant steel screws as designed and reviewed by roof system manufacturer to meet structural loading requirements. The normal minimum screw size shall be #14.
- B. Exposed Fasteners: Corrosion resistant steel screws (cadmium or zinc coating are not acceptable) of 300 Series stainless steel with neoprene sealing washer, or 3/16 inch diameter waterproof rivets.

2.6 CLOSURES

- A. Closures shall be manufactured by the roof system manufacturer out of the same material as the roof system panel.

2.7 ACCESSORIES

- A. Panel Joint Sealant: Non-curing modified isobutylene tri-polymer of thickness to fully adhere to both surfaces being joined with indicated service life of 20 years.
- B. Provide other miscellaneous accessories for complete installation. All accessories shall be furnished by roofing system manufacturer.

2.8 SEALANT

- A. Manufacturers:
Dow Chemical Co. - #790
General Electric Co. - GESIL N 2500
- B. Type: One part primerless silicon sealant.
- C. Colors: As selected by Architect from sealant manufacturer's standard selection.

2.9 FABRICATION

- A. Shop fabricate metal roofing and flashing components to the maximum extent possible, forming metal work with clear, sharp, straight and uniform bends and rises. Hem exposed edges of flashings.

- B. Form flashing components from full single width sheet. Provide shop fabricated, mitered corners, joined using closed end pop rivets and joint sealant.
- C. Fabricate roofing and related sheet metal work in accordance with approved shop drawings and applicable standards.
- D. Provide linear sheet metal items in minimum 10'-0" sections except as otherwise noted. Form flashing using pieces for the full width. Provide shop fabricated, mitered and joined corners.

PART 3 EXECUTION

3.1 PREPARATION

- A. Review of Surfaces: Ensure surfaces to receive roofing and flashing are even, smooth, sound, clean and dry, and free from projecting fastener heads and other defects detrimental to roofing installation.
- B. Coordinate work with other trades; if necessary, hold pre-roofing conference, prior to beginning roofing work.

3.2 UNDERLAYMENT MATERIALS

- A. Install ice & water over entire surface of ridged insulation, along the eaves, and in all valley locations. Adhere to insulation following ice & water shield manufacturers specifications and guidelines.

3.3 ROOFING, SIDING, AND FLASHING INSTALLATION

- A. Install roofing and flashings in accordance with shop drawings and manufacturers product data, within specified erection tolerances.
- B. Isolate dissimilar metals and masonry or concrete from metals with bituminous coating. Use gasketed fasteners where required to prevent corrosive action between fastener, substrate and panels.
- C. Limit exposed fasteners to extent indicated on shop drawings.
- D. Anchorage shall allow for temperature expansion/contraction movement without stress or elongation of panels, clips or anchors. Attach clips to structural substrate using fasteners of size and spacing as determined by manufacturer's design analysis to resist specified uplift and thermal movement forces.
- E. Seal laps and joints in accordance with roofing system manufacturer's product data.
- E. Coordinate flashing and sheet metal work to provide weather-tight conditions at roof terminations. Fabricate and install in accordance with standards of SMACNA Manual using continuous cleats at all exposed edges.

- G. Provide for temperature expansion/contraction movement of panels at roof penetrations and roof mounted equipment in accordance with system manufacturer's product and design calculations.
- H. Installed system shall be true to line and plane and free of dents and physical defects with a minimum of oil canning.
- I. Form joints in linear sheet metal to allow for 1/4 inch minimum expansion at 20'-0" o.c. maximum and 8'-0" from corners. Provide 6 inch wide back-up plate at intersections. Form plates to profile of sheet metal item.
- J. At joints in linear sheet metal items, set sheet metal over back-up plate in two beads of butyl sealant, 1/4 inch in diameter, minimum. Extend sealant over all metal surfaces. Mate components for positive seal. Allow no sealant to migrate on to exposed surfaces.
- K. Remove damaged work and replace with new, undamaged components.
- L. Touch-up exposed fasteners using paint furnished by roofing panel manufacturer and matching exposed panel surface finish.
- M. Touch-up minor abrasions and scratches in finish.
- N. Lap Pre-finished wall panels as required for water tightness and in direction against prevailing winds.

3.4 FIELD QUALITY CONTROL

- A. Erection Tolerances: Maximum variation of placement from true planes or lines: 1/4 inch in 20'-0"; 3/8 in 40'-0" or more. Failure to properly seam panels or provide adequate expansion and contraction which results in distortion will be considered defective and non-conforming work.

3.5 CLEANING

- A. Wash off corrosion products from unpainted mild steel; chloride drainage from unwashed slag roofs; contamination by muriatic or builder's acid or other agents which may deface metal roof; contamination by steel wool, steel drillings, steel filings, or any other construction debris which may cause impairment to metal.
- B. Remove light soil and clean metals.
- C. Final Clean-Up: Remove all debris, metal clips, nails and other materials which could prevent adequate drainage or produce corrosion through electrolysis.

3.6 PROTECTION OF INSTALLED WORK

- A. Provide protection or avoid traffic on completed roof surfaces.
- B. Do not overload roof with stored materials.

C. Do not support roof-mounted equipment directly on roofing systems.

- END OF SECTION 07 61 10 -

SECTION 07 72 00

ROOF ACCESSORIES AND SPECIALTIES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Prefinished aluminum gutters and downspouts.
- B. Snow Guards.

1.2 RELATED SECTIONS

- A. Section 04300 – Unit Masonry System
- B. Section 07611 - Prefinished Metal Roofing and Trim.
- C. Section 07620 - Sheet Metal Flashing and Trim: Metal flashings.
- D. Section 07900 – Joint Sealers.

1.3 REFERENCES

- A. ASTM D2822 - Asphalt Roof Cement.
- B. NRCA (National Roofing Contractors Association) - Roofing and Waterproofing Manual.
- C. SMACNA - Architectural Sheet Metal Manual.

1.4 SUBMITTALS

- A. Submit under provisions of Division 1.
- B. Shop Drawings: Indicate configuration and dimension of components, adjacent construction, required clearances and tolerances, and other affected work.
- C. Product Data: Provide data on shape of components, materials and finishes, anchor types and locations.
- D. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with SMACNA and NRCA details.

PART 2 - PRODUCTS

City Park Train Hub
Locomotive Refurbishment &
Pavilion Replacement
City of Hagerstown, MD

07 72 00-1
Roof Accessories and Specialties

Proj No: 19-35

285

2.1 GUTTERS AND SPOUTS

- A. Box Gutters - Metal substrate and finish to match the roofing and formed from 22 gauge material sized and profiled as detailed (4.5" x 6" minimum). Provide hangers as required to support gutters from roofing panel screws.
- B. Downspouts - Metal substrate and finish to match the roofing, formed, 22 ga. minimum, 2.5" x 3" rectangle. Provide straps as required to support from the building wall. Coordinate with downspout boots, concrete piers, and site drainage system.

2.2 SNOW GUARDS

- A. Snow Guards: Provide classic "pad" style snow cleats with Non-penetrating mechanical clamps for attachment to standing seam roofs. Space clamps in two rows as shown on the drawings. Install per manufacturer's recommendations.
- B. Approved Manufacturers:
 - 1. Ace Clamp – Plainville, CT
 - 2. Alpine Snow Guards – Morrisville, VT
 - 3. Sno-Safe Snow Guards LLC – Chicopee, MA
 - 4. or Approved Equal

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that deck, curbs, roof membrane, base flashing, and other items affecting work of this Section are in place and positioned correctly.

3.2 INSTALLATION

- A. Install components in accordance with manufacturer's instructions.
- B. Conform to SMACNA- Architectural Sheet Metal Manual and NRCA- Waterproofing Manual as applicable.
- C. Coordinate installation of components of this section with installation of roofing membrane, base flashings, and composite siding products.
- D. Coordinate installation of sealants and roofing cement with work of this section to ensure water tightness.

- END OF SECTION 07 72 00 -

SECTION 07 92 00

JOINT SEALERS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Preparing substrate surfaces.
- B. The required applications of sealants include, but are not limited to, the following general locations in new work, or in areas disturbed by the work of this project:
 - 1. Exterior:
 - a. Metal Door Frames
 - b. Cast-In-Place concrete slabs and walks
 - c. Expansion and control joints
 - d. Flashing reglets
 - e. Roof penetration perimeter joints
 - f. Window perimeter joints
 - g. Joints between dissimilar materials, including, but not limited to the following: edges of CMU/face masonry and door/window frame units, at sheet metal work, at steel lintels, at control and expansion joints in masonry, at edges of soffit board, at perimeter of roof expansion joint, between different masonry surfaces
 - h. Others as indicated and required due to job conditions.
 - 2. Interior:
 - a. Control and Expansion joints.
 - b. Metal Door and window frames.
 - c. Toilet fixtures.
 - d. Casework tops and backsplashes.
 - e. Tackboard/Markerboard perimeters (fixed units only).
 - f. Joints at all surfaces to receive opaque finish.
 - g. Joints between steel columns and masonry walls.
 - h. Joints between all dissimilar materials unless otherwise noted.
 - i. Other as indicated.

1.2 RELATED SECTIONS

- A. Section 08800: Sealants required in conjunction with glazing methods.

1.3 REFERENCES

- A. ASTM C790 - Use of Latex Sealing Compounds.
- B. ASTM C804 - Use of Solvent-Release Type Sealants.
- C. ASTM C834 - Latex Sealing Compounds.

D. ASTM C920 - Elastomeric Joint Sealants.

E. ASTM D1565 - Flexible Cellular Materials - Vinyl Chloride Polymers and Copolymers.

F. SWRI (Sealant, Waterproofing and Restoration Institute) - Sealant and Caulking Guide Specification.

1.4 SUBMITTALS

A. Submit under provisions of Division 1.

B. Product Data: Provide data indicating sealant chemical characteristics, performance criteria, substrate preparation, limitations and color availability.

C. Samples: Submit two samples illustrating sealant colors for selection.

D. Manufacturer's Installation Instructions: Indicate special procedures, surface preparation and perimeter conditions requiring special attention.

1.5 QUALITY ASSURANCE

A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.

B. Specified work shall be installed by skilled tradesmen, experienced in the application of the types of materials.

1.6 QUALIFICATIONS

A. Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum three years documented experience.

B. Applicator: Company specializing in performing the work of this section with minimum five years documented experience.

1.7 ENVIRONMENTAL REQUIREMENTS

A. Maintain temperature and humidity recommended by the sealant manufacturer during and after installation. Apply compound prior to final coat of paint.

1.8 PRODUCT DELIVERY, HANDLING AND STORAGE

A. Deliver all materials to job site in factory sealed and labeled containers; label shall show: Manufacturer, Type, Date of Manufacture, Shelf Life, Curing Time at 70 degrees F, Color and Manufacturer's Instructions.

1.9 COORDINATION

A. Coordinate the work with all sections referencing this section.

1.10 WARRANTY

- A. Provide five year warranty under provisions of Division 1.
- B. Warranty: Include coverage for installed sealants and accessories which fail to achieve air tight seal, water tight seal and exhibit loss of adhesion or cohesion, or do not cure.

PART 2 PRODUCTS

2.0 MANUFACTURERS:

- A. Sika Corporation
- B. Pecora Corporation
- C. Sonneborn – Chemrex
- D. Tremco, Inc.
- E. or Approved Equal

2.1 SEALANTS

- A. Back-up Materials: Flexible closed cell, expanded polystyrene or polyethylene round rodding, with diameter 1.333 times width of joint
- B. Exterior Sealant: Sikaflex-1A, premium grade, or component, polyurethane sealant, Fed. Spec. TT-S-00230C, Type II, Class A, color as selected by the Architect
- C. Interior Sealant: Acrylic Emulsion Latex Type C: ASTM C834, single component; color as selected by the Architect
- D. Interior Walls/Floors (Ceramic Tile): Pecora Urexpan NR-201, one part, self-leveling, moisture curing polyurethane sealant, designed for horizontal joints, Fed. Spec. TT-5-00230C, Type I, ASTM C920, color as selected by the Architect
- E. Primers, Cleaners and Bond Breaker Tape: Provide as recommended by sealant manufacturer's installation instructions for the conditions and locations indicated on the drawings.
- F. All sealants and sealant primers must meet or exceed Bay Area Air Quality Management District Reg. 8, Rule 51.

2.2 ACCESSORIES

- A. Primer: Non-staining type, recommended by sealant manufacturer to suit application.
- B. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.

C. Joint Backing: ASTM D1056; round, closed cell polyethylene foam rod; oversized 30 percent larger than joint width; manufactured by Dow Chemical, Sonneborn or approved equivalent.

D. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify that substrate surfaces and joint openings are ready to receive work.

B. Verify that joint backing and release tapes are compatible with sealant.

3.2 PREPARATION

A. Remove loose materials and foreign matter which might impair adhesion of sealant.

B. Clean and prime joints in accordance with manufacturer's instructions.

C. Perform preparation in accordance with ASTM C804 for solvent release and ASTM C790 for latex base sealants.

D. Protect elements surrounding the work of this section from damage or disfiguration.

3.3 INSTALLATION

A. Perform installation in accordance with ASTM C804 for solvent release and ASTM C790 for latex base sealants.

B. Measure joint dimensions and size materials to achieve required 2:1 width/depth ratios.

C. Install joint backing to achieve a neck dimension no greater than 1/3 of the joint width.

D. Install bond breaker where joint backing is not used.

E. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.

F. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.

G. Tool joints concave.

3.4 CLEANING

A. Clean adjacent soiled surfaces.

3.5 PROTECTION OF FINISHED WORK

A. Protect finished installation under provisions of Division 1.

B. Protect sealants until cured.

SECTION 08 80 00

GLASS AND GLAZING

PART 1 – GENERAL

1.1 SUMMARY

- A. Section includes glass and glazing.
- B. Work shall be conducted in accordance with General Conditions, Supplementary Conditions, Division 1 and the requirements of this Section.

1.2 STANDARDS

- A. As required by Safety Glazing Materials regulations and agencies having jurisdiction, provide safety glass manufactured, tested, permanently labeled and installed per these requirements.

1.3 SUBMITTALS

- A. Shop drawings shall be in accordance with the General Conditions, Supplementary Conditions and Division 1.
- B. Copies of the shop drawings, after being certified by the contractor and approved by the Architect, shall be requested by the glazier through channels for the purpose of ordering the glass and expediting its delivery.
- C. Samples: Submit, when notified for the Architect's inspection and approval, samples of the types of glass specified. Sample shall be at least 4 inches wide by 9 inches long in required thickness.

1.4 WARRANTIES, GUARANTEES, TESTING

- A. Warranty: All insulating glass shall be a banded type and carry a 10-year warranty by the manufacturer that under normal conditions, material obstruction of vision resulting from film formation or dust collection between the interior glass surfaces of the double-insulating glass will not occur.

PART 2 – PRODUCTS

2.1 MANUFACTURER

- A. Glass: Glass shall bear the manufacturer's original label for each piece manufactured by the TGP (Fire Lite Plus), American-Saint Gobain, Libbey-Owens Ford Glass Company, PPG, Guardian or equal as approved by the Architect.
- B. Clear glass shall be transparent flat glass that meets the requirements and tolerances of ASTM C-1036.

- C. Glass products shall be tempered for use in doors, entranceways, or other high traffic density areas or in hazardous locations as defined in the U.S. Consumer Product Safety Commission Standard 16 CFR 1201 C1 and C11, or for fixed glazed panels as defined in state glazing laws or building codes.
- D. Glazing Compound: Glazing compound shall be the product of Pecora, Tremco, or equal as approved by the Architect, in color matching frames as closely as possible.

2.2 SIZES

- A. Glass shall conform to manufacturer's standards for maximum size for each type of glass. All tempered glass and double-insulating glass panels shall be ordered from exact sizes given on shop drawings or from field measurements. Lights that are narrower than they are high shall be cut to order to obtain the best viewing.

2.3 GLASS TYPES

- A. Float Glass (Type G-1): Polished, clear, 0.25" thick
- B. Safety Glass (Type G-2) (interior glazing): Clear tempered, 1/4" thick, conforming to ANSI Z97.1, Federal Standard 16 CFR 1201 Category I and Category II, with label clearly visible after glazing. This type includes laminated glass as required by the standards referenced above and IBC 2012 Chapter 24 Section 6.
- C. Fire Rated Safety Glass (Type G-3) (Interior glazing): 45 minute fire rated, clear laminated safety glass ceramic, 5/16" (8mm) thick, conforming to ANSI Z97.1, Federal Standard 16 CFR 1201 Category I and Category II, with label clearly visible after glazing. This type includes laminated glass as required by the standards referenced above and IBC 2012 Chapter 24 Section 6.
- D. Polycarbonate Twinwall Glazing (Type G-4) (Exterior glazing): non-rated, clear, 10mm twinwall
- E. Sealant: Elastic non-hardening glazing sealant, recommended by glazing manufacturer.
- F. Setting Blocks: Neoprene, hardness: 70 to 80 Shore A Durometer, generally 1/8" wider than materials to be glazed and minimum 4" long, 1/8" thick.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Glazing Standards: Applicable requirements of the Glazing Manual of Flat Glass Marketing Association (FGMA), 3310 Harrison, Topeka, Kansas, 66611 latest edition are hereby made a part of these specifications.
- B. Glazing shall not be done when the temperatures are below 40 degrees Fahrenheit. When circumstances require the glazing below 45 degrees Fahrenheit, steps shall be taken to assure clean, dry and frost-free surfaces as approved by the Architect.

- C. Spacers and Shims: All glass to be set with 3/32 inch x 1/4 inch x 3 inch spacers, positioned on 24 inch centers on fixed and removable stops made of 40-70 shore hardness rubber or neoprene setting blocks, 1/4 inch x 1 inch x 4 inches long or 1/4 inch x 5/8 inch x 4 inches long, as required by FGJA Standards for installing glass at quarter points.
- D. Channel Glazing: All glass to be set with a minimum of 1/8 inch spacers on both sides of glass with setting blocks at quarter points. Against rabbet, apply butyl tape. Face bed with one part acrylic sealant at heel finished with architectural glazing compound or vision strip.
- E. Face Glazing: All glass to be set with a minimum of 1/8 inch spacers on rabbet side of glass with setting blocks at quarter points. Against rabbet, apply butyl tape. Face bed with architectural glazing compound.
- F. Neoprene Beads: Glass in aluminum door frames and screens held by neoprene-extruded beads, snap-in type shall be inserted into stops with slight buttering at corners with channel glazing compound. Install glass per manufacturer's instructions.
- G. Wood Frames: Do not set glass in wood frames or beads of doors until after the wood, including glazing rabbets and beads, has been stained and filled or primed. All glass held in place with wood beads shall be bedded in architectural glazing compound on both faces.
- H. Lights in Borrowed Lights: Glaze with metal stops as detailed. Face glaze as specified above.

3.2 CLEANING AND REPLACEMENT

- A. This contractor shall properly protect all glass installed by him from injury or breakage during construction of the building. The contractor shall assume all responsibility for breakage by whomsoever caused and shall replace all cracked, broken, scratched or otherwise defective glass when directed to do so by the Architect.
- B. Wash, rinse and dry glass at frequent intervals during construction in accordance with manufacturers' recommendations.

- END OF SECTION 08 80 00 -

SECTION 09 90 00

COATINGS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Requirements of the General Conditions and Supplementary Conditions apply to this Section.
- B. This section applies to the new Pavilion only and does not include painting the locomotive (see Supplemental Summary of Work – Work Scope “B”) for locomotive painting requirements. This section includes all labor, materials, appliances and services necessary to complete all preparation; application of coatings, and finishing, interior and exterior, and related work required by the drawings and/or described in this specification.
- C. Work of this Section includes, but is not limited to, the following:
 - 1. Preparation and coating of new surfaces, located within and on the new structure, not delivered to the site prefinished.
 - 2. Preparation of all new surfaces indicated to receive coatings.

1.02 QUALITY ASSURANCE

- A. Qualifications of Sub-Contractor: Work of this Section shall be accomplished by skilled tradesmen, experienced in the application of the types of materials specified, employed by a qualified contracting firm which has been in business in the immediate area for at least five (5) years.

1.03 SUBMITTALS

- A. Verify in writing that the products specified will be used as directed or submit for approval a list of comparable materials of another listed approved manufacturer, including full identification of all products by name, color and catalogue number adjacent to those specified, with a statement of equality by the proposed manufacturer.
- B. Colors - All colors shall be selected by the Architect and Owner.
- C. Maintenance Materials - At completion of the project, the contractor shall deliver to the Owner an unopened one (1) gallon can of all coatings used, all colors, for maintenance stock.

1.04 PRODUCT DELIVERY AND STORAGE

- A. All materials shall be stored at the site in a space designated by the General Contractor and approved by the Architect. All coatings shall be mixed in this space only. The storage place shall be kept neat and clean, and accessible at all times.

- B. All coating materials shall be delivered to the site in their original containers with seals unbroken, bearing the manufacturer's printed labels specifying trade names, brand and quality.

1.05 JOB CONDITIONS

- A. Carefully examine executed work of other trades that might affect this work. Notify Architect and General Contractor if any surfaces are found in a condition unacceptable for coating.
- B. Maintain temperature in building at 65 degrees F during coating. Do not coat exterior materials when temperature is below 50 degrees F or when it is frosty or rainy. Do not coat any surfaces while they are exposed to hot sun.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. All materials shall be the BEST grade of their respective kinds. Materials regardless of whether they are herein specified or approved, may be used only on condition that they produce satisfactory results.
 - 1. Approved Manufacturers
 - A. Duron
 - B. Sherwin Williams
 - C. Pittsburgh Paints

PART 3 - EXECUTION

3.01 PREPARATION

- A. All surfaces shall be thoroughly cleaned and dusted before commencing to application of coating. Remove all dirt and stains. Sandpaper rough spots, raised grain and splinters.
- B. Bare metal shall be thoroughly cleaned of rust and dirt, and shop coats shall be retouched before coating is applied.
- C. Conform to coating manufacturer's instructions.
- D. Galvanized steel surfaces: Prepare galvanized coating as directed by manufacturer's instructions for prime coatings

3.02 APPLICATION

- A. All materials shall be applied by skilled mechanics and shall be applied by brushing or rolling only, **no spraying is permitted**. Materials shall be applied according to the manufacturer's instructions. Coatings shall be spread evenly and uniformly; brush each coat out uniformly to eliminate laps, skips and brush marks. Coats, enamel and lacquer shall be flowed on evenly and smoothly.

- B. Metal boxes, electrical plates, iron or steel work in or on surfaces to be coated shall be coated to correspond with such surfaces or as otherwise directed.
- C. Finished work is to be adequately covered with uniform color and finish. The number of coats herein specified being a minimum, this contract shall provide any additional coats to produce a first-class job.
- D. Protect all work against damage by covering with drop cloths. Wiping rags shall be kept in fire proof containers.
- E. Allow the following drying time between coats:
Exterior work - 48 hours
Interior work - 24 hours
- F. Allow masonry work to cure for at least 30 days before coating. Drywall and plaster finishing shall be allowed to dry for 15 days before coating.

3.03 SCHEDULE OF COATINGS: Coordinate with Finish Schedule in Drawings.

<u>Surface</u>	<u>Area</u>	<u>Type, Luster & Coats</u>
Painted Wood Trim	New wood trim	1 ct – Prep Rite Latex Primer (new only) 2 cts – Proclassic Alk – B33W220 Semi-gloss on all trim
Exposed Wood Deck	New wood roof deck	1 ct – sanding sealer 2 cts – Clear Polyurethane
Structural Steel	New steel framing	2 cts - Promar 200 – B31W2200 (over shop primer)

3.04 COLOR SCHEDULE

- A. Exterior
 - 1. New wood trim – by Architect
 - 2. Structural Steel – by Architect

3.05 ADJUST AND CLEAN

- A. Upon completion of the work, all surplus materials, empty packages and other debris shall be removed from the property. Spots and splatterings shall be removed from all finished surfaces. All finished work shall be touched up where necessary in an inconspicuous manner and shall be thoroughly cleaned.

- END OF SECTION 09 90 00 -

SECTION 31 00 00

EARTHWORK

PART 1 GENERAL

1.01 Description

A. This Section includes excavation for concrete foundations and underground utilities, associated backfill, grading and related items in accordance with the Contract Documents.

B. Incorporated by Reference

1. The Washington County General Conditions and Standard Specifications for Water Mains, Sanitary Sewer and Related Structures, latest revision,
2. Maryland State Highway Administration, latest version of MDOT SHA Standard Specifications for Construction and Materials.

The Contractor shall be familiar with the Special Provisions and the modifications to the specifications listed.

C. Definitions

- a. Fill material is material used for trench backfill, structural fill and backfill and embankment.
- b. Filled areas are areas which have received trench backfill, structural fill or embankment materials, placed and compacted as specified herein.
- c. Structural fill and backfill area upon or within which a structure is to be constructed.
- d. Paved areas are areas over which paving exists, or is to be placed under this Contract, or areas designated on the plans to receive future paving.
- e. Open areas are all areas other than the following: paved areas, areas within the public right-of-way, areas upon which structures are to be constructed, and improved grassed areas.
- f. Improved grassed areas are areas so designated on the Plans.
- g. Borrow fill and borrow trench backfill are suitable materials meeting requirements specified herein, and excavated off-site due to unsuitability of site excavated material.

1.02 Quality Assurance

City Park Train Hub
Locomotive Refurbishment &
Pavilion Replacement
City of Hagerstown, MD

31 00 00-1
Earthwork

Proj No: 19-35

297

1. The Contractor shall furnish a guarantee that filled areas will not suffer from ponding or settlement in excess of the following limitations for a period of one year from the date of final acceptance.
 - a. Paved areas and areas within five feet of structures, 0.05 foot.
 - b. All other areas, 0.10 foot.

Fill material which settles in excess of the above limitations shall be removed and replaced with suitable material at no cost to the Owner. Structures, paving, landscaping and other site improvements damaged by settlement, shall be removed and replaced at no cost to the Owner.

PART 2 MATERIALS

2.01 Fill Material

1. General Requirements for all Fill Material
 - a. All fill material shall be free of refuse and vegetable matter, frozen material and other objectionable material.
 - b. Excavated materials meeting these requirements and the requirements stipulated below for the appropriate type of placement shall be used when approved by the Engineer. Otherwise, the Contractor shall excavate haul and place material from other approved sources off site.

2. Utility Trench Backfill
 - a. Earth for backfill shall be free from large lumps, clods, and rocks and shall be placed along the sides of the pipe for the full width of the trench in layers not exceeding 6 inches uncompacted depth. Each layer shall be compacted simultaneously on both sides of the pipe by means of an approved mechanical tamper. Special care shall be taken to compact the backfill thoroughly under the haunches of the pipe. Fill material placed over pipes shall be placed and compacted up to a minimum height of 2 feet above the top of pipe by mechanical tampers in maximum six inch layers. The contractor shall protect all pipe from damage due to construction equipment or other vehicular traffic passing over the pipe. Backfill may be place immediately after laying the pipe.

Immediately after spreading each layer, the material shall be compacted with compaction equipment approved by the Engineer. Rolling shall be done in a longitudinal direction along the trench beginning at the edges and progressing toward the center.

Material 1 ft. below the top of subgrade shall be compacted to not less than 92 percent of the maximum dry density as specified in ASSHTO T-180. Material in the top 1 ft. shall be compacted to not less than 97 percent of the maximum dry density. In-place density shall be determined by MSMT 350 or 352. When necessary, the layer shall be wetted or dried in order to compact the layer to the required density. The resultant moisture content of the embankment material, when finally compacted to required density, shall be within 2 percentage points of optimum.

- b. Fill material for trenches under paved areas and areas to be paved shall conform to requirements for fill material for trenches in open areas up to the top 12 inches below the pavement base course. The top 12 inches of backfill shall meet one of the following materials requirements:
 - (1) Soil having a maximum density not less than 105 pounds per cubic foot as determined by AASHTO T99, Method A, with a liquid limit not exceeding 30; a plasticity index not exceeding 6; containing no stones larger than three inches in the greatest dimension.
 - (2) Special backfill, crushed stone or bank run having a maximum dry weight not less than 115 pounds per cubic foot as determined by AASHTO T99, Method A, with a liquid limit not exceeding 30; a plasticity index not exceeding 6; conforming to MSHA gradation CR 6, or gravel SB II.
- c. Borrow Trench Backfill shall meet materials requirements listed under 2b above or the following:
 - (1) Dry concrete sand meeting requirements ASTM C33, placed up to one foot below finished grade and topped with earth meeting requirements of 2b(1) in non-paved areas, and with materials meeting requirements of 2b(2) in paved areas.

2.02 Granular Backfill Below Subgrade

- 1. Granular backfill below subgrade, replacement for unsuitable material shall be 1/2" to 1 1/2" size stone granular material.

PART 3 EXECUTION

3.01 Topsoil

- 1. Removal requirements

- a. Prior to excavation for sidewalks the topsoil shall be removed and disposed of off-site. All topsoil within the portable building foot print shall remain unless otherwise directed. The grassed area underneath each portable building location shall be thoroughly cleared, grubbed, and disposed off-site.

3.02 Excavation

1. Classification

- a. All material excavated shall be **unclassified** and no additional compensation will be made for rock excavation. Excavation shall be carried out to the lines and grades indicated on the plans. Excavation shall include removal and disposal of all materials encountered.

3. Rock Excavation

- a. Whether or not rock is shown on the plans, the Contractor is responsible for making his own investigation to determine if rock is present. The presence of rock and the furnishing and placing of suitable backfill material **shall not** entitle the Contractor to additional compensation above and beyond the Contract lump sum price.
- b. Rock appearing in utility trench excavations shall be excavated in accordance with the directions and to the line prescribed by the Engineer.
- c. Rock appearing in foundation excavations can remain if it is determined by the Engineer to be stable, sound, and not comprised of rubble or voids.

4. Removal of Unsuitable Material

- a. Where material not meeting the requirements of fill material and deemed unsuitable by the Engineer is encountered either contiguous to or within the proposed limits of excavation shown, the Engineer may direct its removal. Depth of removal will be determined by the Engineer.

5. Unauthorized Excavation

- a. Where unauthorized excavations are made below indicated elevations under slabs, footings, pipes or structures, restore to proper elevations with fill materials as specified hereinbefore and as directed by the Engineer at no cost to the Owner.

6. Trench Excavation

- a. Excavations shall comply with OSHA Construction Industry Standards (29CFR Part 1926) Subpart P, Excavations, Trenching, and Shoring. All excavations shall be completed and maintained in a safe and stable condition throughout the total construction phase.

- b. Excavate trenches to the width and depth indicated on the Standard Details and on the plans. Provide uniform and continuous bearing and support for pipe or structure on granular bedding. Remove rock, when encountered, to a minimum depth of six inches below the pipe, and the same depth below the bell.
- c. Trench excavation shall proceed no more than 75 feet in advance of the placing of backfill unless otherwise authorized by the Engineer, to the widths and depths shown on the Standard Details. The Engineer may require backfilling and subsequent re—excavation on trenches left open an unreasonable amount of time in advance of laying of pipe, at no expense to the Owner. Trenches left open overnight, or during periods when the Contractor’s forces are not present shall be so protected or enclosed and marked as to cause no danger to the public or others.

3.03 Backfill Operations

1. General

- a. Do not place, spread or compact fill material while it is frozen or thawing or place upon or adjacent to frozen or thawing ground or during unfavorable weather conditions. When the work is interrupted by rain, fill operations shall not be resumed until field tests indicate that the moisture content and density of the fill are within the limits specified. Any compacted layer which has been frozen shall be removed before the next layer is placed upon it.
- b. Moisture content of fill material shall be within two percent of the optimum for the material as determined by AASHTO T99, Method
 - A. Prior to commencing compaction, fills shall be brought to specified water content by either aerating the material if it is too wet, or spraying the material with water if it is too dry. Thoroughly mix each lift before compaction to assure uniform distribution of water content. Distribute rocks of permissible sizes through the fill material and fill and compact to eliminate all voids.

2. Preparation

- a. Before depositing fills, remove all vegetative matter, mud, muck and otherwise unsuitable soils from the surfaces upon which fill materials are to be placed and fill irregularities and cavities.
- b. Completely fill boring voids and test pit excavations within the limits of excavation with sand, lean concrete or crushed stone up to the level of the proposed subgrade, as directed by the Engineer.

3. Placing Trench Backfill

- a. Placing trench backfill shall conform to requirement specified hereinbefore for placing structural fills and embankments, modified as follows.
- b. Place granular bedding and haunching in accordance with the Standard Details.
- c. Compact up to two feet above top of pipe by mechanical tampers in maximum six inch layers.
- d. Complete backfill and compaction in not more than one foot lifts as hereinbefore specified under III.C.3. utilizing such compaction equipment as will not damage the pipe and pipe joints. Pipe and pipe joints damaged by the Contractor's operations shall be removed and replaced at no cost to the Owner.

3.04 Finish Grading

1. Perform grading operations so that the excavation will be well drained at all times. Maintain drainage ditches and keep them open and free from soil, debris, and leaves until final acceptance of the work. Finish all grading on neat, regular lines conforming to the sections, lines, grades and contours shown on the Plans or if not shown, in accordance with the criteria set forth hereinafter. Perform grading work in proper sequence with all other associated operations.
2. Structures and pavement; bring finished subgrade to the elevation as shown on the drawings. Bring entire area to the finished subgrade elevation before excavating for footings.

3.05 Material Storage

1. Deposit excess excavated material and unsuitable material onsite as in a location approved by the Engineer. Topsoil shall be stockpiled in a location approved by the Engineer.

3.06 Dewatering and Drainage

1. If water is encountered in excavation, provide pumps of sufficient capacity to remove the water while the excavations are being made and until the concrete footings have been poured, the foundation walls or other structures erected up to grade or until the excavation has been backfilled. Do not allow sediment laden water to flow into any watercourse or drainageway or overland without first filtering it through an approved desilting device. Use of woven and non-woven fiber material will be allowed when approved by the Engineer.
2. Provide all necessary temporary surface drainage and keep the same operating to the satisfaction of the Engineer until permanent drainage or finish grading has been completed. Do not allow damming or ponding of water in gutters or Storm drains.

3.07 Restoration of Surface Facilities

1. The Contractor shall restore and re-stabilize surface features and facilities damaged or destroyed during construction to at least the condition existing before construction, in accordance with General Conditions and other applicable sections of the Specifications.

Infiltration testing was performed in general accordance with the MD SWM Design Manual at test locations TP-7 and TP-8. The results of the infiltration testing were as follows:

TEST LOCATION	TEST DEPTH (ft.)	INFILTRATION RATE (in./hr.)
TP-7	4	1.0
TP-8	4	0.75

CONCLUSIONS AND RECOMMENDATIONS

The subsurface information obtained from the field exploration, our experience with similar projects, and the noted design criteria were the basis for our assessment of the geotechnical issues currently existing at the site. Our geotechnical recommendations associated with the design of the canopy extension are presented in the following sections of this report.

Discussion

Old fill materials were encountered in three (3) of the test locations to depths ranging from 2 to 4.5 feet below existing grade. The type and consistency of the fill encountered was similar at each test location. Based on the results of the field exploration, it is our opinion that the existing old fill observed is suitable for support of the proposed pavilion. We do not have records of the fill placement. Therefore, the type and consistency of the old fill may vary from the conditions observed at our test locations. Therefore, we recommend that a contingency be included in the project bids for over-excavation and removal of unsuitable materials or for lowering foundations to bear on natural soils.

Foundations

Provided that the recommendations in this report are followed, we recommend that a maximum allowable bearing pressure of 2,000 psf be utilized to proportion conventional shallow spread foundations. All foundations should be constructed to bear on approved original soils, approved old fill, or new controlled fill. Minimum dimensions of 3 feet and 2 feet for isolated and continuous foundations, respectively, should be considered. In addition, exterior foundations should bear at least 30 inches below the final outside grade for frost protection.

Based on the recommended allowable bearing pressure and the minimum foundation dimensions, we estimate that total settlements for foundations bearing on approved residual soils, approved old fill and/or new controlled fill will be one (1) inch or less. Differential settlements are anticipated to be one-half of the total settlements. Differential settlements along continuous wall foundations are not expected to exceed an angular distortion of 0.0015 inch/inch.

Seismic Classification

Based on the soil boring information and our experience in this region, we recommend that Site Class “C” be utilized for seismic evaluation for the proposed foundations. This classification is based on the International Building Code (IBC) criteria.

Lateral Earth Pressures

We recommend that the following lateral earth pressure coefficients be used to evaluate earth pressures for design of below grade walls for the project. It is noted that the coefficients are based on the angle of internal friction of the material, and these coefficients do not include a factor of safety. Accordingly, the designer should include an appropriate factor of safety in the structural design.

BACKFILL MATERIAL	MOIST UNIT WEIGHT (pcf)	FRICTION ANGLE (degrees)	LATERAL EARTH PRESSURE COEFFICIENTS (LEVEL BACK SLOPE)		
			Active (K _a)	At-Rest (K _o)	Passive (K _p)
On site old fill	115	30	0.33	0.50	3.0
On site cohesive on-site soils (clays, silts)	115	28	0.36	0.53	2.77

Any surcharge loads anticipated at the surface should be multiplied by 0.5 and superimposed as a uniform horizontal pressure on the recommended design lateral loading. The coefficient of friction which can be used for determination of sliding resistance on the base of foundation elements can be computed as 0.53 times the total vertical load on the foundation. This is based on a friction angle of 28° for the base soil, and it does not include a factor of safety.

It is emphasized that the designer must carefully consider the rigidity of the retaining system in order to select either an active or at-rest condition. In order to use an active earth pressure, the wall(s) must undergo a slight amount of rotation which will result in some translation at the top of the wall. Typically, for well-compacted granular backfill, the translation may be on the order of 0.001 to 0.002H, where H is the height of the wall. Similarly, for compacted cohesive soils, the translation may be on the order of 0.01 to 0.02H. If the retaining system is extremely rigid and/or upper levels are constructed over the wall to provide additional horizontal resistance, an at-rest pressure will be more appropriate.

The lateral pressure values recommended above are based on adequate drainage behind the walls without build-up of hydrostatic pressures. Consequently, a permanent backwall drainage system should be constructed along exterior retaining walls or below grade walls. The permanent backwall drainage should include a 4-inch diameter Schedule 40 PVC or HDPE perforated pipe surrounded by an 18-inch wide zone of free draining gravel such as ASTM Size No. 57 separated from the general site backfill by a non-woven geofabric, such as TC Mirafi 140-N or an approved equal. Backwall drains

should be sloped such that water will flow by gravity to an appropriate drain and daylight or to a sump pit and pump.

SWM Infiltration and Design Considerations

Based on the results of the field exploration, it is our opinion that the subsurface conditions at the site are generally suitable for infiltration. Due to the potential for areas of shallow rock, we recommend that the designer use caution when establishing the design infiltration rate for the facility. In addition, we recommend that the designer consider the use of an underdrain within the SWM facility.

Only very light grading equipment such as a small tracked dozer should be utilized for placement of topsoil and gravel within the proposed infiltration facility. In addition, construction traffic should be prohibited upon completion of the SWM facility area so that any planting soils or permeable media will not be compacted.

LIMITATIONS

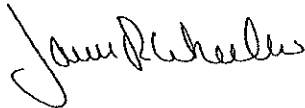
This report has been prepared for the exclusive use The City of Hagerstown for specific application to the proposed City Park Train Hub Canopy Extension in Hagerstown, Maryland. The work has been performed in accordance with generally accepted geotechnical engineering practices. No other warranty, expressed or implied, is made.

It is recommended that we be provided the opportunity to review the final plan and specifications so that our recommendations may be properly interpreted and implemented. If we are not afforded the privilege of making this review, we will not assume responsibility for misinterpretation of our recommendations, as our recommendations are strictly limited to conditions represented to Triad at the time this report was issued.

We appreciate the opportunity to provide our services on this project. If you have any questions regarding this letter, or you require any additional information, please do not hesitate to contact us.

Sincerely,

TRIAD ENGINEERING, INC.



James R. Wheeler
Geotechnical Scientist

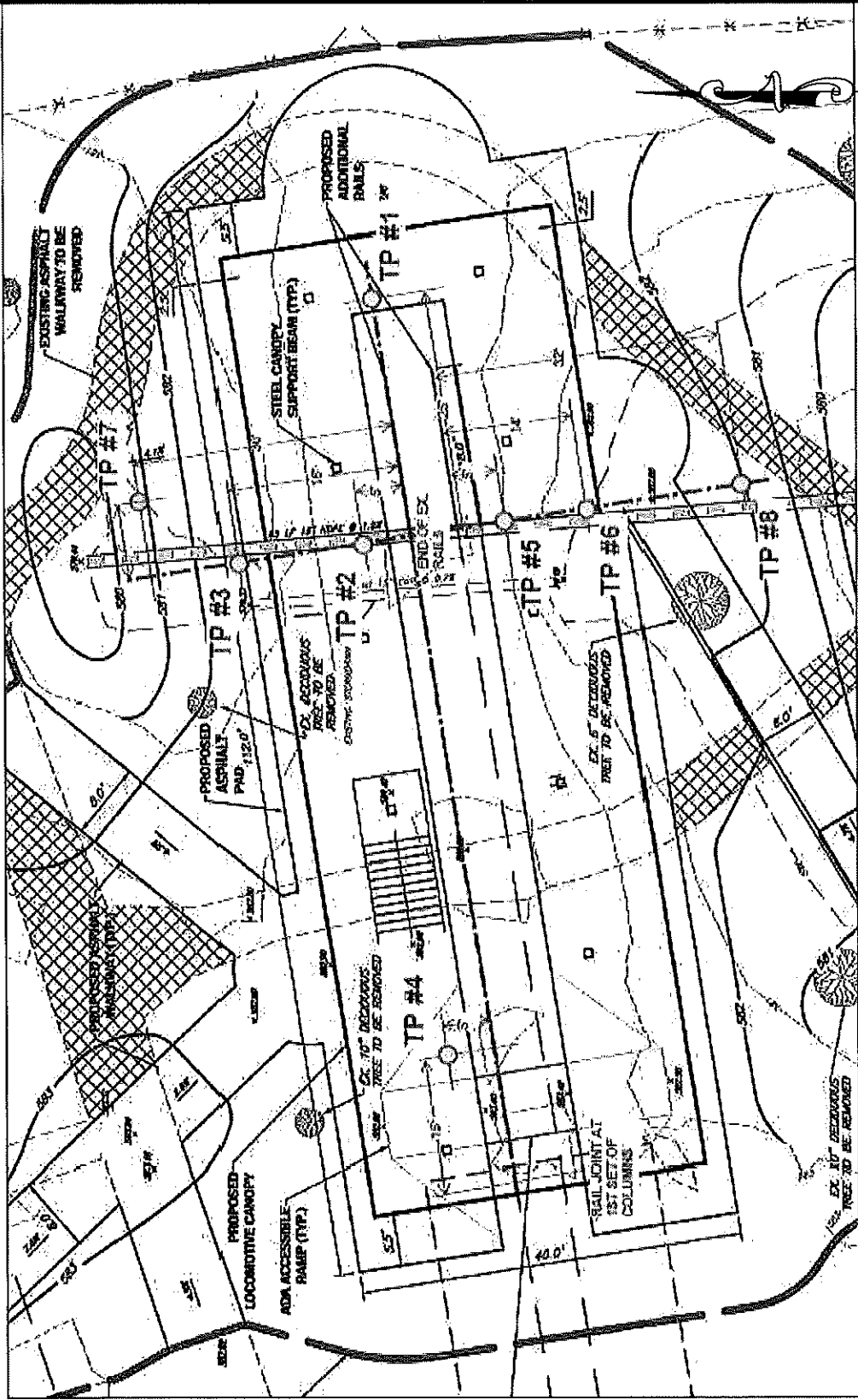


Stephen J. Gyurisin, P.E.
Geotechnical Services Manager



"Professional 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 Maryland, License No. 40821, Expiration Date: 6/16/2021.

Attachments: Test Location Plan
Wildcat® Probe Log
Auger Probe/Test Pit Summary Table



TP-# Approximate Test Location

TEST LOCATION PLAN

PREPARED BY: JRW
REVIEWED BY: SJG

CITY PARK TRAIN HUB CANOPY EXTENSION

DATE: 8/4/2020
SCALE: N/A

PROJECT NO:03-13-0170

Figure: 1

TRIAD
 TRIAD ENGINEERING, INC.
 www.triadeng.com
 1075-D SHERMAN AVENUE
 HAGERSTOWN, MD 21740

WILDCAT DYNAMIC CONE LOG

Triad Engineering, Inc.
 1075D Sherman Avenue
 Hagerstown, MD 21740

PROJECT NUMBER: 03-13-0170
 DATE STARTED: 07-28-2020
 DATE COMPLETED: 07-28-2020

HOLE #: TP-4
 CREW: SJG
 PROJECT: City Park Train Hub Canopy Extension
 ADDRESS: City Park
 LOCATION: Hagerstown, MD

SURFACE ELEVATION: N/A
 WATER ON COMPLETION: None
 HAMMER WEIGHT: 35 lbs.
 CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm ²	GRAPH OF CONE RESISTANCE				N'	TESTED CONSISTENCY	
			0	50	100	150		SAND & SILT	CLAY
1 ft									
2 ft									
3 ft									
1 m									
4 ft									
5 ft	18	69.5	.....				19		VERY STIFF
	12	46.3	.....				13		STIFF
	12	46.3	.....				13		STIFF
	16	61.8	.....				17		VERY STIFF
6 ft	16	61.8	.....				17		VERY STIFF
	20	77.2	.....				22		VERY STIFF
2 m	16	61.8	.....				17		VERY STIFF
7 ft	15	51.3	.....				14		STIFF
	17	58.1	.....				16		VERY STIFF
8 ft									
9 ft									
3 m	10 ft								
	11 ft								
	12 ft								
4 m	13 ft								

310

Auger Probe/Test Pit Summary Table Page 1 of 1
 Project Name: City Park Train Hub
 Project No.: 03-13-0170
 Inspector: SJG



Date: 7/28/2020

Test Pit	Material Depth (ft.)		Material Type	Notes
	From	To		
TP-1	0	0.5	Topsoil	
	0.5	3	Tan SILT and gravel, little cobbles, trace sand, dry to moist.	Fill
	3	4.5	Brown red silty CLAY, moist.	Residuum
			Auger Refusal at 4.5	Original probe refused at 3.0 feet; offset 5 feet south
TP-2	0	0.25	Topsoil	
	0.25	4.5	Tan SILT and gravel, little cobbles, trace sand, dry to moist.	Fill
	4.5	5	Brown silty CLAY, firm conditions, moist	Residuum
			Test Pit Terminated at 5 feet	
TP-4	0	0.25	Topsoil	
	0.25	2	Tan SILT and gravel, little cobbles, trace sand, dry to moist.	Fill
	2	4.5	Brown red silty CLAY, trace sand, firm conditions, moist.	Residuum
			Probe Terminated at 4.5 feet	
TP-7	0	1.5	Topsoil	
	1.5	4	Tan clayey SILT, trace sand, dry to moist.	Residuum
			Probe Terminated at 4.0 feet	
TP-8	0	1.5	Topsoil	
	1.5	4	Tan clayey SILT, trace sand, dry to moist.	Residuum
			Probe Terminated at 4.0 feet	

SECTION 32 14 23

ASPHALTIC CONCRETE PAVING

PART 1 - GENERAL

1.01 DESCRIPTION

- a. This work shall consist of constructing hot mix asphalt (HMA) pavement as specified in the Contract Documents, including surface course, binder course and base course.

1.02 RELATED SECTIONS

- a. Section 02220 - Earthwork
- b. Construction Drawings
- c. Maryland State Highway Administration Standard Specifications for Construction and Materials (Latest Revision):

Aggregates	901
Performance Graded Asphalt Binders	904.02
Tack Coat	904.03
Hot Mix Asphalt Mixes	904.04
Crack Filler	911.01
Production Plant	915

1.03 SUBMITTALS

- a. Design Mix: Before any asphaltic concrete paving is constructed, submit actual design mix to the Engineer for review and/or approval. Design mix submittal shall follow the format as indicated Maryland State Highway Administration Section 504; and shall include the type/name of the mix, gradation analysis, grade of asphalt cement used, flow, effective asphalt content (percent), and direct references to the applicable highway department specifications sections for each material. The design shall be for a mixture listed in the current edition of the applicable state roadway specifications. Mix designs over three (3) years old will not be accepted by the Owner.
- b. Material Certificates: Submit material certificates to on-site independent testing laboratory which is signed by material producer and Contractor, certifying that materials comply with, or exceed, the requirements herein.

1.05 REFERENCES

- a. Maryland State Highway Administration (MSHA):

1. Latest version of the MDOT SHA Standard Specifications for Construction and Materials.
 - a. Section 504 – Hot Mix Asphalt Pavement
 - b. Section 501 - Aggregate Base Courses
 - c. Section 901 - Aggregates
 - d. Section 904 – Performance Graded Asphalt Binders & HMA
- b. American Society for Testing and Materials (ASTM):
 1. ASTM D995 - Requirements for Mixing Plants for Hot-mixed, Hot-laid Bituminous Paving Mixtures.
 2. ASTM D2027 - Liquid Asphalt Medium Curing.

1.06 ENVIRONMENTAL CONDITIONS

a. Weather Restrictions

HMA material shall only be placed on roadway surfaces when the ambient air and surface temperature is at least 40 F and rising for surface mixes and at least 32 F and rising for base mixes. The pavement surfaces shall be clean and dry and approved by the Engineer before HMA paving begins. Placing HMA material on a frozen graded aggregate base is prohibited. When weather conditions differ from these limits, material en route from the plant to the job site may be used at the Contractor's risk. If placement of the material is stopped by the Engineer, all material en route shall be wasted at no additional cost to the Owner.

- b. Apply bituminous prime and tack coats ONLY when the ambient temperature in the shade is 50°F and when the temperature has not been below 35°F for a minimum of 12 hours immediately prior to application.
- c. DO NOT apply when the subbase surface is wet or contains an excess of moisture which would prevent uniform distribution and the required penetration.

1.07 WARRANTY

1. The Contractor shall guarantee the asphalt concrete pavement free from defects in materials and workmanship, for a period of one year from the date of final acceptance. During this time the Contractor shall replace any defective work at no cost to the Owner. All repairs shall be made equal to or better than the original pavement, per the Original Contract and subject to the Owners approval.

PART 2 - PRODUCTS

2.01 MATERIALS

- a. Provide asphalt-aggregate mixture as recommended by local or state paving authorities, unless otherwise specified, to suit project conditions. Use locally available materials and gradations which meet MSHA Section 901 specifications and exhibit satisfactory records of previous installations.
- b. Asphalt Cement: Comply with AASHTO MP-1 Performance Graded Binder Specification

2.02 STABILIZING SUBBASE COURSE MATERIALS

- a. Granular Subbase Course: Shall consist of constructing a stabilizing granular base in accordance with MSHA Section 501.

2.03 ASPHALT PAVEMENT MATERIALS

- a. Bituminous Concrete Base Course: Shall consist of constructing one or more layers of hot-mixed, hot-laid bituminous concrete base course in accordance with MSHA Specifications Section 504.
- b. Bituminous Concrete Binder Course: Shall consist of constructing one or more layers of hot-mixed hot laid bituminous concrete binder course in accordance with MSHA Specifications Section 504.
- c. Wearing Course: Shall consist of constructing a wearing course hot-mixed, hot-laid asphalt concrete to requirements of MSHA Specifications Section 504.

2.04 ASPHALT PAVEMENT MIX

- a. The Contractor shall develop a Superpave mix design in conformance with AASHTO PP 28. HMA Superpave mixes shall conform to the specification for Superpave Volumetric Mix Design, AASHTQ MP 2, and shall be designed for the Equivalent Single Axle Loading (ESAL) range specified in the Contract Documents.

The Contractor may elect to use crushed, recycled asphalt pavement (RAP) material or a maximum of 5 percent roofing shingles from manufacturing waste. The allowable percentage and its suitability for use shall be determined in conformance with MSMT 412. When using 15 percent or less of RAP, binder viscosity adjustments are not required.

The use of RAP may be considered for applications where higher polish value aggregates are required. Approval for use will be on an individual project basis. Documentation of RAP stockpile quality and traceability shall be submitted to the Engineer for approval prior to use.

Crushed glass shall not be used in surface mixes. RAP and roofing shingles from manufacturing waste shall not be used in gap-graded mixes, surface mixes requiring high polish aggregate, or mixes requiring elastomer type polymer binder.

- b. Pavement shall be in strict accordance with MSHA Section 504 Hot Mix asphalt Pavement and Section 904 – Performance Graded Asphalt Binders & HMA
- c. Hot mix asphalt (HMA) mixes shall be produced in a plant as specified in MSHA Section 915.
- d. Aggregates shall conform to Section 901, and AASHTQ MP2 with the exception that the aggregate retained on the 4.75 mm sieve shall be tested for flat and elongated particles in conformance with D 4791. When recycled asphalt pavement is used in an HMA mix as defined in MSMT 412, it shall be considered an aggregate source.

2.05 EQUIPMENT

- a. Maintain equipment in satisfactory operating condition and correct breakdowns in a manner that will not delay or be detrimental to progress of paving operations.

PART 3 - EXECUTION

3.01 INSPECTION/PREPARATION

- a. Verify subgrade for conformity with elevations and sections immediately before placing aggregate subbase material.
- b. Prior to placement of subbase or crushed aggregate surfacing - proofroll subgrade to identify unstable areas. Stability will be determined based on movement of material under compaction equipment. When the specified stability cannot be obtained, excavate material in the area to a depth that, when replaced and compacted, the subgrade will have required stability.
- c. Subbase or crushed aggregate surfacing material SHALL NOT be placed on a wet, frozen, unstable or unsuitable subgrade or subbase.

3.02 PREPARATION

- a. Prior to placement of paving material, the foundation shall be constructed as specified in the Contract Documents and approved by the Engineer. When paving over existing pavement, all excess crack filling or patch material shall be removed and all spalls and potholes shall be cleaned, tack coated, filled and tamped with HMA before placement. Manholes, valve boxes, inlets, and other appurtenances within the area to be paved shall be adjusted to grade as directed by the Engineer.
- b. Remove loose material from compacted subbase material surface immediately before applying prime coat.
- c. Proof roll prepared subbase material surface to check for areas requiring additional compaction and areas requiring removal and recompaction.

- d. Do not begin paving work until deficient subbase material areas have been corrected and are ready to receive paving.

3.03 PLACEMENT OF ASPHALT PAVEMENT

- a. HMA shall be placed by the paver. Delivery of the mixture by the hauling units and placement shall be continuous. The temperature of the mixture shall be a minimum of 225 F at the time of placement. Broadcasting of loose mixture over the new surface is prohibited.
- b. Immediately following placement of the HMA, the mixture shall be compacted by rolling to an in place density of 92.0 to 97.0 percent of the maximum density. In place compaction shall be completed before the mixture cools below 185 F, as determined by a probe type surface thermometer, supplied by the Contractor and approved by the Engineer.
- c. Place asphalt pavement within 24 hours of priming subbase course.

3.04. Equipment:

- a. Paver: Place asphaltic concrete ONLY with self-powered unit equipped with an activated screed or strike-off assembly, and capable of spreading and finishing widths and depths shown, in accordance with MSHA Section 504.

Pavers will be inspected and approved by the Engineer based upon the manufacturer's specification manual (copy to be provided by the Contractor). The paver shall be a self-contained, self-propelled unit capable of spreading the mixture true to line grade and cross slope. The paver shall be equipped with a screed or strike off assembly that will produce a finished surface of the required smoothness and texture without tearing, shoving or gouging the mixture. The paver shall have automatic controls for transverse slope and grade. Controls shall be capable of sensing grade from an outside reference line or ski and sensing the transverse slope of the screed to maintain the required grade and transverse slope within plus or minus 0.1 of the required slope percentage.

Manual operation will be permitted in the construction of irregularly shaped and minor areas, or where directed by the Engineer.

Reference lines or other suitable markings to control the horizontal alignment shall be provided by the Contractor, subject to the approval of the Engineer.

- b. Hand Placement: Areas inaccessible to paver, upon approval by Engineer, may be placed by hand, maintaining required course depth.
- c. Roller: Self-propelled, smooth steel wheel with nominal weight of 10 tons, or approved equivalent vibratory compactor, in accordance with MSHA.

- a. 3 M.P.H. maximum speed during compaction.

- b. Use mechanical tampers in areas not accessible to roller.
- c. Place bituminous concrete base course to compacted depth indicated.
- d. Place bituminous binder course to compacted depth indicated.
- e. Place surface course to compacted depth indicated.
- f. Ensure asphalt pavement is minimum 225°F immediately after placing and PRIOR to initial rolling.
- g. Compact each asphalt paving course to required density with approved rolling equipment in accordance with MSHA Specifications.
- h. Start compaction as soon as pavement will bear equipment without checking or undue displacement.
- i. Carry out compaction in three operations in pass sequence. Ensure each pass of roller overlaps previous passes to ensure a smooth surface free of roller marks. Keep roller wheels sufficiently moist so as not to pick up material.
- j. Perform hand tamping in areas not accessible to rolling equipment. Remove areas that are loose, broken, mixed with dirt, or otherwise defective, or that show an excess or deficiency of bituminous material. Replaced with fresh hot mixture and compact to conform to surrounding area.
- k. Ensure joints made during paving operations are straight, clean, vertical and free of broken or loose material. Prime vertical surfaces of joints to ensure tight bond.
- l. Tolerances: Maximum allowable deviation from elevations and grades indicated for pavement courses:
 - 1. Bituminous Concrete Base Course: 4 inch in 10 ft.
 - 2. Binder Course: 4 inch in 10 ft.
 - 3. Wearing Course: 3/16 inch in 10 ft.
 - 4. Depressions retaining or ponding water or mounds in pavement, or ridges at joints WILL NOT BE ACCEPTABLE.
- m. Apply a tack coat to the existing pavement, structures, and curb line prior to paving.

- n. Seal all joints along the curb line and joints along the existing pavement with hot bituminous material or emulsified asphalt.
- o. Maintain equipment in satisfactory operating condition and correct breakdowns in a manner that will not delay or be detrimental to progress of paving operations.
- p. All new pavement damaged from fuel spills or other material injurious to bituminous material shall be removed and replaced at the Contractor's expense prior to proceeding with paving operations.

3.05 EXISTING PAVEMENT

- a. **Abutting Existing Pavement:** In areas where new bituminous pavement abuts existing pavement, the existing pavement shall be saw cut to its full depth to form straight lines or smooth curved lines as indicated and the resulting vertical face shall be painted with tack coat material.
- b. Condition existing pavement surface with bituminous tack coat in accordance with MSHA Section 504.

3.06 CLEANING AND PROTECTION

- a. **Cleaning:** After completion of paving operations, clean all surfaces of excess or spilled asphalt materials to satisfaction of the Engineer.
- b. **Protection:**
 - 1. After final rolling, DO NOT PERMIT vehicular traffic on asphalt concrete pavement until it has cooled and hardened, and in NO CASE SOONER THAN 24 HOURS.
 - 2. Provide barricades and warning devices as required to protect pavement and the general public.
 - 3. When applicable, cover openings of structures in the area of paving until permanent coverings are placed or installed.

3.07 FIELD QUALITY CONTROL

- a. **Grade Control:** Establish and maintain required lines and elevations.
- b. **Thickness:** In-place compacted thickness shall not be less than thickness specified on the shall be removed and replaced to the proper thickness, at the discretion of the Owner; until specified thickness of the course is met or exceeded at no additional expense to the Owner.

- c. Surface Smoothness: Testing shall be performed on the finished surface of each asphalt concrete course for smoothness, using 10'-0" straightedge applied parallel with, and at right angles to centerline of paved area. The results of these tests shall be made available to the owner upon request. Surfaces will not be acceptable if the following 10' straightedge tolerances for smoothness are exceeded.

Base Course Surface: 1/4"
Binder Course Surface: 1/4"
Wearing Course Surface: 3/16"

- d. Check surface areas at intervals necessary to eliminate ponding areas. Remove and replace unacceptable paving as directed by Owner.
- e. Compaction: Field density test for in place materials shall be performed at the discretion of the Engineer by examination of field cores in accordance with one of the following standards:

1. Bulk specific gravity of paraffin-coated specimens: ASTM D-1 1 88.
2. Bulk specific gravity using saturated surface-dry specimens: ASTM D-2726.

Rate of testing shall be one core per 20,000 square feet of pavement, with a minimum of 3 cores from heavy-duty areas and 3 cores from standard-duty areas. Cores shall be cut from areas representative of the project. Areas of insufficient compaction shall be delineated, removed, and replaced in compliance with the specifications at no expense to the Owner.

SECTION 32 16 23

CONCRETE SIDEWALK

PART 1- GENERAL

1.01 DESCRIPTION

1. This Section includes constructing new concrete sidewalk, within the limits indicated, including preparation of subgrade and providing base courses as required in accordance with the Contract Documents.
2. Related Sections: The following Sections contain requirements that relate to this Section:
 1. Division 2 Section 2200 for subgrade preparation, grading and subbase course.
3. All work in this section shall comply with the Americans with Disabilities Act, 1990 or latest revision and the latest version of the MDOT SHA Standard Specifications for Construction and Materials.

1.02 QUALITY ASSURANCE

1. Concrete Standards: Comply with provisions of the following standards, except where more stringent requirements are indicated.
 1. American Concrete Institute (ACI) 301, "Specifications for Structural Concrete for Buildings."
 2. ACI 318, "Building Code Requirements for Reinforced Concrete."
 3. Concrete Reinforcing Steel Institute (CRSI) "Manual of Standard Practice."
2. Concrete Manufacturer Qualifications: Manufacturer of ready-mixed concrete products complying with ASTM C 94 requirements for production facilities and equipment.
3. Concrete Testing Service: Testing is not required for this project.
4. Field-Constructed Mockup: Cast mockup of size indicated or as required to demonstrate typical joints, surface finish, texture, color, and standard of workmanship.
 1. When Architect determines that mockup does not meet requirements, demolish and remove it from the site and cast another until the mockup is accepted.
 2. Keep accepted mockup undisturbed during construction as a standard for judging completed paving. Undamaged mockup may be incorporated into the Work.
 3. Demolish accepted mockup and remove from site when directed by Architect.
5. Preinstallation Conference: Conduct conference at Project site to comply with requirements of Division 1 Section "Project Meetings" and the following:

1. Before installing portland cement concrete paving, meet with representatives of authorities having jurisdiction, Owner, Inspector, Engineer, consultants, independent testing agency, and other concerned entities to review requirements. Notify participants at least 3 working days before conference.

1.03 SUBMITTALS

1. General: Submit the following according to the Conditions of the Contract and Division 1 Specification Sections.
2. Product data for proprietary materials and items, including reinforcement and forming accessories, admixtures, joint systems, curing compounds, dry-shake finish materials, and others if requested by Architect.
3. Design mixes for each class of concrete. Include revised mix proportions when characteristics of materials, project conditions, weather, test results, or other circumstances warrant adjustments.

1.04 WARRANTY

1. The Contractor shall guarantee the sidewalk and / or curb & gutter free from defects in materials and workmanship, for a period of one year from the date of final acceptance. During this time the Contractor shall replace any defective work at no cost to the Owner. All repairs shall be made equal to or better than the original and subject to the Owners approval.

PART 2 – MATERIALS AND CONSTRUCTION

2.01 PREPARATION:

1. Preparation of subgrade shall meet jurisdictional requirements stated above.
2. Provide base for pavement where required as specified elsewhere in these specifications.
3. Compaction shall meet the requirements specified elsewhere in these specifications.

2.02 Formwork:

1. Forms shall be steel forms with the exception of approved flexible forms for radii formation.

2.04 Concrete:

1. Concrete shall be MSHA Class 3, air entrained. Concrete shall be a State Highway Administration approved mix design, from a State Highway Administration approved batch plant.

2.05 Expansion Joints:

City Park Train Hub
Locomotive Refurbishment &
Pavilion Replacement
City of Hagerstown, MD

32 16 23-2
Concrete Sidewalk

Proj No: 19-35

321

1. Joint spacing shall meet existing contiguous work. Expansion material placement in sidewalks, shall not exceed twenty (20) linear feet or a 15' x 15' square .

2.06 Cold Weather Concrete:

1. Requirements for protection of concrete in cold weather conditions shall be as per American Concrete Institute section 306.

2.07 Slip Form Method for Curb and Gutter to Comply with MSHA Specifications Per Section 806.03.03.

PART 3 EXECUTION

3.01 Examination

1. Verify compacted subgrade is in conformance with specifications set forth in Section 02502 of these specifications.
2. Verify gradients and elevations of base are in conformance with the drawings and / or specifications.

3.02 Subbase

1. See Section 02502 – base construction for work in this section.

3.03 Preparation

1. Moisten base to minimize adsorption of water from fresh concrete.
2. Coat surfaces of inlet frames with form release oil to prevent bond with concrete pavement.

3.04 Forming

1. Place and secure forms to correct location, dimension, profile and gradient.
2. Assemble formwork to permit easy stripping and dismantling without damaging concrete.
3. Place joint filler vertical in position, in straight lines. Secure to formwork during concrete placement.

3.05 Reinforcement

1. Place reinforcement as directed or shown on plans.
2. Interrupt reinforcement at expansion joints.
3. Place dowels and reinforcement to achieve pavement and curb alignment as detailed.

3.06 Placing Concrete

1. Place concrete in accordance with ACI 301.
2. Place concrete over the full width of the panel and between predetermined construction joints.

3.07 Joints

1. Place expansion joints at 20 foot intervals. Align curb & gutter and sidewalk joints.
2. Place joint filler between paving components and building or other appurtenances.
3. Provide scored joints at 4 foot intervals.

3.08 Finishing

1. General Paving: Light broom finish
2. Sidewalk Paving: Light broom finish
3. Curb & gutter: Light broom finish
4. Direction of texturing: Transverse to pavement direction
5. Place curing compound on exposed surfaces immediately after finishing.

SECTION 32 92 19

SEEDING

PART 1 - GENERAL

1.01 Description:

- A. This Section includes seeding and sodding to the limits shown as required for restoration and restabilization of disturbed areas, and as directed by the Engineer, including preparation of seed and sod bed, fertilizer, lime and mulch, in accordance with the Contract Documents.

1.02 Submittals:

- A. Submit certificates of compliance before delivery of materials for the following items:
1. Topsoil
 2. Seed
 3. Sod
 4. Fertilizer
 5. Lime
 6. Mulch

1.03 Construction Criteria:

- A. The following classes of restoration as defined below are noted in the Restoration Schedule on the drawings.
1. Type A Sod (established lawns park lawns and highly mowed public spaces). Commence continuous restoration work within 10 days after completion of work between first manholes but no later than 10 days after commencement of trench excavation operations.
 2. Type B Sod (sodded swales)
 3. Type C Surge stone (seeded and stone - lined swales)
 4. Type D Seed (Improved areas) Type of seeding operation shall be as specified in II.B. of this Section.
 5. Type E Seed (unimproved and outfall areas). Type of seeding operation shall be as specified in II. B of this Section.
 6. Type F (Development sites with existing stabilization of temporary mulch or planted seed)- Restore in kind and maintain.

1.04 Reference Documents:

- A. The Contractor shall obtain and maintain on the site at all times a copy of requirements of Maryland Turf Grass Law and Regulations, publication no. 41, available from the Seed and Turf lab, Agronomy Department, University of Maryland, College Park, Maryland 20742.

PART 2 - MATERIALS

2.01 Topsoil:

General Requirements:

- A. Topsoil shall consist of fertile agricultural soil capable of sustaining vigorous plant growth. It shall contain not less than 1 1/2 percent organic matter as determined by MSHA Standard Method of Testing and shall have a pH value between 6.0 and 7.6.
- B. Topsoil shall be free of roots, rubbish and other objectionable materials such as Bermuda grass, poison Ivy and kindred roots and any material harmful to plant growth. Topsoil shall provide sufficient pore space to permit adequate root penetration.
- C. Topsoil shall meet the following analysis as determined by the MSHA Standard Hydrometer Test. Sand, silt and clay are defined in AASHTO M146.

<u>Minimum</u>	<u>Percent</u>	<u>Maximum Percent</u>
Sand	30%	50%
Silt	30%	50%
Clay	5%	20%

- D. Special purpose topsoil shall be used where indicated. General purpose topsoil shall be used in all other areas.

Special Purpose Topsoil:

- A. Special purpose topsoil shall meet the requirements listed above with the following gradation:

<u>Sieve</u>	<u>Min. Percent Passing</u>
2"	100%
No. 4	90%
No. 10	80%

- B. Special purpose topsoil shall be capable of hand spreading.
- C. General Purpose Topsoil shall meet the General Requirements set forth above and shall contain no stones greater than 1 1/4 inches in their greatest dimension.

- D. Materials available on site which meet the specified requirements may be utilized with the permission of the Engineer.

2.02 Seed:

- A. Unless otherwise specified herein, seed shall be certified by the Maryland State Board of Agriculture and shall conform to requirements of Maryland Turf Grass Law and Regulations, Publication number 41.
- B. Supply the following for improved areas which will be mowed regularly, and are dry and semi shady:

Semi-Shade Mix:

Kentucky Bluegrass's
20-30% Certified Merion
20-30% Certified Kenblue or South Dakota Certified
10-40% Certified Adelphi, Baron, Birka or Pennstar

Creeping Red Fescue
10-50% Certified Pennlawn or Jamestown

Seeding Rate: Sow mixture at 260 pounds per acre, or six pounds per 1,000 square feet between March 1 and May 31 and between August 15 and October 31.

Premixed certified grass mixture labeled 'Maryland Certified 30-30-30-10 Seed Mixture' will be acceptable.

- C. Supply the following for improved areas which will be mowed regularly and are dry, in heavy shade:

Heavy Shade Mix:

Kentucky Bluegrass
20% Certified Merion
30% Certified Kenblue or South Dakota, Adelph, Baron, Birka or Pennstar (any combination thereof)

Creeping Red Fescue
50% Certified Pennlawn or Jamestown

Seeding rate: Sow mixture at 140 pounds per acre or three pounds per 1,000 square feet between March 1 and May 31 and between August 15 and October 31.

- D. Supply the following for unimproved areas not to be mowed (or mowed infrequently) and are drought-prone:

Drought-Prone Mix:

Tall Fescue:

80-90% Certified Kentucky 31

Annual Rye Grass

10-20% (Certification not required)

Seeding rate: Sow mixture at 130 pounds per acre or three pounds per 1,000 square feet between March 1 and May 31 and between August 15 and October 31.

- E. Supply the following for unimproved areas which are poorly drained areas and areas that are subject to frequent flooding:

Wet Area Mix:

Tall Fescue:

75% Certified Kentucky 31

Reed Canarygrass:

25% (Certified Not Required)

Seeding Rate: Sow mixture at 130 pounds per acre or three pounds per 1,000 square feet between March 1 and May 31 and between August 15 and October 31.

- F. Supply one of the following for temporary grass stabilization;

Temporary Seed Mixture:

Sudangrass or Annual Ryegrass: Seeding rate; sow mixture at 40 pounds per acre or one pound per 1,000 square feet between March 15th and May 31st and between August 15th and October 15th.

Millet: Seeding rate; sow mixture at 40 pounds per acre or one pound per 1,000 square feet between May 31st and August 15th.

Do not use the above in maintained turf areas.

2.03 Fertilizer:

- A. Fertilizer shall be uniform in composition, free flowing and delivered to the site fully labeled according to applicable state fertilizer laws and shall bear the name, trade name or trademark and warranty of the producer.
- B. The Contractor may submit soils samples to an approved soils testing laboratory for fertilizing recommendations. Recommendations shall be submitted to and approved by the Environmental Matters Section before implementation.

Otherwise, fertilize at the following rates:

1. Temporary Seeding:

Supply 10-20-10 or equivalent at the rate of 600 pounds per acre or 15 pounds per 1,000 square foot.

2. Permanent Seeding:

Supply 600 pounds of 0-20-20 per acre with limestone. Immediately prior to seeding, supply 400 pounds of 38-0-0 ureaform and 500 pounds of 10-20-20 or equivalent per acre.

3. Sodding:

Supply 15 pounds of 10-20-10 per 1,000 square feet. Immediately prior to sod installation, supply 3.5 pounds of slow release nitrogen per 1,000 square feet. Slow release nitrogen shall be approximately 1/3 immediately available and 2/3 water insoluble, such as Urea formaldehyde or isobutyledene urea.

2.04 Lime:

- A. Lime shall be ground limestone containing at least 50 percent total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such a fineness that at least 50 percent will pass through a 100 mesh sieve and 98% will pass through a 20 mesh sieve.
- B. Supply 70 pounds per 1,000 square feet (1-1/2 tons per acre) on sandy and silty soils or 100 pounds per 1,000 square feet 2.3 per acre) on clay or clay loam soils.

2.05 Mulch:

A. Mulch for protection of permanent seeding shall conform to the following requirements:

- 1. Straw, clean, weed free, unrotted straw applied at a rate of not less than 70 pounds per 1,000 square feet (1 1/2 tons per acre) and shall be anchored with: Mulch anchoring tool (flat slopes), mulch nettings, cut back and emulsified asphalt (five gallons per 1,000 square feet), Curasol AH (five gallons per 1,000 square feet), Terra Tack II (20 gallons per 1,000 square feet), or Petroset (Manufacturer's recommendations).
- 2. Mulch nettings, jute or excelsior blanket.

Mulch utilized as temporary protection and stabilization shall conform to the above materials requirements. Rate of application shall be as directed by the Engineer. Stone mulch will be permitted at the option of the Engineer.

- 3. Wood chips, coverage to be 1-1/2 inches deep.

Use either straw or cellulose wood fiber for landscaping.

PART 3 – EXECUTION

3.01 Permanent Seeding:

- A. Harrow, disc, or otherwise loosen subsoil to a depth of four inches. Spread topsoil evenly over prepared subsoil to the following depths:
slopes 3:1 or steeper; two inches after compaction
slopes flatter than 3:1, four inches after compaction
- B. Remove objectionable material such as stones, 1-1/2 inches or larger, clods, brush, roots and trash from the top four inches of soil.
- C. Apply lime and fertilizer at the rates specified in "Materials", and thoroughly mix into the top six inches. Scarify the area and rake until the surface is leveled up to provide a maximum of two inches in variation, and the soil is friable and of uniform fine texture.
- D. Immediately prior to seeding apply additional fertilizer at the rates specified in "Materials", and work into the top two inches of the soil.
- E. Perform harrowing, discing, scarifying and raking on the contour of slopes steeper than 3:1.
- F. Moisten seedbed during periods of high temperatures and when directed by the Engineer.
- G. Apply seed mixture uniformly with mechanical power driven seeders, mechanical cyclone hand seeders or hydroseeding equipment. (Slurry for hydroseeder may contain seed and fertilizer only.)
- H. Disc seed one inch into soil in floodplain areas. Rake, roll or drag the seedbed in all other areas, if hydroseeder or cyclone seeder is used.
- I. Apply mulch at the rates specified in "Materials".
- J. Anchor mulch as specified.

3.02 Maintenance of Seeded Areas:

- A. Maintain seeded areas until accepted stand of grass is established. Water seeded areas as necessary to maintain adequate moisture in the upper four inches of soil and keep mowed to a height of two to three inches. Do not remove more than 1/3 of the grass leaf during initial mowing. Do not mow sod until it is firmly rooted.
- B. Inspect seeded areas for failures and necessary repairs. Provide replacements during the specified planting seasons. If stand of turf is inadequate as determined by the Engineer, overseed and fertilize using half of the rates originally applied, or resod.

- C. If stand is over 60 percent damaged, reestablish following original lime, fertilizer, seed or sod bed preparation and seeding or sodding recommendations.

DESCRIPTION OF BID ITEMS

CITY PARK TRAIN HUB LOCOMOTIVE
REFURBISHMENT & PAVILION REPLACEMENT

MSHA CONTRACT NO. WA061B51
F.A. PROJECT NO. AC-TAP-3(910)E
CITY CONTRACT NO. 20-CPTH-33
DRAWING SERIES NOS. 67-219

Note : The following Descriptions of individual Bid Items may refer the bidders and the contractors to specific sections of the latest version of the MDOT SHA "Standard Specifications for Construction and Materials" (hereinafter referred to as the specifications), for the latest descriptions of materials and construction methods to be used for site work.

These bid items also include the Architectural specifications prepared by *Proffitt & Associate Architects* to construct the pavilion and the cosmetic restoration details prepared by *Strasburg Railroad Company* to refurbish the historic locomotive.

MOBILIZATION

ITEM 4001:

I. DESCRIPTION:

This work consists of the construction preparatory operations, including the movement of personnel and equipment to the project site and for the establishment of the Contractor's offices, buildings, and other facilities necessary to begin work. This item shall also include establishing temporary utilities to the project to perform required work along with all associated fees and charges. Refer to the Specifications section 108.01.

II. MATERIALS:

Refer to the Specifications section 108.02

III. CONSTRUCTION:

Refer to the Specifications section 108.03

IV. MEASUREMENT AND PAYMENT:

- A. Mobilization will not be measured but will be paid at the **LUMP SUM** Contract unit price. The cost of all required insurance and bonds will be incidental to the Mobilization item.
- B. Payment of 50 percent of the Mobilization item will be made in the first monthly estimate after the Contractor has established the necessary facilities. The remaining 50 percent will be prorated based upon the number of working days remaining after the date of the first monthly estimate, and will be paid in equal amounts on each of the following monthly estimates. The payment will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work.
- C. Payment of the Mobilization item will not be made more than once, regardless of the fact that the Contractor may have, for any reason, shut the work down on the project or moved their equipment away from the project and then back again.

4001 Mobilization**LUMP SUM**

TEMPORARY ORANGE CONSTRUCTION FENCE

ITEM 4002:

I. DESCRIPTION:

This item includes furnishing and installing orange plastic fence, steel posts with wire ties, and concrete block post feet (on pavement) in designated areas as specified in the contract documents or where directed by the City Engineer. This item also includes the removal of fence and posts when no longer required. This fence is not a safety barrier., but is meant to keep pedestrians out of the work zone.

II. MATERIALS:

- A. Temporary Orange Construction Fence shall be high density polyethylene plastic oval mesh 4' in height. Fence shall have a tension wire continuous along the top edge.
- B. Fence posts shall be steel "T" post or "U" channel, 1.0 lb per linear foot minimum, 6' in length for non-pavement areas. Fence posts in pavement areas shall be round steel with a 1.90" outside diameter, 5' in length, and each shall have a concrete block foot that holds the posts firmly upright.

III. CONSTRUCTION:

In non-pavement areas plant fence posts firmly into the ground at least 12" and spaced no more than 10' apart. In areas of pavement set fence post firmly in concrete block feet. Fence fabric shall be stretched taut and secured to posts with tie wire at the top, middle, and bottom locations on each post.

IV. MEASUREMENT AND PAYMENT:

Measurement and payment of this item will be per **LINEAR FOOT** of complete in place fence as measured in the field paid for at the Contract unit price. Payment will be full compensation for furnishing, installing, moving, re-installing, maintaining, and removing fence, posts, and concrete block feet, along with all materials, labor, equipment, tools and incidentals necessary to complete the work.

4002 Temporary Orange Construction Fence**LINEAR FOOT**

**LOCOMOTIVE PAVILION
AND SITE WORK
WORK SCOPE "A"**

ITEM 4001-4050 :

I. DESCRIPTION:

This work consists of furnishing materials, labor and equipment to remove existing pavilion, construct the new pavilion complete and all related site work to protect Locomotive #202 at City Park, Hagerstown, Md. in accordance with the plans and specifications prepared by *Proffitt & Associates Architect* with assistance from *Strasburg Railroad Company* and other co-designers.

II. MATERIALS:

- A. All materials shall comply with the specifications included in this Invitation For Bids (IFB).

III. CONSTRUCTION:

- A. The contractor will be required to obtain a Building Permit through the City of Hagerstown Permits Office, fee will be waived. The contractor will need to be licensed in the City of Hagerstown through that office.
- B. Inspection phases of construction must be scheduled with the Permits office during construction for their approvals.
- C. All construction practices shall comply with applicable codes shown on the contract drawings, including but not limited to:
 - 1. International Building Code
 - 2. Maryland Fire Prevention Code and NFPA 101 Life Safety Code
 - 3. National Electric Code
 - 4. International Energy Conservation Code
 - 5. International Mechanical Code
 - 6. International Plumbing Code
 - 7. Maryland Accessibility Code and 2010 Americans with Disability Act Accessibility Guidelines (ADAAG)
- D. Contractor shall submit a schedule for completion of this project for review by the City Engineer.
- E. Installation of materials shall not begin until the material shop drawing has been approved by the City Engineer and Maryland State Highway Administration.
- F. Upon completion of the construction, the site shall be cleaned and all excess materials hauled away.

**LOCOMOTIVE PAVILION
AND SITE WORK**

- G. Before ordering any materials or beginning any work, the successful bidder will be required to meet with the City Engineer and Building Inspector to review the project.

IV. MEASUREMENT AND PAYMENT:

Measurement and Payment of these items will be in accordance with the bid as submitted by the contractor with unit costs.

Payment will be full compensation for constructing the pavilion in accordance with the drawings and specifications including all labor, materials, equipment, tools and incidentals necessary to complete the work as directed.

**LOCOMOTIVE #202 REFURBISHMENT
WORK SCOPE "B"**

ITEM 4501-4538:

I. DESCRIPTION:

This work consists of furnishing materials, labor and equipment necessary to complete a cosmetic restoration to historic locomotive engine #202 including, but not limited to; abatement of hazardous material; disassemble, catalog and clean components; prepare surfaces for repainting and apply finish coats; furnish and install missing components; preserve existing components; as specified in the contract documents or where directed by the City Engineer, including all work described in items A thru E in the attached Supplemental Summary of Work as prepared by *Strasburg Railroad Company*. Bidders for this refurbishment work must be approved by the City of Hagerstown to be qualified to perform all of the bid items in the 4500 series.

II. MATERIALS:

- A. This locomotive #202 is listed on the National register of Historic Places and is the cornerstone of the Hagerstown Railroad Museum.
- B. The locomotive has been evaluated by an expert from the Strasburg Rail Road Company in Pennsylvania and their report is included herein as the basis for the scope of work to be performed.
- C. All materials and workmanship must be completed to the satisfaction of the City Engineer
- D. Prior to start of restoration work, the contractor shall submit product material shop drawings for all materials to be used for approval by the City Engineer and design team. Submittals for all chemical products shall include MSDS information. No materials will be ordered until they have been approved for use on this project.

III. CONSTRUCTION:

- A. The contractor for this work must be performed by a contractor or subcontractor approved by the City of Hagerstown to complete the refurbishment of the locomotive.
- B. Prior to beginning the restoration work, the contractor shall submit a restoration work plan and schedule for review and approval by the City Engineer and Design team. This will include all major items and the time frame to complete each item as described in items A thru E in the attached Supplemental Summary of Work as prepared by *Strasburg Railroad Company*.
- C. Before ordering any materials or beginning any work, the successful bidder will be required to meet with the City Engineer to review the contractors plan.

LOCOMOTIVE #202 REFURBISHMENT

IV. MEASUREMENT AND PAYMENT:

- A. Measurement and payment of these items will be as described and as submitted by the contractor with unit prices. Payment will be full compensation for hazardous material abatement, surface preparation, furnishing and applying paint and all labor, materials, equipment, tools and incidentals necessary to complete the work.

**PRE-QUALIFICATION
ENVELOP 'A'
REQUIREMENTS**

Prequalification Requirements for the Refurbishment of
Western Maryland Railway Locomotive 202

REQUIREMENTS FOR THE "PRE-QUALIFICATION ENVELOPE "A"

The City of Hagerstown Maryland (hereafter referred to as "the City") will be accepting bids to undertake the construction of a new shelter and cosmetic refurbishment of Western Maryland Railway Locomotive 202 located in City Park. Due to the specialized nature of the restoration work on this historic railroad artifact, it has been determined that bidders must be pre-qualified to perform the refurbishment to the locomotive. Bidders may use one of the four pre-qualified contractors listed in the Summary of Work on page 144 to complete the refurbishment portion of this contract, and avoid completing this Pre-qualification package.

Restoration Contractors wishing to submit a bid as a subcontractor to a General (Prime) Contractor participating in the general construction bid process, but who are not one of the four listed as pre-qualified, must complete this prequalification package and demonstrate competency and experience for the following aspects of the locomotive refurbishment project:

1. Cleaning and general restoration
2. Fabrication/replacement of missing components
3. Painting.

This Pre-qualification package shall be submitted in envelope A. Note: Prequalification is not required for construction of the pavilion.

Pre-qualification for the locomotive refurbishment work must be approved by the City prior to opening the cost proposals.

On the day that bids are submitted, the bidder is required to submit two separate sealed envelopes:

Envelope A will be labeled "Pre-qualification for locomotive refurbishment" and will describe the bidders qualifications to complete the cosmetic refurbishment of the locomotive. If the bidders will use one the four (4) firms pre-approved by the City then this envelope will only need to include a letter stating which of the already pre-approved contractors they will use. However, if the bidder wishes to utilize a contractor who has not been pre-approved by the City, he must submit the qualification information requested in this section of the bid documents including, but not limited to, experience and competency on similar projects.

Envelope B will be labeled "Proposal for City Park Train Hub locomotive Refurbishment & Pavilion Replacement, Contract No. 20-CPTH-33" and will include the entire bid book with executed forms and cost proposal.

On Bid Opening day, the Pre-qualification envelope A will be opened first to identify which firm will perform the locomotive refurbishment for each bidder. If all bidders are using one of the four pre-approved contractors then the cost proposals in envelope B will also be opened that same day.

However, if any one of the bidder wishes to use a contractor other than the four pre-approved for the refurbishment, then all cost proposals in envelope B will be opened later. Over the next few days the City will review the information in the Pre-qualification envelope A and will determine which bidders are approved to complete the locomotive refurbishment. The second envelope with the cost proposal will be opened two weeks later, but only for those bidders who are qualified to complete the refurbishment. Proposal envelope B from bidders who are not approved based on the pre-qualification envelop will not be opened, but will be returned unopened to the bidder.

Prequalification Requirements for the Rehabilitation of
Western Maryland Railway Locomotive 202

REQUEST FOR QUALIFICATIONS

If the bidder wishes to utilize a contractor, other than one of the four contractors who have already been approved by the City, then the Pre-qualification envelope A must include all information in this section.

Nothing in this Request for Qualifications shall create any contractual relationship between the City of Hagerstown and respondents.

Responders are advised to respond to this RFQ fully and with forth-rightness at the time of response submission in envelope A. Responders are strongly cautioned NOT to contact elected officials or members of the evaluation committee regarding the selection process. Inappropriate efforts to lobby or influence individuals or organizations involved in this selection may result, at the City's sole discretion, in dismissal from further consideration. Responders may be required to clarify their responses by making individual presentations to the evaluation committee. Responses shall not be available for inspection by Responders until interviews, if scheduled, are completed. All responses become matter of public record and are available for inspection by the general public.

The City of Hagerstown will not assume any responsibility for any oral instruction, suggestion or interpretations.

PROPRIETARY INFORMATION

It shall be the responder's responsibility to duly note on their submittal if any information in their submitted response contains proprietary information and the context under which same should be handled by reviewers.

REQUIREMENTS FOR REQUEST FOR QUALIFICATIONS AND STATEMENTS OF QUALIFICATIONS

The purpose of this RFQ is to solicit information that will enable the City to determine which Restoration Contractors: (a) are qualified to successfully execute the Restoration Project; and (b) will be allowed to have their cost proposals opened.

This RFQ is intended to enable Restoration Contractors to demonstrate their qualifications to perform the Project, and to enable the City to evaluate those qualifications.

This project is partially funded by a State TAP Grant that includes federal funds. Thus, all labor pricing shall be reflective of current wage rates issued by the Dept. of Labor.

Note that no pricing is requested in envelope A.

All information required by the Request for Qualifications must be supplied to constitute a regular, complete submittal.

Prequalification Requirements for the Rehabilitation of
Western Maryland Railway Locomotive 202

SCOPE OF WORK

Attachments:

Section 01 11 05 Supplemental Summary of Work and Exhibits (specific to steam locomotive refurbishment only)

Historic Status

Steam Locomotive 202 is listed on the National Register of Historic Places and improvements are subject to review and approval by the Maryland Historic Trust.

Description of Work

The work is described in detail in Section 01 11 05 Supplemental Summary of Work and Exhibits but generally the work includes:

- Hazardous materials abatement.
- Cleaning and repairs.
- Replacement of missing components.
- Fabrication of replacement components.
- Repainting, lettering, and striping.

A detailed summary of work and drawings are included in the Invitation for Bids for applicants to review and better understand the scope of the project. Respondents are encouraged to review these documents and provide constructive comments or questions in order to increase the quality and/or completeness of the final bidding documents.

Required Bonding Capacity: Cost of project (To be carried by the Prime Contractor)

Insurance Requirements: Per City of Hagerstown Contract Requirements (To be carried by the Prime Contractor)

Worker's Compensation Insurance Requirements: Per City of Hagerstown Contract Requirements (To be carried by the Prime Contractor)

Comments and Questions Regarding Restoration Scope of Work:

After reviewing the scope of work documents contained in this RFQ, prospective bidders are encouraged to ask questions or submit written comments regarding the scope of work to help ensure the most complete and accurate bidding documents are issued for final bidding.

Prequalification Requirements for the Rehabilitation of
Western Maryland Railway Locomotive 202

NOT OBLIGATED FOR COSTS OF RESPONDING

The City of Hagerstown assumes no obligations, responsibilities, and liabilities, fiscal or otherwise, to reimburse all or part of the costs incurred or alleged to have been incurred by parties considering and/or responding to this RFQ. All of such costs shall be borne solely by each Contractor.

INDEMNIFICATION

Contractor shall indemnify, protect, defend, and hold harmless the City, the City's representatives, and their respective officers, directors, elected and appointed officers, officials, partners, employees, and agents ("City Indemnitees") from and against all liability, claims, demands, damages, losses, liens, causes of action, suits, judgments, fines, penalties, costs and expenses (including, without limitation, reasonable attorney fees and costs of defense), of any nature, kind, or description claimed, asserted, or prosecuted by any person or entity whomsoever, to the extent caused by: (i) the negligent, acts, errors, or omissions, by Contractor, its agents, partners, employees and sub-consultants, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, or (ii) the material breach of this Contract, except to the extent that any claims or damages are caused by the negligence, willful misconduct or material breach of this Contract by the City Indemnitees. This indemnity obligation shall survive the termination or expiration of this Contract, but shall not otherwise extend any applicable statute of limitations or statute of repose. This indemnity obligation shall be in addition to, and not in lieu of, any and all other liability which the Responder has or may have to any party indemnified hereunder or to third parties as a matter of law. Contractor's obligations hereunder shall not be limited by any insurance coverage required by this Contract.

DISCLAIMER

The City of Hagerstown may, in its sole and absolute discretion, accept or reject, in whole or in part, for any reason whatsoever any or all Qualifications; re-advertise this Request for Qualifications; postpone or cancel at any time this Request for Qualifications process; or waive any formalities of or irregularities in the Qualifications process. Qualifications that are not submitted on time and/or do not conform to the City of Hagerstown's requirements will not be considered. The selection by the City of Hagerstown shall be based on the qualifications, which is, in the sole opinion of the Selection Committee, to be in the best interest of The City of Hagerstown. The issuance of this Request for Qualifications constitutes only an invitation to make presentations to The City of Hagerstown. The City of Hagerstown reserves the right to determine, at its sole discretion, whether any aspect of the qualifications satisfies the criteria established in this Request for Qualifications. In all cases, The City of Hagerstown shall have no liability to any contractor for any costs or expense, incurred in connection with this Request for Qualifications or otherwise.

Prequalification Requirements for the Rehabilitation of
Western Maryland Railway Locomotive 202

REVIEW AND APPROVAL PROCESS

Review Criteria

The following criteria will be used to verify the respondent's qualifications:

1. Respondent's general experience in Steam Locomotive Restoration (30 pts.)
Static display is preferred but restoration of operation locomotives will also be considered.
2. Respondent's experience in painting, lettering, and striping (30 pts.)
3. Respondent's experience in restoration of Steam Locomotive cab interiors and boiler backhead (20 pts.)
4. Respondent's experience in fabrication of facsimile components (20 pts.)

100 total points available. In order to be approved for refurbishment of the locomotive on this project, a minimum score of 70 points is required.

Prequalification Requirements for the Rehabilitation of
Western Maryland Railway Locomotive 202

CONTRACTOR'S CERTIFICATION

I have carefully examined the Scope of Services Background, and any other documents accompanying or made a part of this RFQ.

I hereby propose to furnish the services specified in the Request. I agree that my response will remain firm for a period of up to 120 days in order to allow the City adequate time to evaluate the qualifications submitted.

I verify that all information contained in this response is truthful to the best of my knowledge and belief. I further certify that I am duly authorized to submit this response on behalf of the company as its act and deed and that the company shall be ready, willing and able to perform if short listed and pre-qualified.

I further certify, under oath, that this response is made without prior understanding, agreement, connection, discussion, or collusion with any other person, firm or corporation submitting a response for the same product or service: no officer, employee or agent of The City of Hagerstown or any other Contractor's is interested in said response, and that the undersigned executed this Contractor's Certification with full knowledge and understanding of the matters therein contained and was duly authorized to do so.

NAME OF BUSINESS

BY:

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

SIGNATURE

NAME & TITLE, TYPED OR PRINTED

Notary Public

MAILING ADDRESS

State of _____

CITY, STATE, ZIP CODE

My Commission Expires: _____

()

TELEPHONE NUMBER

Prequalification Requirements for the Rehabilitation of
Western Maryland Railway Locomotive 202

PREQUALIFICATION QUESTIONNAIRE

*****This questionnaire should be completed by the prime restoration contractor and any proposed subcontractors. *****

PART I. CONTACT INFORMATION

CONTACT INFORMATION:

Firm Name: _____ Check One: Corporation
(as it appears on license) Partnership
 Sole Proprietor

FEIN: _____

Contact Person: _____

Address: _____

Phone: _____ Fax: _____

If firm is a sole proprietor or partnership:

Owner(s) of Company _____

Contractor's License Number(s):

Prequalification Requirements for the Rehabilitation of
Western Maryland Railway Locomotive 202

PART II. ESSENTIAL REQUIREMENTS FOR QUALIFICATION

Restoration Contractor will be immediately disqualified if the answer to any of question 1 is "no."

1. At any time during the last five years, has your firm, or any of its Owner's or officer's been convicted of a crime involving obtaining, attempting to obtain or performing a government construction contract?
 Yes No

PART III. ORGANIZATION, HISTORY, ORGANIZATIONAL PERFORMANCE, COMPLIANCE WITH CIVIL AND CRIMINAL LAWS

A. Current Organization and Structure of the Business

For Restoration Firms That Are Corporations:

- 1a. Date incorporated: _____
 1b. Under the laws of what state: _____
 1c. Provide all the following information for each person who is either (a) an officer of the corporation (president, vice president, secretary, treasurer), or (b) the owner of at least ten per cent of the corporation's stock.

Name	Position	Years with Co.	% Ownership	Social Security #

- 1d. Identify every Restoration Firm that any person listed above has been associated with (as owner, general partner, limited partner or officer) at any time during the last five years.
NOTE: For this question, "owner" and "partner" refer to ownership of ten per cent or more of the business, or 10 per cent or more of its stock, if the business is a corporation.

Person's Name	Restoration Firm	Dates of Person's Participation with Firm

For Restoration Firms That Are Partnerships:

- 1a. Date of formation: _____

Prequalification Requirements for the Rehabilitation of
Western Maryland Railway Locomotive 202

- 1b. Under the laws of what state: _____
- 1c. Provide all the following information for each partner who owns 10 per cent or more of the firm.

Name	Position	Years with Co.	% Ownership	Social Security #

- 1d. Identify every Restoration Firm that any partner has been associated with (as owner, general partner, limited partner or officer) at any time during the last five years.

NOTE: For this question, "owner" and "partner" refer to ownership of ten per cent or more of the business, or ten per cent or more of its stock, if the business is a corporation.

Person's Name	Restoration Firm	Dates of Person's Participation with Company

For Restoration Firms That Are Sole Proprietorships:

- 1a. Date of commencement of business. _____
- 1b. Social security number of company owner. _____
- 1c. Identify every construction firm that the business owner has been associated with (as owner, general partner, limited partner or officer) at any time during the last five years.

NOTE: For this question, "owner" and "partner" refer to ownership of ten per cent or more of the business, or ten per cent or more of its stock, if the business is a corporation.

Person's Name	Restoration Firm	Dates of Person's Participation with Company

B. History of the Business and Organizational Performance

2. Has there been any change in ownership of the firm at any time during the last three years?
NOTE: A corporation whose shares are publicly traded is not required to answer this question.

Yes No

If "yes," explain on a separate signed page.

Prequalification Requirements for the Rehabilitation of
Western Maryland Railway Locomotive 202

3. Is the firm a subsidiary, parent, holding company or affiliate of another Restoration Firm?
NOTE: Include information about other firms if one firm owns 50 per cent or more of another, or if an owner, partner, or officer of your firm holds a similar position in another firm.
 Yes No
If "yes," explain on a separate signed page.
4. Are any corporate officers, partners or owners connected to any other Restoration Firms.
NOTE: Include information about other firms if an owner, partner, or officer of your firm holds a similar position in another firm.
 Yes No
If "yes," explain on a separate signed page.
5. State your firm's gross revenues for each of the last three years:

6. How many years has your organization performed Restoration work in Maryland under your present business name? _____ years
7. Is your firm currently the debtor in a bankruptcy case?
 Yes No
If "yes," please attach a copy of the bankruptcy petition, showing the case number, and the date on which the petition was filed.
8. Was your firm in bankruptcy at any time during the last five years? (This question refers only to a bankruptcy action that was not described in answer to question 7, above)
 Yes No
If "yes," please attach a copy of the bankruptcy petition, showing the case number and the date on which the petition was filed, and a copy of the Bankruptcy Court's discharge order, or of any other document that ended the case, if no discharge order was issued.

PART IV. RECENT/CURRENT RESTORATION PROJECTS

9. Offeror shall provide information about its five most recently *completed* steam locomotive rehabilitation/restoration projects. Names and references must be current and verifiable. Use separate sheets of paper that contain all of the following information:

Project Name: _____

Location: _____

Owner: _____

Prequalification Requirements for the Rehabilitation of
Western Maryland Railway Locomotive 202

Owner Contact (name, email, and current phone number):

Description of Project, Scope of Work Performed:

Original Contract Value: _____

Final Contract Value: _____

Value of Change Orders:

Owner initiated: _____

Other: _____

Original Scheduled Completion Date: _____

Time Extensions Granted (number of days): _____

Actual Date of Completion: _____

10. Offeror shall provide information about *five most recently completed steam locomotive restoration projects that are similar in magnitude, scope and complexity to the proposed project described herein*. Names and references must be current and verifiable. Use separate sheets of paper that contain all of the following information:

Project Name: _____

Location: _____

Owner: _____

Owner Contact (name, email, and current phone number):

Prequalification Requirements for the Rehabilitation of
Western Maryland Railway Locomotive 202

Firm's Project Manager's name(s):

Firm's Lead Mechanic(s) on Project:

Project Information:

Approximate Size (length): _____

Approximate Age: _____

Was this project under the purview of the Maryland Historic Trust? _____

Was this project under the purview of a local Historic Commission? _____

Brief Description of Project, Scope of Work Performed:

Original Contract Value: _____

Final Contract Value: _____

Value of Change Orders:

Owner initiated: _____

Other: _____

Original Scheduled Completion Date: _____

Time Extensions Granted (number of days): _____

Actual Date of Completion: _____

Prequalification Requirements for the Rehabilitation of
Western Maryland Railway Locomotive 202

PART V. STAFF AND RESOURCES

11. List lead mechanics on your staff with 5 or more years experience restoring steam locomotives. For each employee listed include mechanics name, their years with your firm and their years of experience restoring steam locomotives.
12. List lead mechanics on your staff with 5 or more years experience fabricating facsimile components. For each employee listed include mechanics name, their years with your firm and their years of experience fabricating facsimile components.
13. List lead mechanics on your staff with 5 or more years experience performing painting, lettering, and striping. For each employee listed include mechanics name, their years with your firm and their years of experience performing painting, lettering, and striping.

PART VI: DECLARATION/SIGNATURE

I, the undersigned, certify and declare that I have read all the foregoing answers to this prequalification questionnaire and know their contents. The matters stated in the questionnaire answers are true of my own knowledge and belief, except as to those matters stated on information and belief, and as to those matters I believe them to be true. I declare under penalty of perjury under the laws of the State of Maryland, that the foregoing is correct.

Dated:

(Name)

(Title)

(Signature)

(Date)

PROPOSAL FORMS

Bidders are advised that the following documents:

BIDDER'S AFFIDAVIT
CONTRACT AFFIDAVIT
BIDDER CERTIFICATION OF WORK CAPACITY
CERTIFICATION BY CONTRACTOR FOR E.E.O
SUBCONTRACTOR LISTING
ADDENDUM RECEIPT VERIFICATION FORM
PROPOSAL FORM PACKET

Shall all be completed, signed and submitted in sealed envelope
'B' clearly marked on the outside of the envelope as:

**“SEALED BID – CONTRACT 20-CPTH-33:
“City Park Train Hub Locomotive
Refurbishment & Pavilion Replacement”
MSHA CONTRACT NO. WA061B51 FAP PROJECT NO. AC-TAP-3(910)E**

To the City Clerk's office
located on the second floor of City Hall
#1 East Franklin Street, Hagerstown, MD 21740

By no later than the designated bid opening time and date.

ELECTRONIC BIDS WILL NOT BE ACCEPTED

**SUBMITTALS SHALL INCLUDE TWO SEPARATE ENVELOPES
AS DESCRIBED IN THESE DOCUMENTS**

BIDDER'S AFFIDAVIT
CITY PARK TRAIN HUB LOCOMOTIVE
REFURBISHMENT & PAVILION REPLACEMENT
CONTRACT 20-CPTH-33

1. AUTHORIZED REPRESENTATIVE:

I HEREBY DECLARE AND AFFIRM that I am the _____
(TITLE)

and duly authorized representative of the firm of _____
(NAME OF FIRM)

whose address is _____

and that I am duly authorized on behalf of said firm to make this Affidavit.

2. BRIBERY:

I FURTHER DECLARE AND AFFIRM that neither I, nor, to the best of my knowledge, information and belief, the above firm, nor any Officer, Director or Partner of the above firm, nor any employee of the above firm directly involved in obtaining contracts with the State of Maryland, or any County or other subdivision of the State of Maryland, has been convicted* of bribery, or conspiracy to bribe under the laws of any State or the Federal Government, except as herein expressly stated (if any):

3. NON-COLLUSION:

In connection with the firm's price proposal for the above-captioned contract, as submitted to THE CITY OF HAGERSTOWN, MARYLAND, I HEREBY DECLARE AND AFFIRM, to the best of my knowledge, information and belief that:

- a) Said proposal has been independently prepared without collusion by any Officer, Director, Partner, Employee or other representative of this firm, with any other proposer, or with any competitor; that
- b) No attempt has been or hereafter, will be made by any Officer, Director, Partner, Employee or other Representative of this firm to induce any other person, firm, or entity to submit or not submit a proposal; that
- c) Any unit or total price in this proposal has not been knowingly disclosed and will not be knowingly disclosed prior to its official opening, directly or indirectly, to any other bidder or to any competitor, and, that
- d) I have fully informed myself regarding the accuracy of the statements contained herein.

* As used herein the word "convicted" includes an accepted plea of nolo contendere.

BIDDER'S AFFIDAVIT (contd.)

I acknowledge that this Affidavit is to be furnished to the City of Hagerstown and may be distributed to Boards, Commissions, Administrations, Department Agencies of the City of Hagerstown, of the State of Maryland, and other States and the Federal Government. I further acknowledge that this Affidavit is subject to applicable laws of the State of Maryland, both criminal and civil, and this Affidavit is to be attached to and become a part of the contract when and if awarded and executed.

I FURTHER HEREBY DECLARE AND AFFIRM, that I and the firm I herein represent, acknowledge and agree that if any misrepresentation is herein made, the City of Hagerstown, Maryland, Washington County, in their discretion shall have the right to reject this proposal or terminate the contract, without liability, (as the case may be).

I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THE FOREGOING DOCUMENT ARE TRUE AND CORRECT.

(DATE) (AFFIANT)

(PRINTED OR TYPED NAME) (TITLE)

FOR _____
(COMPANY)

STATE OF _____ COUNTY OF _____

CITY OF _____

On this _____ day of _____ 2023, before me _____,

the above signed Officer, personally appeared known to me to be the person described in the foregoing Affidavit and acknowledged that he (she) executed the same in the capacity therein stated and for the purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

Notary Public

My commission expires _____ (Notary seal)

CONTRACT AFFIDAVIT

**CITY PARK TRAIN HUB LOCOMOTIVE
REFURBISHMENT & PAVILION REPLACEMENT
CONTRACT 20-CPTH-33**

(This document must be executed by the successful bidder)

In connection with the above-captioned Contract:

1. AUTHORIZED REPRESENTATIVE:

I HEREBY DECLARE AND AFFIRM that I am the _____
(Title)
and the duly authorized Representative of

(Name of Firm)
whose address is

2. CORPORATE REGISTRATION:
(Applicable to corporations only)

I FURTHER DECLARE AND AFFIRM that the firm named above is a domestic { } foreign { }
corporation registered in accordance with the Corporations and Associations Article, Annotated Code of
Maryland, and that it is in good standing and has filed all its annual reports together with its filing fees
with the Maryland State Department of Assessments and Taxation, AND THAT THE NAME AND
ADDRESS OF ITS RESIDENT AGENT FILED WITH THE MARYLAND DEPARTMENT OF
ASSESSMENTS AND TAXATION IS:

(NAME)

(ADDRESS)

3. CONTINGENT FEES:

I FURTHER DECLARE AND AFFIRM that neither I, nor to the best of my knowledge, information
and belief, the above firm, nor any of its other representatives I herein represent have:

- a) Employed, retained or otherwise engaged for a commission, percentage, brokerage, contingent
fee, or other consideration, any person, partnership, corporation, or other entity, other than a
bona fide employee or agent working solely for me or the above firm to solicit or secure this
Contract:
- b)

- c) Agreed, as an express or implied condition for obtaining this contract, to employ or retain the services of any person, partnership, corporation, or other entity, in connection with carrying out this contract; or,
- d) Paid, or agreed to pay, to any person, partnership, corporation, or other entity, other than a bona fide employee or agent working solely for me or the above firm, any fee, contribution, donation, or consideration of any kind for, or in connection with, procuring or carrying out this Contract, except as here expressly stated (if any):

4. BRIBERY:

I FURTHER DECLARE AND AFFIRM that neither I, nor, to the best of my knowledge, information and belief, the above firm, nor any Officer, Director or Partner of the above firm, nor any employee of the above firm directly involved in obtaining contracts with the City of Hagerstown or any county or other subdivision of the State of Maryland, has been convicted* of bribery, attempted bribery or conspiracy to bribe, nor has engaged in conduct, or by any acts or omissions, made admissions in writing or under oath during the course of an official investigation or other proceedings, which would constitute an offense or offenses of bribery, attempted bribery, or conspiracy to bribe under the laws of any state or the Federal Government; except as herein expressly stated (if any):

*As used herein the work "convicted" includes an accepted plea of nolo contendere.

5. TRUTH IN NEGOTIATION:
(Applicable to consultant contracts)

I FURTHER DECLARE AND AFFIRM that I am aware of, that the above firm will comply with and that this contract is subject to the provisions of Section 2-311 (a) and (b) of the Transportation Article of the Annotated code of Maryland (Chapter 13 of the Laws of Maryland) which require that any contract for architectural or engineering services costing over \$25,000 not be awarded unless the firm first executes a truth-in-negotiation certificate. It is understood that the terms and provisions hereof shall likewise apply to any future legislative changes made thereto. I further declare and affirm that wage rates and other factual unit costs supporting the compensation in the Contract are accurate, complete and current as of the time of contracting. Furthermore, I, on behalf of the above firm, acknowledge and agree that the original price of this contract and any additions to this contract will be adjusted to exclude any significant sums if the City of Hagerstown determines that the price was increased due to inaccurate, incomplete or non-current wage rates or other actual unit costs; said adjustments to be made within one year after the end of the contract.

6. TRUTH IN NEGOTIATION:
(Applicable to construction contracts)

I FURTHER CERTIFY that I am aware of, that the above firm will comply with and that this Contract is subject to the provisions of Paragraph 3 of Section 7 of Article 78A of the Annotated Code of Maryland (Chapter 451 of the Laws of Maryland) which requires that a negotiated or change order contract for construction in excess of \$10,000 may not be awarded unless the contractor first executes a truth in negotiation certificate. It is agreed that the terms hereof shall likewise apply to any future legislative changes made thereto.

I FURTHER DECLARE AND AFFIRM that wage rates and other factual unit costs supporting the compensation in this contract are accurate, complete and current as of the time of contracting. Furthermore, I on behalf of the above firm, acknowledge and agree that the original price of this Contract and any additions to this Contract will be adjusted to exclude any significant sums if the City of Hagerstown determines that the price was increased due to inaccurate, incomplete or non-current wage rates or other actual unit costs; said adjustments to be made within one year after the end of the contract.

7. MANDATORY DISCLOSURE OF OWNERSHIP:

I FURTHER DECLARE AND AFFIRM that I am aware of and that the above firm will comply with the provisions of Section 13-221 of the State Finance and Procurement Article of the Annotated Code of Maryland which requires that every business that enters into contracts, leases, or other agreements with the State of Maryland or its agencies during a calendar year under which the business is to receive in the aggregate \$200,000 or more, shall within 30 days of the time when the aggregate value of these contracts, leases or other agreements reaches \$200,000, file with the Maryland Secretary of State certain specified information to include disclosure of beneficial ownership of the business.

I ACKNOWLEDGE that this Affidavit is to be furnished to the City of Hagerstown and may be distributed to Boards, Commissions, Administrations, Departments and Agencies of (1) the City, (2) Counties or other subdivisions of the City, (3) other States, and (4) the Federal Government. I further acknowledge that this Affidavit is subject to applicable laws of the United States and the State of Maryland, both criminal and civil, and that nothing in this Affidavit or the Contract shall be construed to supersede, amend, modify or waive, on behalf of the City of Hagerstown and any other office or agency having jurisdiction, the exercise of any statutory right or remedy conferred by the Constitution and laws of Maryland in respect to any misrepresentation by the above firm in respect to (1) this Affidavit, (2) the Contract, and (3) other affidavits comprising part of the proposal documents associated with the contract.

I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THE FOREGOING DOCUMENT ARE TRUE AND CORRECT, AND THAT I AM AUTHORIZED, ON BEHALF OF THE ABOVE FIRM, TO MAKE THIS AFFIDAVIT.

(DATE)

NAME _____
(TITLE)

State of _____

County of _____

City of _____

On this ____ day of _____, 2023, before me, _____,

the above signed Officer, personally appeared, known to me to be the person described in the foregoing Affidavit and acknowledged that he (she) executed the same in the capacity therein stated and for the purposes therein contained.

In Witness Whereof, I hereunto set my hand and official seal.

(NOTARY PUBLIC)

My commission expires _____ NOTARY SEAL

BIDDER CERTIFICATION OF WORK CAPACITY
CITY PARK TRAIN HUB LOCOMOTIVE
REFURBISHMENT & PAVILION REPLACEMENT
CONTRACT 20-CPTH-33

We have the equipment, labor, supervision and financial capacity to perform this Contract either with our organization or with subcontractors, as provided in Section 8, GP-8.01 and TC-5.03 of the Maryland State Highway Standard Specifications for Construction and Specifications.

We shall supply any additional information as may be required by the City Engineer.

(CONTRACTOR)

BY: _____
(SIGNATURE)

(TITLE)

Sworn to before me this _____ day of _____, 2023.

(NOTARY PUBLIC)

My commission expires _____ NOTARY SEAL

**CERTIFICATION BY CONTRACTOR OR SUBCONTRACTOR
REGARDING EQUAL EMPLOYMENT OPPORTUNITY**

CONTRACT 20-CPTH-33

Name of Contractor _____

IRS EMPLOYER IDENTIFICATION NO.

INSTRUCTIONS

This certification is required pursuant to Executive Order 11246, Part II, Section 203 (b), 30 F.R. 12319-25). Any bidder or prospective contractor, or any of their proposed subcontractors, shall state as an initial part of the bid or negotiations of the contract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; and, if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicated that the prime or subcontractor has not filed a compliance report due under applicable instruction, such contractor shall be required to submit a compliance report.

CONTRACTOR'S CERTIFICATION

Contractor's Name: _____

Address: _____

1. Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause. Yes No
2. Compliance Reports were required to be filed in connection with such contract or subcontract. Yes No

If yes, state what reports were filed and with what agency.

3. Bidder has filed all compliance reports due under applicable instructions, including SF-100. Yes No
4. If answer to Item 3 is NO, please explain in detail on reverse side of this certification.

Certification – The information above is true and complete to the best of my knowledge and belief. (A willfully false statement is punishable by law-U.S. Code, Title 18, Section 1001.)

Name and title of signer (Please type)

Signature

Date

CONTRACT PROVISIONS
ADDENDUM RECEIPT VERIFICATION FORM

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
1 of 1

ADDENDUM RECEIPT VERIFICATION FORM

COMAR 21.05.02.08 requires that all addenda issued be acknowledged, therefore before bids may be considered responsive, the Maryland State Highway Administration must receive verification that all bids considered the contents of all Contract Documents and all Addenda issued, as applicable, for this project.

I do solemnly declare and affirm under the penalties of perjury that this bid was prepared by this firm, including all subcontractors and suppliers, with consideration of all the information contained in the as advertised Contract Documents and all Addenda issued, as applicable.

NO ADDENDA WERE ISSUED

ADDENDUM NO. 1 to _____

(Must be filled in by the bidder – if only one Addendum enter 1 in the blank space provided)

Date: _____

By: _____

(print name of Authorized Representative)

(signature of Authorized Representative)

Bidders are advised that the following:

ADDENDUM RECEIPT
VERIFICATION FORM

and the

PROPOSAL FORM PACKET

shall be completed,

and submitted in a sealed envelope

clearly marked

“SEALED BID”

and the

CONTRACT NUMBER

on the outside of the envelope

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E

1 of 44

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
PROPOSAL FORM PACKET — FEDERAL

Proposal by _____
Name

Address (Street and/or P.O. Box)

City State Zip

() ()
A.C. Phone No. A.C. Fax No.

to furnish and deliver all materials and to do and perform all work, in conformance with the Standard Specifications, revisions thereto, General Provisions and the Special Provisions in this contract to Refurbish Historic Locomotive #202 and replace Pavilion located in, Washington County, Maryland, for which Invitation for Bids will be received until **11:00 A.M. on Tuesday, November 7, 2023**, this work being situated as follows:

At 730 City Park Drive in City Park, Hagerstown, Maryland and includes cosmetic refurbishment of Historic Train Locomotive #202, removal of existing pavilion and construct new pavilion to protect the locomotive and miscellaneous site work.

To the City of Hagerstown
City Clerk's Office (2nd floor City Hall)
1 East Franklin Street
Hagerstown, Maryland 21740

In response to the advertisement by the Administration, inviting bids for the work in conformance with the Contract Documents, now on file in the office of the Administration. I/We hereby certify that I/we am/are the only person, or persons, interested in this bid proposal as principals, and that an examination has been made of the work site, the Specifications, the Plans, and Invitation for Bids, including the Special Provisions contained herein. I/We propose to furnish all necessary machinery, equipment, tools, labor and other means of construction, and to furnish all materials required to complete the project at the following unit price or lump sum price.

BASE BID PROPOSAL

City Park Train Hub Locomotive Refurbishment & Pavilion Replacement
City CONTRACT NO. 20-CPTH-33

2A of 44

ITEM NO.	APPROXIMATE QUANTITY	UNITS	DESCRIPTION OF ITEMS	UNIT PRICE (DOLLARS & CENTS)	EXTENDED AMOUNT (DOLLARS & CENTS)
4001	8	Month	Mobilization		
4002	600	L.F.	Temporary Orange Construction Fence		
4003	8	Month	Dumpster		
4004	8	Month	Portable toilet		
4005	1	L.S.	Remove 1 bay of existing pavilion structure		
4006	1	L.S.	Remove and salvage railroad signal equipment		
4007	310	L.F.	Remove existing asphalt sidewalk		
4008	4	EA.	Remove existing trees		
4009	1	L.S.	Remove existing storm drain pipe		
4010	1	L.S.	Remove and salvage track at new pavilion		
4011	1	L.S.	Reinstall track with new ballasts, ties and painted		
4012	1	L.S.	Install sediment control devices		
4013	50	C.Y.	Earthwork excavation		
4014	175	C.Y.	Earthwork fill - off site material required		
4015	75	L.F.	Furnish and install new culvert		
4016	1	L.S.	Fine grade and topsoil all disturbed areas		
4017	1	L.S.	Seeding		
4018	2	L.S.	Install submerged gravel wetland structures including gabion weir, precast concrete inlets, PVC liner, trashrack and underdrains.		
4019	1	L.S.	Landscaping		

365

BASE BID PROPOSAL

City Park Train Hub Locomotive Refurbishment & Pavilion Replacement
City CONTRACT NO. 20-CPH-33

2B of 44

ITEM NO.	APPROXIMATE QUANTITY	UNITS	DESCRIPTION OF ITEMS	UNIT PRICE (DOLLARS & CENTS)	EXTENDED AMOUNT (DOLLARS & CENTS)
4020	275	L.F.	Install underground rain leaders		
4021	12	EA.	Concrete footings		
4022	3,500	S.F.	Concrete slab with stone base and turned down edge		
4023	1,040	S.F.	Sidewalk with stone base, curbs and step		
4024	2	EA.	Detectable warning pads at concrete ramps		
4025	12	L.F.	Steel columns with bent plate saddles		
4026	1	L.S.	Splice plates and brackets		
4027	12	EA.	Painted steel stairs with diamond plate treads		
4028	100	L.F.	Painted steel guardrails and handrails		
4029	18	L.F.	Galvanized steel removable handrails		
4030	6	EA.	Timber trusses		
4031	30	EA.	Timber beams		
4032	42	EA.	Wood rafters		
4033	3,880	S.F.	T&G wood roof deck		
4034	48	EA.	Custom wood brackets		
4035	480	L.F.	Wood fascis and trim		
4036	360	L.F.	Bird spikes		
4037	1	L.S.	Fasteneres for wood construction		
4038	3,880	S.F.	Standing seam metal roof		
4039	1	L.S.	Flashing and trim		

366

BASE BID PROPOSAL

City Park Train Hub Locomotive Refurbishment & Pavilion Replacement
City CONTRACT NO. 20-CPH-33

2C of 44

ITEM NO.	APPROXIMATE QUANTITY	UNITS	DESCRIPTION OF ITEMS	UNIT PRICE (DOLLARS & CENTS)	EXTENDED AMOUNT (DOLLARS & CENTS)
4040	220	EA.	Snow guards and roof accessories		
4041	220	L.F.	Gutters and downspouts		
4042	480	S.F.	Clerestory windows		
4043	1	L.S.	Painting of steel and wood structure		
4044	1	L.S.	Clear coat finish of wood structure		
4045	1	L.S.	Signage		
4046	2	EA.	Fire extinguishers		
4047	N/A		Relocate existing pole light and power line	By City Light	No cost to contractor
4048	32	EA.	Building lighting and controls		
4049	6	EA.	Power distribution and devices		
4050	1	L.S.	Subpanel to new pavilion		
4501	1	L.S.	Hazardous materials abatement - remove insulation and wrappings		
4502	1	L.S.	Disassembly, classification and storage of engine components		
4503	1	L.S.	Degrease all surfaces identified to be repainted		
4504	1	L.S.	Prepare metallic surfaces for repainting		
4505	1	L.S.	Prepare wood surfaces for repainting		
4506	1	L.S.	Smokebox front grab iron with 3 stanchions and 2 end caps - Custom Fabrication and castings with powder coating		

367

BASE BID PROPOSAL

City Park Train Hub Locomotive Refurbishment & Pavilion Replacement
City CONTRACT NO. 20-CPH-33

2D of 44

ITEM NO.	APPROXIMATE QUANTITY	UNITS	DESCRIPTION OF ITEMS	UNIT PRICE (DOLLARS & CENTS)	EXTENDED AMOUNT (DOLLARS & CENTS)
4507	1	L.S.	Smokebox front grab iron with 6 stanchions and 2 end caps - Custom Fabrication and castings with powder coating		
4508	1	L.S.	Headlight and classification light conduits - Custom Fabrication with conventional painting		
4509	1	L.S.	Boiler top check valve - New cast aluminum facsimile		
4510	2	EA.	Feedwater piping - Custom Fabrication and conventional painting		
4511	4	EA.	Sand pipes - Custom Fabrication and conventional painting		
4512	1	L.S.	Boiler Jacket and spacers (above running boards) - Custom sheet metal fabrication with conventional		
4513	1	L.S.	Right pilot wheel fender - Custom fabrication with conventional painting		
4514	1	L.S.	Builder's plate - Surplus casting		
4515	13	EA.	Backhead valves and handles - Surplus casting		
4516	1	L.S.	Gauge cocks and gauge cock funnels - Surplus casting		
4517	1	L.S.	Steam head reducing valve - Surplus casting		
4518	1	L.S.	Boiler pressure gauge - Custom photo lamination on steel plate		
4519	1	L.S.	Boiler water level glass - Custom photo lamination on steel plate		
4520	1	L.S.	Oil can tray - Custom sheet metal fabrication with conventional painting		

368

BASE BID PROPOSAL

City Park Train Hub Locomotive Refurbishment & Pavilion Replacement
City CONTRACT NO. 20-CPTH-33

2E of 44

ITEM NO.	APPROXIMATE QUANTITY	UNITS	DESCRIPTION OF ITEMS	UNIT PRICE (DOLLARS & CENTS)	EXTENDED AMOUNT (DOLLARS & CENTS)
4521	2	EA.	Engineer's and Fireman's seat - Custom wood and upholstery		
4522	1	L.S.	Boiler grab iron with 1 stanchion and 1 end cap - Custom fabrication with conventional painting		
4523	1	L.S.	Engine numbers - Custom resin castings		
4524	1	L.S.	Brass stars - Custom resin castings		
4525	1	L.S.	Classification light - Reinstall original item		
4526	1	L.S.	Compressed Air cooling coil - Reinstall original item		
4527	1	L.S.	Brass bell - Retain installed item and repaint		
4528	1	L.S.	Brass whistle - Surplus item		
4529	1	L.S.	Steam generators - Reinstall original item		
4530	1	L.S.	Air brake gauge - Custom photo lamination on steel plate		
4531	1	L.S.	Train air brake gauge - Custom photo lamination on steel plate		
4532	1	L.S.	Engine air brake gauge - Custom photo lamination on steel plate		
4533	1	L.S.	Boiler pressure gauge - Custom photo lamination on steel plate		
4534	1	L.S.	Air brake gauge - Custom photo lamination on steel plate		
4535	12	EA.	Smokebox door dogs - Reinstall original item		
4536	2	EA.	Electrify, replace headlight lens and number boards - Lexan with silk screen numerals		

369

BASE BID PROPOSAL

City Park Train Hub Locomotive Refurbishment & Pavilion Replacement
City CONTRACT NO. 20-CPTH-33

ZF of 44

ITEM NO.	APPROXIMATE QUANTITY	UNITS	DESCRIPTION OF ITEMS	UNIT PRICE (DOLLARS & CENTS)	EXTENDED AMOUNT (DOLLARS & CENTS)
4537	1	L.S.	Refinish side rods and valve gear - Recondition and repaint with one part polyurethane paint		
4538	1	L.S.	Repaint locomotive, cab and tender - includes stenciling and striping		
			Alternate A - Full Boiler Jacket		
			Alternate B - Updrade Paint to High Gloss Polyurethane		
			Alternate C - Powder Coat Running Gear		

TOTAL BASE BID (Items 4001 - 4538)

AT

WRITTEN WORDS

FIGURES

370

SUMMARY SHEET – CITY PARK TRAIN HUB LOCOMOTIVE REFURBISHMENT & PAVILION REPLACEMENT
CONTRACT NO. 20-CPTH-33

26 of 44

DESCRIPTION OF ITEMS		AMOUNTS (FIGURES)
BASE BID (Total of Items 4001-4538)		
AT _____	WRITTEN WORDS	_____ FIGURES
ALTERNATE "A" BID: (Full boiler jacket)		
AT _____	WRITTEN WORDS	_____ FIGURES
ALTERNATE "B" BID (Upgrade Paint to High Gloss Polyurethane)		
AT _____	WRITTEN WORDS	_____ FIGURES
ALTERNATE "C" BID (Powder Coat Running Gear)		
AT _____	WRITTEN WORDS	_____ FIGURES
GRAND TOTAL OPTION SUMS: (To be calculated by bidder and submitted with bid)		Show following sums in Figures.
1. TOTAL BASE BID ----->		_____ _____
2. BASE BID + ALTERNATE "A" BID ----->		_____ _____
3. BASE BID + ALTERNATE "B" BID:----->		_____ _____
4. BASE BID + ALTERNATE "C" BID ----->		_____ _____
5. BASE BID + ALTERNATE "A" + ALTERNATE "B" + ALTERNATE "C" ----->		_____ _____

371

Note : The successful bidder will be selected at the discretion of the Mayor & Council for the City of Hagerstown, who are not required to accept either Alternate bids. They may accept one alternate, two alternates or neither alternate. The Basis of Award will be the lowest accepted and responsible bid that includes the sum of the Base Bid and any accepted Alternates at the discretion of Mayor & Council.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET - FEDERAL

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP NO. AC-TAP-3(910)E
3 of 44

GENERAL MATERIAL REQUIREMENTS

CONVICT PRODUCED MATERIALS

Section 1019 of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) clarifies that materials produced by convict labor after July 1, 1991 may not be used for Federal-aid highway construction projects unless produced at a prison facility producing convict made materials for Federal-aid construction projects prior to July 1, 1987.

CONTRACT PROVISION BUY AMERICA

This section only applies to projects partially or totally financed with Federal funds.

The prime contractor or its subcontractors shall comply with Infrastructure Investment and Jobs Act (IIJA) Title IX – Build America, Buy America (BABA) Act. Pub. L. No. 117-58, §§ 70901-52.

Materials used on this contract and permanently incorporated into the project, including all materials/items supplied, shall comply with the Buy America preference requirements including:

- (A) All iron and steel used in the project are produced in the United States.

This means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

- (B) All manufactured products used in the project are produced in the United States.

This means the manufactured product was manufactured in the United States, and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation.

In accordance with 23 CFR Part 635.410, FHWA currently has a general applicability waiver on manufactured products that do not contain steel and iron components. Therefore, this 55 percent standard for manufactured products that do not contain steel and iron components, does not apply on projects funded under Title 23 U.S.C.

- (C) All construction materials are manufactured in the United States.

This means that all manufacturing processes for the construction material occurred in the United States. Common construction materials used in public works infrastructure projects are or consist primarily of non-ferrous metals, plastic and polymer-based

CONTRACT PROVISIONS
PROPOSAL FORM PACKET - FEDERAL

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP NO. AC-TAP-3(910)E
4 of 44

products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables), glass (including optic glass), lumber, and drywall.

The term 'construction materials' shall not include cement and cementitious materials, aggregates such as stone, sand, or gravel, or aggregate binding agents (including asphalt cement) or additives; or any material composed of or derived from these items.

Items that consist of two or more of the listed materials that have been combined together through a manufacturing process, and items that include at least one of the listed construction materials combined with a material that is not listed through a manufacturing process, shall be treated as manufactured products, rather than as construction materials.

Furnish steel or iron construction materials, including coating, for permanently incorporated work according to 23 CFR 635.410 and as follows:

- (a) All manufacturing processes of steel or iron materials in a product, including coating; and any subsequent process that alters the steel or iron material's physical form or shape, changes its chemical composition, or the final finish; are to occur within the United States (One of the 50 States, the District of Columbia, Puerto Rico, or in territories and possessions of the U.S.). Manufacturing begins with the initial melting and mixing, and continues through the coating stage. The processes include rolling, extruding, machining, bending, grinding, drilling, welding, and coating. The action of applying a coating to steel or iron is deemed a manufacturing process. Coating includes epoxy coating, galvanizing, aluminizing, painting, and any other coating that protects or enhances the value of steel or iron. Any process from the original reduction from ore to the finished product constitutes a manufacturing process for iron.
- (b) The following are considered to be steel manufacturing processes:
 - (1) Production of steel by any of the following processes:
 - (a) Open hearth furnace.
 - (b) Basic oxygen.
 - (c) Electric furnace.
 - (d) Direct reduction.
 - (2) Rolling, heat treating, and any other similar processing.
 - (3) Fabrication of the products:
 - (a) Spinning wire into cable or strand.
 - (b) Corrugating and rolling into culverts.
 - (c) Shop fabrication.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET - FEDERAL

- (c) The manufacturing process for a steel/iron product is considered complete when the product is ready for use as an item (e.g., fencing, posts, girders, pipe, manhole cover, etc.) or could be incorporated as a component of a more complex product through a further manufacturing process (e.g., prestressed concrete girders, reinforced concrete pipe, traffic control devices, bearing pads, etc.). A product containing both steel and/or iron components, may be assembled outside the United States and meet Buy America requirements if the constituent steel and iron components (in excess of the minimal amounts permitted) were manufactured domestically and are not modified at the assembly location prior to final assembly.
- (d) If domestically produced steel billets or iron ingots are exported outside of the U.S., as defined above, for any manufacturing process then the resulting product does not conform to the Buy America requirements. Additionally, products manufactured domestically from foreign source steel billets or iron ingots do not conform to the Buy America requirements because the initial melting and mixing of alloys to create the material occurred in a foreign country.
- (e) Due to a nationwide waiver, Buy America does not apply to raw materials (iron ore and alloys), scrap (recycled steel or iron), and pig iron or processed, pelletized, and reduced iron ore.
- (f) For the Buy America provisions to apply, the steel or iron product must be permanently incorporated into the project. If an item is rendered as a “donated material” in accordance with 23 U.S.C. 323 – Donations and Credits, it will have to comply with Buy America requirements. While States and local governments may receive a credit for donated material, this material must generally comply with Buy America requirements. Buy America does not apply to temporary steel items, e.g., temporary sheet piling, temporary bridges, steel scaffolding and falsework. Further, Buy America does not apply to materials which remain in place at the contractor convenience.
- (g) Certifications which document that steel and iron have been manufactured and that coatings for iron or steel have been applied in the United States shall be provided to the Contractor by the manufacturer. The Contractor shall provide the required certifications to the Engineer prior to such items being incorporated into the permanent work. Certifications shall extend to materials utilized in manufactured and fabricated products purchased by the Contractor.
- (h) Products manufactured of foreign steel or iron materials may be used, provided the cost of such products as they are delivered to the project does not exceed 0.1% of the total contract amount, or \$2,500, whichever is greater. If a supplier or fabricator wishes to use a partial fabrication process where domestic and foreign source components are assembled at a domestic location, the “as delivered cost” of the foreign components should include any transportation, assembly and testing costs required to install them in the final product.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET - FEDERAL

**ALTERNATE BID
USING FOREIGN PRODUCTS**

Are you using Foreign Products? Yes No

When a bidder elects to utilize Foreign Products on one or more items, the following summation indicating the Total Bid using Foreign Products must be completed in addition to the individual item bid tabulations.

The following instructions are given to the bidder in completing the Total Bid summation using Foreign Products:

- 1 - The "Bid Total" for the initial bid using Domestic Products shall be shown on line (1).
- 2 - The subtotal for Item Amounts using Domestic Products shall be shown on line (2), for those items which the Contractor elects to use Foreign Products.
- 3 - The subtotal for Item Amounts using Foreign Products shall be shown on line (3).
- 4 - The total Bid, utilizing Foreign Products shall be shown on line (4). The value is obtained by subtracting subtotal (2) from the Total Bid (1) and then adding subtotal (3).

Bid Total for Bid 1 using Domestic items	Line (1)_____
Total of Domestic Items	Line (2) - _____
Total of Foreign Items	Line (3) + _____
Bid Total using Foreign Items	Line (4)_____

PROPOSAL FORM PACKET — FEDERAL

ALTERNATE BID - USING FOREIGN PRODUCTS
 BIDDER'S INSTRUCTIONS

When the bidder elects to submit a bid for one or more items using Foreign Products, the following form must be used. For each item that Foreign Products are contemplated, the appropriate "Item Numbers", "Approximate Quantities", "Description of Items", "Unit Price or Lump Sum Price", "Item Amount Domestic" and "Item Amount Foreign" shall be tabulated below as specified in the initial bid. The bidder shall indicate the unit price in dollars and cents and show the total cost of the item for each item that utilizes Foreign Products. When all items utilizing Foreign Products have been listed, the bidder shall indicate on Page 6 of 45 the subtotals of the Item Amounts for Domestic Products in Line (2) and for Foreign Products in Line (3).

376

Item Nos.	Approximate Quantities	Description of Items	Unit Price or Lump Sum Dollars.Cts.	Items Amount Domestic Dollars.Cts.	Items Amount Foreign Dollars.Cts.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
8 of 44

NOTICE

All bidders shall complete and submit with their bid the Bid/Proposal Affidavit below.

BID/PROPOSAL AFFIDAVIT

A. AUTHORIZED REPRESENTATIVE AND AFFIANT

I HEREBY AFFIRM THAT:

I, _____ (print name), possess the legal authority to make this Affidavit.

B. CERTIFICATION REGARDING COMMERCIAL NONDISCRIMINATION

The undersigned bidder hereby certifies and agrees that the following information is correct: In preparing its bid on this project, the bidder has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not engaged in “discrimination” as defined in §19-103 of the State Finance and Procurement Article of the Annotated Code of Maryland. “Discrimination” means any disadvantage, difference, distinction, or preference in the solicitation, selection, hiring, or commercial treatment of a vendor, subcontractor, or commercial customer on the basis of race, color, religion, ancestry, or national origin, sex, age, marital status, sexual orientation, sexual identity, genetic information or an individual’s refusal to submit to a genetic test or make available the results of a genetic test, disability, or any otherwise unlawful use of characteristics regarding the vendor’s, supplier’s, or commercial customer’s employees or owners. “Discrimination” also includes retaliating against any person or other entity for reporting any incident of “discrimination”. Without limiting any other provision of the solicitation on this project, it is understood that, if the certification is false, such false certification constitutes grounds for the State to reject the bid submitted by the bidder on this project, and terminate any contract awarded based on the bid. As part of its bid or proposal, the bidder herewith submits a list of all instances within the past 4 years where there has been a final adjudicated determination in a legal or administrative proceeding in the State of Maryland that the bidder discriminated against subcontractors, vendors, suppliers, or commercial customers, and a description of the status or resolution of that determination, including any remedial action taken. Bidder agrees to comply in all respects with the State’s Commercial Nondiscrimination Policy as described under Title 19 of the State Finance and Procurement Article of the Annotated Code of Maryland.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

C. AFFIRMATION REGARDING BRIBERY CONVICTIONS

I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the above business (as is defined in Section 16-101(b) of the State Finance and Procurement Article of the Annotated Code of Maryland), or any of its officers, directors, partners, controlling stockholders, or any of its employees directly involved in the business's contracting activities, including obtaining or performing contracts with public bodies, has been convicted of, or has had probation before judgment imposed pursuant to Criminal Procedure Article, §6-220, Annotated Code of Maryland, or has pleaded nolo contendere to a charge of, bribery, attempted bribery, or conspiracy to bribe in violation of Maryland law, or of the law of any other state or federal law, except as follows (indicate the reasons why the affirmation cannot be given and list any conviction, plea, or imposition of probation before judgment with the date, court, official or administrative body, the sentence or disposition, the name(s) of person(s) involved, and their current positions and responsibilities with the business):

If required, please attach the required document for affirmation regarding bribery convictions:

D. AFFIRMATION REGARDING OTHER CONVICTIONS

I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the above business, or any of its officers, directors, partners, controlling stockholders, or any of its employees directly involved in the business's contracting activities including obtaining or performing contracts with public bodies, has:

- (1) Been convicted under state or federal statute of:
 - (a) a criminal offense incident to obtaining, attempting to obtain, or performing a public or private contract; or
 - (b) fraud, embezzlement, theft, forgery, falsification or destruction of records, or receiving stolen property;
- (2) Been convicted of any criminal violation of a state or federal antitrust statute;
- (3) Been convicted under the provisions of Title 18 of the United States Code for violation of the Racketeer Influenced and Corrupt Organization Act, 18 U.S.C. §1961, et seq., or the Mail

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

Fraud Act, 18 U.S.C. §1341, et seq., for acts in connection with the submission of bids or proposals for a public or private contract;

- (4) Been convicted of a violation of the State Minority Business Enterprise Law, Section 14-308 of the State Finance and Procurement Article of the Annotated Code of Maryland;
- (5) Been convicted of a violation of the Section 11-205.1 of the State Finance and Procurement Article of the Annotated Code of Maryland;
- (6) Been convicted of conspiracy to commit any act or omission that would constitute grounds for conviction or liability under any law or statute described in subsections (1) through (5) above;
- (7) Been found civilly liable under a state or federal antitrust statute for acts or omissions in connection with the submission of bids or proposals for a public or private contract;
- (8) Been found in a final adjudicated decision to have violated the Commercial Nondiscrimination Policy under Title 19 of the State Finance and Procurement Article of the Annotated Code of Maryland with regard to a public or private contract;
- (9) Been convicted of a violation of one or more of the following provisions of the Internal Revenue Code:
 - (a) §7201, Attempt to Evade or Defeat Tax;
 - (b) §7203, Willful Failure to File Return, Supply Information, or Pay Tax,
 - (c) §7205, Fraudulent Withholding Exemption Certificate or Failure to Supply Information,
 - (d) §7206, Fraud and False Statements, or
 - (e) §7207 Fraudulent Returns, Statements, or Other Documents;
- (10) Been convicted of a violation of 18 U.S.C. §286 Conspiracy to Defraud the Government with Respect to Claims, 18 U.S.C. §287, False, Fictitious, or Fraudulent Claims, or 18 U.S.C. §371, Conspiracy to Defraud the United States;
- (11) Been convicted of a violation of the Tax-General Article, Title 13, Subtitle 7 or Subtitle 10, Annotated Code of Maryland;
- (12) Been found to have willfully or knowingly violated State Prevailing Wage Laws as provided in the State Finance and Procurement Article, Title 17, Subtitle 2, Annotated Code of Maryland, if:
 - (a) A court:
 - (i) Made the finding; and
 - (ii) Decision became final; or
 - (b) The finding was:
 - (i) Made in a contested case under the Maryland Administrative Procedure Act; and
 - (ii) Not overturned on judicial review;

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

(13) Been found to have willfully or knowingly violated State Living Wage Laws as provided in the State Finance and Procurement Article, Title 18, Annotated Code of Maryland, if:

- (a)** A court:
 - (i)** Made the finding; and
 - (ii)** Decision became final; or
- (b)** The finding was:
 - (i)** Made in a contested case under the Maryland Administrative Procedure Act; and
 - (ii)** Not overturned on judicial review;

(14) Been found to have willfully or knowingly violated the Labor and Employment Article, Title 3, Subtitles 3, 4, or 5, or Title 5, Annotated Code of Maryland, if:

- (a)** A court:
 - (i)** Made the finding; and
 - (ii)** Decision became final; or
- (b)** The finding was:
 - (i)** Made in a contested case under the Maryland Administrative Procedure Act; and
 - (ii)** Not overturned on judicial review; or

(15) Admitted in writing or under oath, during the course of an official investigation or other proceedings, acts or omissions that would constitute grounds for conviction or liability under any law or statute described in §§B and C and subsections D(1) — (14) above, except as follows (indicate reasons why the affirmations cannot be given, and list any conviction, plea, or imposition of probation before judgment with the date, court, official or administrative body, the sentence or disposition, the name(s) of the person(s) involved and their current positions and responsibilities with the business, and the status of any debarment):

If required, please attach the required document for affirmation regarding other convictions:

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

E. AFFIRMATION REGARDING DEBARMENT

I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the above business, or any of its officers, directors, partners, controlling stockholders, or any of its employees directly involved in the business's contracting activities, including obtaining or performing contracts with public bodies, has ever been suspended or debarred (including being issued a limited denial of participation) by any public entity, except as follows (list each debarment or suspension providing the dates of the suspension or debarment, the name of the public entity and the status of the proceedings, the name(s) of the person(s) involved and their current positions and responsibilities with the business, the grounds of the debarment or suspension, and the details of each person's involvement in any activity that formed the grounds of the debarment or suspension):

If required, please attach the required document for affirmation regarding debarment:

F. AFFIRMATION REGARDING DEBARMENT OF RELATED ENTITIES

I FURTHER AFFIRM THAT:

- (1) The business was not established and it does not operate in a manner designed to evade the application of or defeat the purpose of debarment pursuant to Sections 16-101, et seq., of the State Finance and Procurement Article of the Annotated Code of Maryland; and
- (2) The business is not a successor, assignee, subsidiary, or affiliate of a suspended or debarred business, except as follows (you must indicate the reasons why the affirmations cannot be given without qualification):

If required, please attach the required document for affirmation regarding debarment of related entities:

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

G. SUB-CONTRACT AFFIRMATION

I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the above business, has knowingly entered into a contract with a public body under which a person debarred or suspended under Title 16 of the State Finance and Procurement Article of the Annotated Code of Maryland will provide, directly or indirectly, supplies, services, architectural services, construction related services, leases of real property, or construction.

H. AFFIRMATION REGARDING COLLUSION

I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the above business has:

- (1) Agreed, conspired, connived, or colluded to produce a deceptive show of competition in the compilation of the accompanying bid or offer that is being submitted;
- (2) In any manner, directly or indirectly, entered into any agreement of any kind to fix the bid price or price proposal of the bidder or offeror or of any competitor, or otherwise taken any action in restraint of free competitive bidding in connection with the contract for which the accompanying bid or offer is submitted.

I. CERTIFICATION OF TAX PAYMENT

I FURTHER AFFIRM THAT:

Except as validly contested, the business has paid, or has arranged for payment of, all taxes due the State of Maryland and has filed all required returns and reports with the Comptroller of the Treasury, the State Department of Assessments and Taxation, and the Department of Labor, Licensing, and Regulation, as applicable, and will have paid all withholding taxes due the State of Maryland prior to final settlement.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

J. CONTINGENT FEES

I FURTHER AFFIRM THAT:

The business has not employed or retained any person, partnership, corporation, or other entity, other than a bona fide employee, bona fide agent, bona fide salesperson, or commercial selling agency working for the business, to solicit or secure the Contract, and that the business has not paid or agreed to pay any person, partnership, corporation, or other entity, other than a bona fide employee, bona fide agent, bona fide salesperson, or commercial selling agency, any fee or any other consideration contingent on the making of the Contract.

K. CERTIFICATION REGARDING INVESTMENTS IN IRAN

- (1) The undersigned certifies that, in accordance with State Finance and Procurement Article, §17-705, Annotated Code of Maryland:
 - (a) It is not identified on the list created by the Board of Public Works as a person engaging in investment activities in Iran as described in State Finance and Procurement Article, §17-702, Annotated Code of Maryland; and
 - (b) It is not engaging in investment activities in Iran as described in State Finance and Procurement Article, §17-702, Annotated Code of Maryland.
- (2) The undersigned is unable to make the above certification regarding its investment activities in Iran due to the following activities: _____.

If required, please attach the required document for affirmation regarding Certification regarding investment in Iran:

L. CONFLICT MINERALS ORIGINATED IN THE DEMOCRATIC REPUBLIC OF CONGO (FOR SUPPLIES AND SERVICES CONTRACTS)

I FURTHER AFFIRM THAT:

The business has complied with the provisions of State Finance and Procurement Article, §14-413, Annotated Code of Maryland governing proper disclosure of certain information regarding conflict minerals originating in the Democratic Republic of Congo or its neighboring countries as required by federal law.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

M. I FURTHER AFFIRM THAT:

Any claims of environmental attributes made relating to a product or service included in the bid or proposal are consistent with the Federal Trade Commission’s Guides for the Use of Environmental Marketing Claims as provided in 16 CFR §260, that apply to claims about the environmental attributes of a product, package, or service in connection with the marketing, offering for sale, or sale of such item or service.

N. ACKNOWLEDGEMENT

I ACKNOWLEDGE THAT this Affidavit is to be furnished to the Procurement Officer and may be distributed to units of: (1) the State of Maryland; (2) counties or other subdivisions of the State of Maryland; (3) other states; and (4) the federal government. I further acknowledge that this Affidavit is subject to applicable laws of the United States and the State of Maryland, both criminal and civil, and that nothing in this Affidavit or any contract resulting from the submission of this bid or proposal shall be construed to supersede, amend, modify or waive, on behalf of the State of Maryland, or any unit of the State of Maryland having jurisdiction, the exercise of any statutory right or remedy conferred by the Constitution and the laws of Maryland with respect to any misrepresentation made or any violation of the obligations, terms and covenants undertaken by the above business with respect to (1) this Affidavit, (2) the contract, and (3) other Affidavits comprising part of the contract.

I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THIS AFFIDAVIT ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF.

Date: _____

By: _____ (print name of Authorized Representative and Affiant)

_____ (signature of Authorized Representative and Affiant)

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

COMPREHENSIVE SIGNATURE PAGE 1 OF 2

THE BIDDER IS HEREBY NOTIFIED THAT THIS DOCUMENT SHALL BE SIGNED IN INK IN ORDER FOR THE BID TO BE ACCEPTED. BY SIGNING, THE BIDDER CERTIFIES THAT HE/SHE WILL COMPLY IN EVERY ASPECT WITH THESE SPECIFICATIONS.

FURTHER, I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THIS AFFIDAVIT (PARAGRAPHS A-N) ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF.

This bid form shall be filled out legibly in ink or typed. The bid, if submitted by an individual, shall be signed by an individual; if submitted by a partnership, shall be signed by such member or members of the partnership as have authority to bind the partnership; if submitted by a corporation the same shall be signed by the President and attested by the Secretary or an Assistant Secretary. If not signed by the President as aforesaid, there must be attached a copy of that portion of the By-Laws, or a copy of a Board resolution, duly certified by the Secretary, showing the authority of the person so signing on behalf of the corporation. In lieu thereof, the corporation may file such evidence with the Administration, duly certified by the Secretary, together with a list of the names of those officers having authority to execute documents on behalf of the corporation, duly certified by the Secretary, which listing shall remain in full force and effect until such time as the Administration is advised in writing to the contrary. In any case where a bid is signed by an Attorney in Fact the same must be accompanied by a copy of the appointing document, duly certified.

IF AN INDIVIDUAL:

NAME: _____

Street and/or P.O. Box

City

State

Zip Code

Fed ID or SSN

Signature

(SEAL)

Date

Print Signature

WITNESS: _____

Signature

Print Signature

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

COMPREHENSIVE SIGNATURE PAGE 2 OF 2

IF A PARTNERSHIP:

NAME OF PARTNERSHIP: _____

Street and/or P.O. Box

City State Zip Code Fed ID or SSN

BY: _____ (SEAL) _____
Signature Date

Print Signature

TITLE: _____ WITNESS: _____
Signature

Print Signature

IF A CORPORATION:

NAME OF CORPORATION: _____

Street and/or P.O. Box

City State Zip Code Fed ID or SSN

STATE OF INCORPORATION: _____

BY: _____ (SEAL) _____
Signature Date

Print Signature

TITLE: _____ WITNESS: _____
Secretary's Signature

Print Signature

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

MDOT DBE FORM A
FEDERALLY-FUNDED CONTRACTS
CERTIFIED DBE UTILIZATION AND FAIR SOLICITATION AFFIDAVIT
PAGE 1 OF 2

This affidavit must be included with the bid/ proposal. If the bidder/offeror fails to accurately complete and submit this affidavit as required, the bid shall be deemed not responsive or the proposal shall be deemed not susceptible of being selected for award.

In connection with the bid/proposal submitted in response to Solicitation No. City Contract No. 20-CPTH-33, SHA Contract No. WA061B51 & FAP No. AC-TAP-3(910)E, I affirm the following:

1. DBE Participation (PLEASE CHECK ONLY ONE)

I have met the overall certified Disadvantaged Business Enterprise (DBE) participation goal of **twenty-seven percent (27%)**. I agree that this percentage of the total dollar amount of the Contract for the DBE goal will be performed by certified DBE firms as set forth in the DBE Participation Schedule - Part 2 of the MDOT DBE Form B (Federally-Funded Contracts).

OR

I conclude that I am unable to achieve the DBE participation goal. I hereby request a waiver, in whole or in part, of the goal. Within 10 business days of receiving notice that our firm is the apparent awardee or as requested by the Procurement Officer, I will submit a written waiver request and all required documentation in accordance with COMAR 21.11.03.11. For a partial waiver request, I agree that certified DBE firms will be used to accomplish the percentages of the total dollar amount of the Contract as set forth in the DBE Participation Schedule - Part 2 of the MDOT DBE Form B (Federally-Funded Contracts).

2. Additional DBE Documentation

I understand that if I am notified that I am the apparent awardee or as requested by the Procurement Officer, I must submit the following documentation within 10 business days of receiving such notice: (a) Outreach Efforts Compliance Statement (MDOT DBE Form C - Federally-Funded Contracts); (b) Subcontractor Project Participation Statement (MDOT DBE Form D - Federally-Funded Contracts); (c) DBE Waiver Request documentation per COMAR 21.11.03.11 (if waiver was requested); and (d) Any other documentation required by the Procurement Officer to ascertain bidder's responsibility/ offeror's susceptibility of being selected for award in connection with the certified DBE participation goal.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

MDOT DBE FORM A
FEDERALLY-FUNDED CONTRACTS
CERTIFIED DBE UTILIZATION AND FAIR SOLICITATION AFFIDAVIT
PAGE 2 OF 2

I acknowledge that if I fail to return each completed document (in 2 (a) through (d)) within the required time, the Procurement Officer may determine that I am not responsible and therefore not eligible for contract award or not susceptible of being selected for award.

3. Information Provided to DBE firms

In the solicitation of subcontract quotations or offers, DBE firms were provided not less than the same information and amount of time to respond as were non-DBE firms.

4. Products and Services Provided by DBE firms

I hereby affirm that the DBEs are only providing those products and services for which they are MDOT certified.

I solemnly affirm under the penalties of perjury that the information in this affidavit is true to the best of my knowledge, information and belief.

Company Name

Signature of Representative

Address

Printed Name and Title

City, State and Zip Code

Date

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
20 of 44

**MDOT DBE FORM B
FEDERALLY-FUNDED CONTRACTS
DBE PARTICIPATION SCHEDULE**

PART 1 – INSTRUCTIONS FOR DBE PARTICIPATION SCHEDULE

PARTS 2 AND 3 MUST BE INCLUDED WITH THE BID/PROPOSAL. IF THE BIDDER/OFFEROR FAILS TO ACCURATELY COMPLETE AND SUBMIT PART 2 WITH THE BID/PROPOSAL AS REQUIRED, THE BID SHALL BE DEEMED NOT RESPONSIVE OR THE PROPOSAL SHALL BE DEEMED NOT SUSCEPTIBLE OF BEING SELECTED FOR AWARD.

PAGE 1 OF 4

*** STOP ***

**FORM INSTRUCTIONS
PLEASE READ BEFORE COMPLETING THIS FORM**

1. Please refer to the Maryland Department of Transportation (MDOT) DBE Directory at www.mdot.state.md.us to determine if a firm is certified for the appropriate North American Industry Classification System (“NAICS”) Code **and** the product/services description (specific product that a firm is certified to provide or specific areas of work that a firm is certified to perform). For more general information about NAICS, please visit www.naics.com. Only those specific products and/or services for which a firm is certified in the MDOT Directory can be used for purposes of achieving the DBE participation goal.
2. In order to be counted for purposes of achieving the DBE participation goal, the firm must be certified for that specific NAICS (“DBE” for Federally-funded projects designation after NAICS Code). **WARNING:** If the firm’s NAICS Code is in **graduated status**, such services/products **will not be counted** for purposes of achieving the DBE participation goals. Graduated status is clearly identified in the MDOT Directory (such graduated codes are designated with the word graduated after the appropriate NAICS Code).
3. Examining the NAICS Code is the **first step** in determining whether a DBE firm is certified and eligible to receive DBE participation credit for the specific products/services to be supplied or performed under the contract. The **second step** is to determine whether a firm’s Products/Services Description in the DBE Directory includes the products to be supplied and/or services to be performed that are being used to achieve the DBE participation goal.
4. If you have any questions as to whether a firm is MDOT DBE certified, or if it is certified to perform specific services or provide specific products, please call MDOT’s Office of Minority Business Enterprise at 1-800-544-6056 or send an email to mbe@mdot.state.md.us.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

MDOT DBE FORM B
FEDERALLY-FUNDED CONTRACTS
DBE PARTICIPATION SCHEDULE
PART 1 – INSTRUCTIONS FOR DBE PARTICIPATION SCHEDULE
PAGE 2 OF 4

5. The Contractor's subcontractors are considered second-tier subcontractors. Third-tier contracting used to meet a DBE goal is to be considered the exception and not the rule. The following two conditions must be met before MDOT, its Modal Administrations and the Maryland Transportation Authority may approve a third-tier contracting agreement: (a) the bidder/offeror must request in writing approval of each third-tier contract arrangement, and (b) the request must contain specifics as to why a third-tier contracting arrangement should be approved. These documents must be submitted with the bid/proposal in Part 2 of this DBE Participation Schedule.

6. For each DBE firm that is being used as supplier/wholesaler/regular dealer/broker/manufacturer, please follow these instructions for calculating the amount of the subcontract for purposes of achieving the DBE participation goal:
 - A. Is the firm certified as a broker of the products/supplies? If the answer is YES, please continue to Item C. If the answer is NO, please continue to Item B.

 - B. Is the firm certified as a supplier, wholesaler, regular dealer, or manufacturer of such products/supplies? If the answer is YES, continue to Item D. If the answer is NO, continue to Item C only if the DBE firm is certified to perform trucking/hauling services under NAICS Codes 484110, 484121, 484122, 484210, 484220 and 484230. If the answer is NO and the firm is not certified under these NAICS Codes, then no DBE participation credit will be given for the supply of these products.

 - C. For purposes of achieving the DBE participation goal, you may count only the amount of any reasonable fee that the DBE firm will receive for the provision of such products/supplies - not the total subcontract amount or the value (or a percentage thereof) of such products and/or supplies. For Column 3 of the DBE Participation Schedule, please divide the amount of any reasonable fee that the DBE firm will receive for the provision of such products/services by the total Contract value and insert the percentage in Line 3.1.

 - D. Is the firm certified as a manufacturer (refer to the firm's NAICS Code and specific description of products/services) of the products/supplies to be provided? If the answer is NO please continue to Item E. If the answer is YES, for purposes of achieving the DBE participation goal, you may count the total amount of the subcontract. For Column 3 of the DBE Participation Schedule, please divide the total amount of the subcontract by the total Contract value and insert the percentage in Line 3.1.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

MDOT DBE FORM B
FEDERALLY-FUNDED CONTRACTS
DBE PARTICIPATION SCHEDULE
PART 1 – INSTRUCTIONS FOR DBE PARTICIPATION SCHEDULE
PAGE 3 OF 4

- E. Is the firm certified as a supplier, wholesaler and/or regular dealer? If the answer is YES and the DBE firm is furnishing and installing the materials and is certified to perform these services, please divide the total subcontract amount (including full value of supplies) by the total Contract value and insert the percentage in Line 3.1. If the answer is YES and the DBE firm is only being used as a supplier, wholesaler and/or regular dealer or is not certified to install the supplies/materials, for purposes of achieving the DBE participation goal, you may only count sixty percent (60%) of the value of the subcontract for these supplies/products (60% Rule). To apply the 60% Rule, first divide the amount of the subcontract for these supplies/products only (not installation) by the total Contract value. Then, multiply the result by sixty percent (60%) and insert the percentage in Line 3.2.
7. For each DBE firm that is not being used as a supplier/wholesaler/regular dealer/broker/manufacturer, to calculate the amount of the subcontract for purposes of achieving the DBE participation goal, divide the total amount of the subcontract by the total Contract value and insert the percentage in Line 3.1.
- Example:** \$ 2,500 (Total Subcontract Amount) ÷ \$10,000 (Total Contract Value) x 100 = 25%.
8. Please note that for USDOT-funded projects, a DBE prime may count towards its DBE participation goal work performed by its own forces. Include information about the DBE prime in Part 2.
9. **WARNING:** The percentage of DBE participation, computed using the dollar amounts in Column 3 for all of the DBE firms listed in Part 2, **MUST** at least equal the DBE participation goal as set forth in MDOT DBE Form A – Federally-Funded Contracts for this solicitation. If the bidder/offeror is unable to achieve the DBE participation goals, then the bidder/offeror must request a waiver in Form A or the bid will be deemed not responsive, or the proposal not susceptible of being selected for award. You may wish to use the Goal Worksheet shown below to assist you in calculating the percentage and confirming that you have met the applicable DBE participation goal.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

MDOT DBE FORM B
FEDERALLY-FUNDED CONTRACTS
DBE PARTICIPATION SCHEDULE
PART 1 – INSTRUCTIONS FOR DBE PARTICIPATION SCHEDULE
PAGE 4 OF 4

GOAL WORKSHEET	
Total DBE Firm Participation (Add percentages in Column 3 for all DBE firms listed in DBE Participation Schedule)	(A) _____%
The percentage amount in Box A above should be equal to the percentage amount in Box E below.	
Add <i>Countable</i> Subcontract Amounts (see 6 through 8 of Instructions) for all DBE firms listed in DBE Participation Schedule, and insert in Box B	(B) \$ _____
Insert the Total Contract Amount in Box C	(C) \$ _____
Divide Box B by Box C and Insert in Box D	(D) = _____
Multiply Box D by 100 and insert in Box E	(E) = _____%

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

MDOT DBE FORM B
FEDERALLY-FUNDED CONTRACTS
DBE PARTICIPATION SCHEDULE
PART 2 – DBE PARTICIPATION SCHEDULE

PARTS 2 AND 3 MUST BE INCLUDED WITH THE BID/PROPOSAL. IF THE BIDDER/OFFEROR FAILS TO ACCURATELY COMPLETE AND SUBMIT PART 2 WITH THE BID/PROPOSAL AS REQUIRED, THE BID SHALL BE DEEMED NOT RESPONSIVE OR THE PROPOSAL SHALL BE DEEMED NOT SUSCEPTIBLE OF BEING SELECTED FOR AWARD.

PAGE ___ OF ___

Prime Contractor	Project Description	Solicitation Number

LIST INFORMATION FOR EACH CERTIFIED DBE SUBCONTRACTOR YOU AGREE TO USE TO ACHIEVE THE DBE PARTICIPATION GOAL.

COLUMN 1	COLUMN 2	COLUMN 3
		Unless the bidder/offeror requested a waiver in MDOT DBE Form A – Federally Funded Contracts for this solicitation, the cumulative DBE participation for all DBE firms listed herein must equal at least the DBE participation goal set forth in Form A.
NAME OF DBE SUBCONTRACTOR AND TIER	CERTIFICATION NO.	FOR PURPOSES OF ACHIEVING THE DBE PARTICIPATION GOAL, refer to sections 6, 7 and 8 in Part 1 - Instructions. State the percentage amount of the products/services in Line 3.1, except for those products or services where the DBE firm is being used as a wholesaler, supplier, or regular dealer. For items of work where the DBE firm is being used as a supplier, wholesaler and/or regular dealer, complete Line 3.2 using the 60% Rule.
<input type="checkbox"/> Please check if DBE firm is a third-tier contractor (if applicable). Please submit written documents in accordance with Section 5 of Part 1 - Instructions	Certification Number: <hr/>	3.1. TOTAL PERCENTAGE TO BE PAID TO THE SUBCONTRACTOR (STATE THIS PERCENTAGE AS A PERCENTAGE OF THE TOTAL CONTRACT VALUE- EXCLUDING PRODUCTS/SERVICES FROM SUPPLIERS, WHOLESALERS OR REGULAR DEALERS). _____% (Percentage for purposes of calculating achievement of DBE Participation goal) 3.2 TOTAL PERCENTAGE TO BE PAID TO THE SUBCONTRACTOR FOR ITEMS OF WORK WHERE THE DBE FIRM IS BEING USED AS A SUPPLIER, WHOLESALER AND/OR REGULAR DEALER) (STATE THE PERCENTAGE AS A PERCENTAGE OF THE TOTAL CONTRACT VALUE AND THEN APPLY THE 60% RULE PER SECTION 6(E) IN PART 1 - INSTRUCTIONS). _____% Total percentage of Supplies/Products x _____ 60% (60% Rule) _____% (Percentage for purposes of calculating achievement of DBE Participation goal)

Please check if Continuation Sheets are attached.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

MDOT DBE FORM B
FEDERALLY-FUNDED CONTRACTS
DBE PARTICIPATION SCHEDULE
CONTINUATION SHEET

PAGE ___ OF ___

Prime Contractor	Project Description	Solicitation Number

LIST INFORMATION FOR EACH CERTIFIED DBE SUBCONTRACTOR YOU AGREE TO USE TO ACHIEVE THE DBE PARTICIPATION GOAL.

COLUMN 1	COLUMN 2	COLUMN 3
		Unless the bidder/offeree requested a waiver in MDOT DBE Form A – Federally Funded Contracts for this solicitation, the cumulative DBE participation for all DBE firms listed herein must equal at least the DBE participation goal set forth in Form A.
NAME OF DBE SUBCONTRACTOR AND TIER	CERTIFICATION NO.	FOR PURPOSES OF ACHIEVING THE DBE PARTICIPATION GOAL, refer to sections 6, 7 and 8 in Part 1 - Instructions. State the percentage amount of the products/services in Line 3.1, except for those products or services where the DBE firm is being used as a wholesaler, supplier, or regular dealer. For items of work where the DBE firm is being used as a supplier, wholesaler and/or regular dealer, complete Line 3.2 using the 60% Rule.
<input type="checkbox"/> Please check if DBE firm is a third-tier contractor (if applicable). Please submit written documents in accordance with Section 5 of Part 1 - Instructions	Certification Number: <hr/>	<p>3.1. TOTAL PERCENTAGE TO BE PAID TO THE SUBCONTRACTOR (STATE THIS PERCENTAGE AS A PERCENTAGE OF THE TOTAL CONTRACT VALUE- EXCLUDING PRODUCTS/SERVICES FROM SUPPLIERS, WHOLESALERS OR REGULAR DEALERS).</p> <p>_____ % (Percentage for purposes of calculating achievement of DBE Participation goal)</p> <p>3.2. TOTAL PERCENTAGE TO BE PAID TO THE SUBCONTRACTOR FOR ITEMS OF WORK WHERE THE DBE FIRM IS BEING USED AS A SUPPLIER, WHOLESALER AND/OR REGULAR DEALER) (STATE THE PERCENTAGE AS A PERCENTAGE OF THE TOTAL CONTRACT VALUE AND THEN APPLY THE 60% RULE PER SECTION 6(E) IN PART 1 - INSTRUCTIONS).</p> <p>_____ % Total percentage of Supplies/Products</p> <p>x _____ 60% (60% Rule)</p> <p>_____ % (Percentage for purposes of calculating achievement of DBE Participation goal)</p>

Please check if Continuation Sheets are attached.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

MDOT DBE FORM B
FEDERALLY-FUNDED CONTRACTS
DBE PARTICIPATION SCHEDULE

PART 3 – CERTIFICATION FOR DBE PARTICIPATION SCHEDULE

PARTS 2 AND 3 MUST BE INCLUDED WITH THE BID/PROPOSAL AS DIRECTED IN THE SOLICITATION.

I hereby affirm that I have reviewed the Products and Services Description (specific product that a firm is certified to provide or areas of work that a firm is certified to perform) set forth in the MDOT DBE Directory for each of the DBE firms listed in Part 2 of this DBE Form B for purposes of achieving the DBE participation goal that was identified in the DBE Form A that I submitted with this solicitation, and that the DBE firms listed are only performing those products/services/areas of work for which they are certified. I also hereby affirm that I have read and understand the form instructions set forth in Part 1 of this DBE Form B.

The undersigned Prime Contractor hereby certifies and agrees that it has fully complied with the State Minority Business Enterprise law, State Finance and Procurement Article §14-308(a)(2), Annotated Code of Maryland which provides that, except as otherwise provided by law, a contractor may not identify a certified minority business enterprise in a bid or proposal and:

- (1) fail to request, receive, or otherwise obtain authorization from the certified minority business enterprise to identify the certified minority business enterprise in its bid or proposal;
- (2) fail to notify the certified minority business enterprise before execution of the contract of its inclusion of the bid or proposal;
- (3) fail to use the certified minority business enterprise in the performance of the contract; or
- (4) pay the certified minority business enterprise solely for the use of its name in the bid or proposal.

I solemnly affirm under the penalties of perjury that the contents of Parts 2 and 3 of MDOT DBE Form B are true to the best of my knowledge, information and belief.

Company Name

Signature of Representative

Address

Printed Name and Title

City, State and Zip Code

Date

395

09/05/2023

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

MDOT MBE/DBE FORM E
GOOD FAITH EFFORTS GUIDANCE AND DOCUMENTATION

PART 1 – GUIDANCE FOR DEMONSTRATING GOOD FAITH EFFORTS
TO MEET MBE/DBE PARTICIPATION GOALS

In order to show that it has made good faith efforts to meet the Minority Business Enterprise (MBE)/Disadvantaged Business Enterprise (DBE) participation goal (including any MBE subgoals) on a contract, the bidder/offeror must either (1) meet the MBE/DBE Goal(s) and document its commitments for participation of MBE/DBE Firms, or (2) when it does not meet the MBE/DBE Goal(s), document its Good Faith Efforts to meet the goal(s).

I. Definitions

MBE/DBE Goal(s) – “MBE/DBE Goal(s)” refers to the MBE participation goal and MBE participation subgoal(s) on a State-funded procurement and the DBE participation goal on a federally-funded procurement.

Good Faith Efforts – The “Good Faith Efforts” requirement means that when requesting a waiver, the bidder/offeror must demonstrate that it took all necessary and reasonable steps to achieve the MBE/DBE Goal(s), which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient MBE/DBE participation, even if those steps were not fully successful. Whether a bidder/offeror that requests a waiver made adequate good faith efforts will be determined by considering the quality, quantity, and intensity of the different kinds of efforts that the bidder/offeror has made. The efforts employed by the bidder/offeror should be those that one could reasonably expect a bidder/offeror to take if the bidder/offeror were actively and aggressively trying to obtain DBE participation sufficient to meet the DBE contract goal. Mere *pro forma* efforts are not good faith efforts to meet the DBE contract requirements. The determination concerning the sufficiency of the bidder's/offeror's good faith efforts is a judgment call; meeting quantitative formulas is not required.

Identified Firms – “Identified Firms” means a list of the DBEs identified by the procuring agency during the goal setting process and listed in the federally-funded procurement as available to perform the Identified Items of Work. It also may include additional DBEs identified by the bidder/offeror as available to perform the Identified Items of Work, such as DBEs certified or granted an expansion of services after the procurement was issued. If the procurement does not include a list of Identified Firms or is a State-funded procurement, this term refers to all of the MBE Firms (if State-funded) or DBE Firms (if federally-funded) the bidder/offeror identified as available to perform the Identified Items of Work and should include all appropriately certified firms that are reasonably identifiable.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

Identified Items of Work – “Identified Items of Work” means the bid items identified by the procuring agency during the goal setting process and listed in the procurement as possible items of work for performance by MBE/DBE Firms. It also may include additional portions of items of work the bidder/offeror identified for performance by MBE/DBE Firms to increase the likelihood that the MBE/DBE Goal(s) will be achieved. If the procurement does not include a list of Identified Items of Work, this term refers to all of the items of work the bidder/offeror identified as possible items of work for performance by MBE/DBE Firms and should include all reasonably identifiable work opportunities.

MBE/DBE Firms – For State-funded contracts, “MBE/DBE Firms” refers to certified **MBE** Firms. Certified MBE Firms can participate in the State’s MBE Program. For federally-funded contracts, “MBE/DBE Firms” refers to certified **DBE** Firms. Certified DBE Firms can participate in the federal DBE Program.

II. Types of Actions MDOT will Consider

The bidder/offeror is responsible for making relevant portions of the work available to MBE/DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available MBE/DBE subcontractors and suppliers, so as to facilitate MBE/DBE participation. The following is a list of types of actions MDOT will consider as part of the bidder's/offeror's Good Faith Efforts when the bidder/offeror fails to meet the MBE/DBE Goal(s). This list is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.

A. Identify Bid Items as Work for MBE/DBE Firms

1. Identified Items of Work in Procurements

- (a) Certain procurements will include a list of bid items identified during the goal setting process as possible work for performance by MBE/DBE Firms. If the procurement provides a list of Identified Items of Work, the bidder/offeror shall make all reasonable efforts to solicit quotes from MBE Firms or DBE Firms, whichever is appropriate, to perform that work.
- (b) Bidders/Offerors may, and are encouraged to, select additional items of work to be performed by MBE/DBE Firms to increase the likelihood that the MBE/DBE Goal(s) will be achieved.

2. Identified Items of Work by Bidders/Offerors

- (a) When the procurement does not include a list of Identified Items of Work, bidders/offerors should reasonably identify sufficient items of work to be performed by MBE/DBE Firms.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

- (b) Where appropriate, bidders/offerors should break out contract work items into economically feasible units to facilitate MBE/DBE participation, rather than perform these work items with their own forces. The ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder/offeror of the responsibility to make Good Faith Efforts.

B. Identify MBE Firms or DBE Firms to Solicit

1. DBE Firms Identified in Procurements

- (a) Certain procurements will include a list of the DBE Firms identified during the goal setting process as available to perform the items of work. If the procurement provides a list of Identified DBE Firms, the bidder/offeror shall make all reasonable efforts to solicit those DBE firms.
- (b) Bidders/offerors may, and are encouraged to, search the MBE/DBE Directory to identify additional DBEs who may be available to perform the items of work, such as DBEs certified or granted an expansion of services after the solicitation was issued.

2. MBE/DBE Firms Identified by Bidders/Offerors

- (a) When the procurement does not include a list of Identified MBE/DBE Firms, bidders/offerors should reasonably identify the MBE Firms or DBE Firms, whichever is appropriate, that are available to perform the Identified Items of Work.
- (b) Any MBE/DBE Firms identified as available by the bidder/offeror should be certified in the appropriate program (MBE for State-funded procurements or DBE for federally-funded procurements)
- (c) Any MBE/DBE Firms identified as available by the bidder/offeror should be certified to perform the Identified Items of Work.

C. Solicit MBE/DBEs

1. Solicit all Identified Firms for all Identified Items of Work by providing written notice. The bidder/offeror should:

- (a) provide the written solicitation at least 10 days prior to bid opening to allow sufficient time for the MBE/DBE Firms to respond;
- (b) send the written solicitation by first-class mail, facsimile, or email using contact information in the MBE/DBE Directory, unless the bidder/offeror has a valid basis for using different contact information; and

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

- (c) provide adequate information about the plans, specifications, anticipated time schedule for portions of the work to be performed by the MBE/DBE, and other requirements of the contract to assist MBE/DBE Firms in responding. (This information may be provided by including hard copies in the written solicitation or by electronic means as described in C.3 below.)
2. “All” Identified Firms includes the DBEs listed in the procurement and any MBE/DBE Firms you identify as potentially available to perform the Identified Items of Work, but it does not include MBE/DBE Firms who are no longer certified to perform the work as of the date the bidder/offeror provides written solicitations.
3. “Electronic Means” includes, for example, information provided *via* a website or file transfer protocol (FTP) site containing the plans, specifications, and other requirements of the contract. If an interested MBE/DBE cannot access the information provided by electronic means, the bidder/offeror must make the information available in a manner that is accessible by the interested MBE/DBE.
4. Follow up on initial written solicitations by contacting DBEs to determine if they are interested. The follow up contact may be made:
- (a) by telephone using the contact information in the MBE/DBE Directory, unless the bidder/offeror has a valid basis for using different contact information; or
 - (b) in writing *via* a method that differs from the method used for the initial written solicitation.
5. In addition to the written solicitation set forth in C.1 and the follow up required in C.4, use all other reasonable and available means to solicit the interest of MBE/DBE Firms certified to perform the work of the contract. Examples of other means include:
- (a) attending any pre-bid meetings at which MBE/DBE Firms could be informed of contracting and subcontracting opportunities;
 - (b) if recommended by the procurement, advertising with or effectively using the services of at least two minority focused entities or media, including trade associations, minority/women community organizations, minority/women contractors' groups, and local, state, and federal minority/women business assistance offices listed on the MDOT Office of Minority Business Enterprise website; and
 - (c) effectively using the services of other organizations, as allowed on a case-by-case basis and authorized in the procurement, to provide assistance in the recruitment and placement of MBE/DBE Firms.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
31 of 44

D. Negotiate With Interested MBE/DBE Firms

Bidders/Offerors must negotiate in good faith with interested MBE/DBE Firms.

1. Evidence of negotiation includes, without limitation, the following:
 - (a) the names, addresses, and telephone numbers of MBE/DBE Firms that were considered;
 - (b) a description of the information provided regarding the plans and specifications for the work selected for subcontracting and the means used to provide that information; and
 - (c) evidence as to why additional agreements could not be reached for MBE/DBE Firms to perform the work.
2. A bidder/offeror using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration.
3. The fact that there may be some additional costs involved in finding and using MBE/DBE Firms is not in itself sufficient reason for a bidder's/offeror's failure to meet the contract DBE goal, as long as such costs are reasonable. Factors to take into consideration when determining whether a MBE/DBE Firm's quote is excessive or unreasonable include, without limitation, the following:
 - (a) the dollar difference between the MBE/DBE subcontractor's quote and the average of the other subcontractors' quotes received by the bidder/offeror;
 - (b) the percentage difference between the MBE/DBE subcontractor's quote and the average of the other subcontractors' quotes received by the bidder/offeror;
 - (c) the percentage that the DBE subcontractor's quote represents of the overall contract amount;
 - (d) the number of MBE/DBE firms that the bidder/offeror solicited for that portion of the work;
 - (e) whether the work described in the MBE/DBE and Non-MBE/DBE subcontractor quotes (or portions thereof) submitted for review is the same or comparable; and
 - (f) the number of quotes received by the bidder/offeror for that portion of the work.
4. The above factors are not intended to be mandatory, exclusive, or exhaustive, and other evidence of an excessive or unreasonable price may be relevant.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

5. The bidder/offeror may not use its price for self-performing work as a basis for rejecting a MBE/DBE Firm's quote as excessive or unreasonable.
6. The "average of the other subcontractors' quotes received by the" bidder/offeror refers to the average of the quotes received from all subcontractors, except that there should be quotes from at least three subcontractors, and there must be at least one quote from a MBE/DBE and one quote from a Non-MBE/DBE.
7. A bidder/offeror shall not reject a MBE/DBE Firm as unqualified without sound reasons based on a thorough investigation of the firm's capabilities. For each certified MBE/DBE that is rejected as unqualified or that placed a subcontract quotation or offer that the bidder/offeror concludes is not acceptable, the bidder/offeror must provide a written detailed statement listing the reasons for this conclusion. The bidder/offeror also must document the steps taken to verify the capabilities of the MBE/DBE and Non-MBE/DBE Firms quoting similar work.
 - (a) The factors to take into consideration when assessing the capabilities of a MBE/DBE Firm, include, but are not limited to the following: financial capability, physical capacity to perform, available personnel and equipment, existing workload, experience performing the type of work, conduct and performance in previous contracts, and ability to meet reasonable contract requirements.
 - (b) The MBE/DBE Firm's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the efforts to meet the project goal.

E. Assisting Interested MBE/DBE Firms

When appropriate under the circumstances, the decision-maker will consider whether the bidder/offeror:

1. made reasonable efforts to assist interested MBE/DBE Firms in obtaining the bonding, lines of credit, or insurance required by MDOT or the bidder/offeror; and
2. made reasonable efforts to assist interested MBE/DBE Firms in obtaining necessary equipment, supplies, materials, or related assistance or services.

III. Other Considerations

In making a determination of Good Faith Efforts the decision-maker may consider engineering estimates, catalogue prices, general market availability and availability of certified MBE/DBE Firms in the area in which the work is to be performed, other bids or offers and subcontract bids or offers substantiating significant variances between certified MBE/DBE and Non-MBE/DBE

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

costs of participation, and their impact on the overall cost of the contract to the State and any other relevant factors.

The decision-maker may take into account whether a bidder/offeror decided to self-perform subcontract work with its own forces, especially where the self-performed work is Identified Items of Work in the procurement. The decision-maker also may take into account the performance of other bidders/offerors in meeting the contract. For example, when the apparent successful bidder/offeror fails to meet the contract goal, but others meet it, this reasonably raises the question of whether, with additional reasonable efforts, the apparent successful bidder/offeror could have met the goal. If the apparent successful bidder/offeror fails to meet the goal, but meets or exceeds the average MBE/DBE participation obtained by other bidders/offerors, this, when viewed in conjunction with other factors, could be evidence of the apparent successful bidder/offeror having made Good Faith Efforts.

IV. Documenting Good Faith Efforts

At a minimum, a bidder/offeror seeking a waiver of the MBE/DBE Goal(s) or a portion thereof must provide written documentation of its Good Faith Efforts, in accordance with COMAR 21.11.03.11, within 10 business days after receiving notice that it is the apparent awardee. The written documentation shall include the following:

A. Items of Work (Complete Good Faith Efforts Documentation Form E, Part 2)

A detailed statement of the efforts made to select portions of the work proposed to be performed by certified MBE/DBE Firms in order to increase the likelihood of achieving the stated MBE/DBE Goal(s).

B. Outreach/Solicitation/Negotiation

1. The record of the bidder's/offeror's compliance with the outreach efforts prescribed by COMAR 21.11.03.09C(2)(a) through (e) and 49 C.F.R. Part 26, Appendix A. **(Complete Outreach Efforts Compliance Statement)**
2. A detailed statement of the efforts made to contact and negotiate with MBE/DBE Firms including:
 - (a) the names, addresses, and telephone numbers of the MBE/DBE Firms who were contacted, with the dates and manner of contacts (letter, fax, email, telephone, etc.) **(Complete Good Faith Efforts Form E, Part 3, and submit letters, fax cover sheets, emails, etc. documenting solicitations);** and
 - (b) a description of the information provided to MBE/DBE Firms regarding the plans, specifications, and anticipated time schedule for portions of the work to be performed and the means used to provide that information.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

C. Rejected MBE/DBE Firms (Complete Good Faith Efforts Form E, Part 4)

1. For each MBE/DBE Firm that the bidder/offeror concludes is not acceptable or qualified, a detailed statement of the reasons for the bidder's/offeror's conclusion, including the steps taken to verify the capabilities of the MBE/DBE and Non-MBE/DBE Firms quoting similar work.
2. For each certified MBE/DBE Firm that the bidder/offeror concludes has provided an excessive or unreasonable price, a detailed statement of the reasons for the bidder's/offeror's conclusion, including the quotes received from all MBE/DBE and Non-MBE/DBE firms bidding on the same or comparable work. **(Include copies of all quotes received.)**
3. A list of MBE/DBE Firms contacted but found to be unavailable. This list should be accompanied by a Minority Contractor Unavailability Certificate signed by the MBE/DBE contractor or a statement from the bidder/offeror that the MBE/DBE contractor refused to sign the Minority Contractor Unavailability Certificate.

D. Other Documentation

1. Submit any other documentation requested by the Procurement Officer to ascertain the bidder's/offeror's Good Faith Efforts.
2. Submit any other documentation the bidder/offeror believes will help the Procurement Officer ascertain its Good Faith Efforts.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

MDOT MBE/DBE FORM E
GOOD FAITH EFFORTS GUIDANCE AND DOCUMENTATION

PART 2 – CERTIFICATION REGARDING GOOD FAITH EFFORTS DOCUMENTATION

PAGE ___ OF ___

Prime Contractor	Project Description	Solicitation Number

PARTS 3, 4, AND 5 MUST BE INCLUDED WITH THIS CERTIFICATE ALONG WITH ALL DOCUMENTS SUPPORTING YOUR WAIVER REQUEST.

I hereby request a waiver of (1) the Minority Business Enterprise (MBE) participation goal and/or subgoal(s), (2) the Disadvantaged Business Enterprise (DBE) participation goal, or (3) a portion of the pertinent MBE/DBE participation goal and/or MBE subgoal(s) for this procurement.¹ I affirm that I have reviewed the Good Faith Efforts Guidance MBE/DBE Form E. I further affirm under penalties of perjury that the contents of Parts 3, 4, and 5 of MDOT MBE/DBE Form E are true to the best of my knowledge, information and belief.

Company Name

Signature of Representative

Address

Printed Name and Title

City, State and Zip Code

Date

¹ MBE participation goals and subgoals apply to State-funded procurements. DBE participation goals apply to federally-funded procurements. Federally-funded contracts do not have subgoals.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

MDOT MBE/DBE FORM E
GOOD FAITH EFFORTS GUIDANCE AND DOCUMENTATION

**PART 3 – IDENTIFIED ITEMS OF WORK BIDDER/OFFEROR MADE AVAILABLE TO
MBE/DBE FIRMS**

PAGE ___ OF ___

Prime Contractor	Project Description	Solicitation Number

Identify those items of work that the bidder/offeror made available to MBE/DBE Firms. This includes, where appropriate, those items the bidder/offeror identified and determined to subdivide into economically feasible units to facilitate the MBE/DBE participation. For each item listed, show the anticipated percentage of the total contract amount. It is the bidder's/offeror's responsibility to demonstrate that sufficient work to meet the goal was made available to MBE/DBE Firms, and the total percentage of the items of work identified for MBE/DBE participation equals or exceeds the percentage MBE/DBE goal set for the procurement. Note: If the procurement includes a list of bid items identified during the goal setting process as possible items of work for performance by MBE/DBE Firms, the bidder/offeror should make all of those items of work available to MBE/DBE Firms or explain why that item was not made available. If the bidder/offeror selects additional items of work to make available to MBE/DBE Firms, those additional items should also be included below.

Identified Items of Work	Was this work listed in the procurement?	Does bidder/offeror normally self-perform this work?	Was this work made available to MBE/DBE Firms? If no, explain why?
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

Please check if Additional Sheets are attached.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

MDOT MBE/DBE FORM E
GOOD FAITH EFFORTS GUIDANCE AND DOCUMENTATION

PART 4 – IDENTIFIED MBE/DBE FIRMS AND RECORD OF SOLICITATIONS

PAGE ___ OF ___

Prime Contractor	Project Description	Solicitation Number

Identify the MBE/DBE Firms solicited to provide quotes for the Identified Items of Work made available for MBE/DBE participation. Include the name of the MBE/DBE Firm solicited, items of work for which bids/quotes were solicited, date and manner of initial and follow-up solicitations, whether the MBE/DBE provided a quote, and whether the MBE/DBE is being used to meet the MBE/DBE participation goal. MBE/DBE Firms used to meet the participation goal must be included on the MBE/DBE Participation Schedule, Form B. Note: If the procurement includes a list of the MBE/DBE Firms identified during the goal setting process as potentially available to perform the items of work, the bidder/offeror should solicit all of those MBE/DBE Firms or explain why a specific MBE/DBE was not solicited. If the bidder/offeror identifies additional MBE/DBE Firms who may be available to perform Identified Items of Work, those additional MBE/DBE Firms should also be included below. Copies of all written solicitations and documentation of follow-up calls to MBE/DBE Firms must be attached to this form. If the bidder/offeror used a Non-MBE/DBE or is self-performing the identified items of work, Part 4 must be completed.

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 PROPOSAL FORM PACKET — FEDERAL

Name of Identified MBE/DBE Firm & MBE Classification	Describe Item of Work Solicited	Initial Solicitation Date & Method	Follow-up Solicitation Date & Method	Details for Follow-up Calls	Quote Rec'd	Quote Used	Reason Quote Rejected
Firm Name: <hr/> MBE Classification (Check only if requesting waiver of MBE subgoal.) <input type="checkbox"/> African American-Owned <input type="checkbox"/> Hispanic American-Owned <input type="checkbox"/> Asian American-Owned <input type="checkbox"/> Women-Owned <input type="checkbox"/> Other MBE Classification <hr/>		Date: <input type="checkbox"/> Mail <input type="checkbox"/> Facsimile <input type="checkbox"/> Email	Date: <input type="checkbox"/> Phone <input type="checkbox"/> Mail <input type="checkbox"/> Facsimile <input type="checkbox"/> Email	Time of Call: Spoke With: <input type="checkbox"/> Left Message	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Used Other MBE/DBE <input type="checkbox"/> Used Non-MBE/DBE <input type="checkbox"/> Self-performing
Firm Name: <hr/> MBE Classification (Check only if requesting waiver of MBE subgoal.) <input type="checkbox"/> African American-Owned <input type="checkbox"/> Hispanic American-Owned <input type="checkbox"/> Asian American-Owned <input type="checkbox"/> Women-Owned <input type="checkbox"/> Other MBE Classification <hr/>		Date: <input type="checkbox"/> Mail <input type="checkbox"/> Facsimile <input type="checkbox"/> Email	Date: <input type="checkbox"/> Phone <input type="checkbox"/> Mail <input type="checkbox"/> Facsimile <input type="checkbox"/> Email	Time of Call: Spoke With: <input type="checkbox"/> Left Message	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Used Other MBE/DBE <input type="checkbox"/> Used Non-MBE/DBE <input type="checkbox"/> Self-performing

Please check if Additional Sheets are attached.

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PROPOSAL FORM PACKET — FEDERAL

MDOT MBE/DBE FORM E
GOOD FAITH EFFORTS GUIDANCE AND DOCUMENTATION

PART 5 – ADDITIONAL INFORMATION REGARDING REJECTED MBE/DBE QUOTES

PAGE ___ OF ___

Prime Contractor	Project Description	Solicitation Number

This form must be completed if Part 3 indicates that a MBE/DBE quote was rejected because the bidder/offeror is using a Non-MBE/DBE or is self-performing the Identified Items of Work. Provide the Identified Items Work, indicate whether the work will be self-performed or performed by a Non-MBE/DBE, and if applicable, state the name of the Non-MBE/DBE. Also include the names of all MBE/DBE and Non-MBE/DBE Firms that provided a quote and the amount of each quote.

Describe Identified Items of Work Not Being Performed by MBE/DBE (Include spec/section number from bid)	Self-performing or Using Non-MBE/DBE (Provide name)	Amount of Non-MBE/DBE Quote	Name of Other Firms who Provided Quotes & Whether MBE/DBE or Non-MBE/DBE	Amount Quoted	Indicate Reason Why MBE/DBE Quote Rejected & Briefly Explain
	<input type="checkbox"/> Self-performing <input type="checkbox"/> Using Non-MBE/DBE	\$ _____	_____	\$ _____	<input type="checkbox"/> Price <input type="checkbox"/> Capabilities <input type="checkbox"/> Other
	<input type="checkbox"/> Self-performing <input type="checkbox"/> Using Non-MBE/DBE	\$ _____	_____	\$ _____	<input type="checkbox"/> Price <input type="checkbox"/> Capabilities <input type="checkbox"/> Other
	<input type="checkbox"/> Self-performing <input type="checkbox"/> Using Non-MBE/DBE	\$ _____	_____	\$ _____	<input type="checkbox"/> Price <input type="checkbox"/> Capabilities <input type="checkbox"/> Other

Please check if Additional Sheets are attached.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

INFORMATION REQUIRED TO BE SUBMITTED FOR FEDERALLY ASSISTED CONTRACTS:

(a) Each bidder shall provide the following information:

NAME OF FIRM: _____

Street and/or P.O. Box

City State Zip Code
____ DBE ____ Non-DBE Age of the firm ____ years
Annual gross receipts per last calendar year ____ <\$500,000 ____ \$500,000-1,000,000
____ \$1,000,000-3,000,000 ____ \$3,000,000-5,000,000 ____ \$5,000,000-10,000,000
____ >\$10,000,000

(b) Each bidder shall provide the following information for each firm quoting or considered as subcontractors and/or suppliers:

NAME OF FIRM: _____

Street and/or P.O. Box

City State Zip Code
____ DBE ____ Non-DBE Age of the firm ____ years
Annual gross receipts per last calendar year ____ <\$500,000 ____ \$500,000-1,000,000
____ \$1,000,000-3,000,000 ____ \$3,000,000-5,000,000 ____ \$5,000,000-10,000,000
____ > \$10,000,000

NAME OF FIRM: _____

Street and/or P.O. Box

City State Zip Code
____ DBE ____ Non-DBE Age of the firm ____ years
Annual gross receipts per last calendar year ____ <\$500,000 ____ \$500,000-1,000,000
____ \$1,000,000-3,000,000 ____ \$3,000,000-5,000,000 ____ \$5,000,000-10,000,000
____ > \$10,000,000

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

NAME OF FIRM: _____

Street and/or P.O. Box

City State Zip Code

____ DBE ____ Non-DBE Age of the firm ____ years
Annual gross receipts per last calendar year ____ <\$500,000 ____ \$500,000-1,000,000
____ \$1,000,000-3,000,000 ____ \$3,000,000-5,000,000 ____ \$5,000,000-10,000,000
____ > \$10,000,000

NAME OF FIRM: _____

Street and/or P.O. Box

City State Zip Code

____ DBE ____ Non-DBE Age of the firm ____ years
Annual gross receipts per last calendar year ____ <\$500,000 ____ \$500,000-1,000,000
____ \$1,000,000-3,000,000 ____ \$3,000,000-5,000,000 ____ \$5,000,000-10,000,000
____ > \$10,000,000

NAME OF FIRM: _____

Street and/or P.O. Box

City State Zip Code

____ DBE ____ Non-DBE Age of the firm ____ years
Annual gross receipts per last calendar year ____ <\$500,000 ____ \$500,000-1,000,000
____ \$1,000,000-3,000,000 ____ \$3,000,000-5,000,000 ____ \$5,000,000-10,000,000
____ > \$10,000,000

Submit additional copies of this page as page 41A of 44, 41B of 44, etc. as necessary, and place them as the last pages in the Invitation for Bids. Place an "X" for "NO" on the last copy. Any additional Copies: _____ NO _____ YES

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

**EXTRA WORK, CONTRACT TIME, BONDING, LIQUIDATED DAMAGES, AND
PROPOSAL GUARANTY**

EXTRA WORK. It is further proposed to do all "Extra Work" which may be required to complete the work contemplated at unit prices or lump sum prices to be agreed upon in writing prior to starting such extra work, or if such prices or sums cannot be agreed upon, to perform such work on a Force Account basis as specified in TC-7.03.

CONTRACT TIME. To commence work as specified in the "Notice to Proceed" and to prosecute the work to complete the contract within/or before

One hundred and fifty (150) (working days)

Any delay in awarding or the execution of this contract will not be considered as a basis for any monetary claim, however, an extension of time may be considered by the Administration, if warranted.

BONDING. When the Contractor's bid is \$100,000 or more, the Contractor shall furnish a Payment Bond and a Performance Bond in the full amount of the Contract Award as security for the construction and completion of the contract in conformance with the Plans, Standard Specifications, revisions thereto, General Provisions and Special Provisions.

To guarantee all of the work performed under this contract to be done in conformance with the Standard Specifications, revisions thereto, General Provisions and Special Provisions in a good workmanlike manner and to renew or repair any work which may be rejected due to defective materials or workmanship, prior to final completion and acceptance of the work, also we have the equipment, labor, supervision and financial capacity to perform this contract either with our organization or with Subcontractors.

LIQUIDATED DAMAGES. The Contractor is hereby advised that liquidated damages in the amount of

Three hundred dollars (\$300.00) per working day

will be assessed for unauthorized extensions beyond the contracted time of completion.

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
43 of 44

PROPOSAL GUARANTY. A bid security is not required on Contract Proposals under \$100,000.

A bid security totaling at least five percent (5%) of the bid amount will be required on contracts of \$100,000 or over.

Acceptable forms of security for bid guaranty shall be per GP-2.07.

Enclosed herewith, find bid security based on at least five percent (5%) of the aggregate amount of the bid submitted, and made payable to the "City of Hagerstown". The bid security shall be delivered per GP-2.08. This bid security is a Proposal Guaranty (which is understood will be forfeited in the event the contract is not executed, if awarded to the signer of this affidavit).

CONTRACT PROVISIONS
PROPOSAL FORM PACKET — FEDERAL

City Contract No. 20-CPTH-33
SHA Contract No. WA061B51
FAP No. AC-TAP-3(910)E
44 of 44

Commercial Nondiscrimination

- A. As a condition of entering into this Agreement, Contractor represents and warrants that it will comply with the State's Commercial Nondiscrimination Policy, as described under Title 19 of the State Finance and Procurement Article of the Annotated Code of Maryland. As part of such compliance, Contractor may not discriminate on the basis of race, color, religion, ancestry, national origin, sex, age, marital status, sexual orientation, sexual identity, genetic information or an individual's refusal to submit to a genetic test or make available the results of a genetic test or on the basis of disability, or other unlawful forms of discrimination in the solicitation, selection, hiring, or commercial treatment of subcontractors, vendors, suppliers, or commercial customers, nor shall Contractor retaliate against any person for reporting instances of such discrimination. Contractor shall provide equal opportunity for subcontractors, vendors, and suppliers to participate in all of its public sector and private sector subcontracting and supply opportunities, provided that this clause does not prohibit or limit lawful efforts to remedy the effects of marketplace discrimination that have occurred or are occurring in the marketplace. Contractor understands that a material violation of this clause shall be considered a material breach of this Agreement and may result in termination of this Agreement, disqualification of Contractor from participating in State contracts, or other sanctions. This clause is not enforceable by or for the benefit of, and creates no obligation to, any third party.
- B. The Contractor agrees to include the clause contained in subsection (A.), above, in all subcontracts, regardless of the tier.
- C. As a condition of entering into this Agreement, upon the request of the Commission on Civil Rights, and only after the filing of a complaint against Contractor under Title 19 of the State Finance and Procurement Article of the Annotated Code of Maryland, as amended from time to time, Contractor agrees to provide within 60 days after the request a complete list of the names of all subcontractors, vendors, and suppliers that Contractor has used in the past 4 years on any of its contracts that were undertaken within the State of Maryland, including the total dollar amount paid by Contractor on each subcontract or supply contract. Contractor further agrees to cooperate in any investigation conducted by the State pursuant to the State's Commercial Nondiscrimination Policy as set forth under Title 19 of the State Finance and Procurement Article of the Annotated Code of Maryland, and to provide any documents relevant to any investigation that are requested by the State. Contractor understands that violation of this clause is a material breach of this Agreement and may result in contract termination, disqualification by the State from participating in State contracts, and other sanctions.