Southeastern Pennsylvania Transportation Authority (SEPTA)

Request for Proposal

21-00208-ACAC

for

The Leasing and Servicing of Bus Tires
Lease and Service of Bus Tires

Contents

Part I – Instructions & Information

Part II – Contract

Attachments

1. Technical Proposal
2. Scope of Services
3. Price Proposal
4. Federal Transit Administration (FTA) Provisions for Contracts
5. Certification Regarding Lobbying
6. Disadvantaged Business Enterprise (DBE) Requirements
7. SEPTA Solicitation Statistics
8. Project Progress and Performance Evaluation
9. Certification Regarding Compliance with Immigration Reform and
   Control Act of 1986
10. Commonwealth of Pennsylvania Contract Requirements
11. SEPTA EEO/AA Contractual Requirements
Southeastern Pennsylvania Transportation Authority

Part I

Instructions and Information
Request for Proposal
The Leasing and Servicing of Bus Tires

SECTION 1 – INSTRUCTIONS AND INFORMATION FOR PROPOSERS

I. You (hereinafter referred to as “Proposer”) are requested to submit a formal proposal (hereinafter referred to as “Proposal”) for the required services detailed in Attachment 2 (hereinafter referred to as “Scope of Services”) in accordance with this Request for Proposal (RFP). Any information in addition to that required by this RFP which Proposer feels will help in the evaluation of its Proposal is to be submitted with its Proposal. Any Proposal submitted must comply with the requirements of this RFP as herein stated including all applicable Federal, State and Local laws, and is to be signed by an officer legally authorized to bind Proposer to a Contract (hereinafter referred to as “Contract”) and shall be submitted to SEPTA in writing, in the time and in the manner described herein.

II. FORM OF PROPOSAL

The Proposal must address all items set forth in Attachment 2, “Scope of Services.”

A. Technical Proposal: This shall include but not be limited to the following information:

1. A statement concerning Proposer’s interpretation of the Project objectives, and a description of the services as understood by the Proposer.

   The services described by Proposer must be fully responsive to this RFP. Eliminations or qualifications by Proposer of performance of services required by this RFP may result in a Proposal being judged non-responsive.

2. A Project organization chart identifying Proposer’s manager of the Project and all other “key” personnel. SEPTA retains the right to reject or accept proposed Project personnel. Resumes shall be provided identifying the qualifications and experience of the manager of the Project and all key personnel. Except as specified in Paragraph 6 of the attached Contract, SEPTA will not permit a change in the manager of the Project or key personnel after award, if any, to the successful proposing firm.

3. If the Proposer is a joint venture, then a copy of any written agreement that exists between the members of each party to the joint venture shall be included as part of the Technical Proposal. Such agreement shall fully discuss and identify the responsibility of the joint venture for performing the services, provided, however, the joint venture must comply with Section 37 of the contract.
B. **Price Proposal:** The price to SEPTA for performing all of the SEPTA required scope of services must be detailed in the Price Proposal. **The Price Proposal will be submitted to SEPTA as a SEPARATE DOCUMENT IN A SEALED ENVELOPE.** Price Proposals which exclude or restrict cost items necessary for a Proposer to perform the SEPTA required scope of services are not acceptable and may be considered by SEPTA as non-responsive to the RFP.

1. The Price Proposal shall be submitted using the form included in Attachment 3 along with any other additional information required to make it complete.

2. **The requirements of this RFP should be carefully reviewed by Proposer prior to preparation of its Price Proposal. In preparation of its Price Proposal, Proposer must assume that SEPTA will not make modifications to the terms of the Contract as attached.**

### III. RESPONSIBILITY OF PROPOSER

SEPTA will only award a contract to a firm which it has determined to be responsible. The Proposer shall furnish adequate documentation to permit SEPTA to determine the responsibility of Proposer within five (5) calendar days of SEPTA’s written request. A responsible Proposer is one that meets the following standards:

1. **Integrity and Ethics** - Has a satisfactory record of integrity and business ethics, in compliance with 49 U.S.C. Section 5325(j) (2) (A);

2. **Debarment and Suspension** – Is neither debarred nor suspended from Federal programs under DOT regulations, “Nonprocurement Suspension and Debarment,” 2CFR Parts 180 and 1200, or under FAR at 48CFR, Chapter 1 Part 9.4 or any Commonwealth of Pennsylvania funded programs. This contract will also be governed by the Contractor’s/Consultant’s responsibilities under 49 CFR, Part 29, regarding debarment, suspension, and other responsibility matters of any lower tier covered transactions, as applicable.

3. **Affirmative Action and DBE** – Is in compliance with the Common Grant Rules’ affirmative action and DOT’s Disadvantaged Business Enterprise requirements, 49 CFR, Part 26;

4. **Public Policy** – Is in compliance with the public policies of the Federal Government, as required by 49 U.S.C. Section 5325 (j) (2) (B) and Commonwealth of Pennsylvania public policies;

5. **Administrative and Technical Capacity** – has the necessary organization, experience, accounting, and operational controls and technical skills, or the ability to obtain them in compliance with 79 U.S.C Section 5325 (j) (2) (D);
6. **Licensing and Taxes** – Is in compliance with applicable licensing and tax laws and regulations;

7. **Financial Resources** – has, or can obtain, sufficient financial resources to perform the contract, as required by 49 U.S.C. Section 5325 (j) (2) (D);

8. **Production Capability** – Has, or can obtain, the necessary production, and technical equipment and facilities;

9. **Timeliness** – Is able to comply with the required delivery or performance schedule, taking into consideration all existing commercial and governmental business commitments;

10. **Performance Record** – Is able to provide a satisfactory current and past performance record.

### IV. GENERAL REQUIREMENTS:

#### A. SUBMISSION OF PROPOSALS

One (1) original copy of the Technical Proposal, plus 1 thumb-drive in “PDF” format and one (1) original copy of the Price Proposal, plus 1 thumb-drive in “PDF” format, in separate envelopes (clearly marked) shall be submitted to SEPTA’s Contract Administrator:

Caroline Caruso  
Contract Administrator  
Procurement, Supply Chain & DBE Division  
Southeastern Pennsylvania Transportation Authority  
1234 Market Street, 11th Floor  
Philadelphia, PA  19107-3780

#### B. DISADVANTAGED BUSINESS ENTERPRISE (DBE) GOAL

No Goal(s) Established  – No Goal has been established for this procurement. If the successful Proposer will be using a DBE subcontractor/subconsultant in conjunction with the contract, the Proposer must include the properly executed DBE Participation Schedule with their Technical Proposal. Please refer to the DBE section, Attachment #6.

#### C. SEPTA SOLICITATION STATISTICS SURVEY FOR DBE and NON-DBE CONTRACTOR/CONSULTANT AND SUB-CONTRACTOR/SUBCONSULTANT FORM

All Proposers are required to complete a SEPTA Solicitation Statistics Survey (See Attachment 7) for themselves and each of their DBE and non-DBE subcontractors/subconsultants in accordance with 49 CFR part 26.11. The form is to be signed by an officer legally authorized to bind the Proposer to a Contract and shall be submitted to SEPTA as part of their proposal.
D. RIGHTS RESERVED BY SEPTA
In submitting the proposal the Proposer understands that the right is reserved by SEPTA to reject any and all proposals and/or to negotiate separately with any firm in any manner deemed appropriate to serve its best interest. If any award of Contract is made as a result of these Proposals, it will be made on the basis of the Proposal(s) which best satisfied the intent of the RFP and other factors considered in the best interest of SEPTA. SEPTA is not liable for any expenses incurred by Proposers in the development of its Proposal or any subsequent activity related to the Proposal.

It is also understood and agreed that if the Proposer should withdraw any part or all of its proposal within ninety (90) calendar days after the Best and Final Offer (BAFO) without the consent of SEPTA, or shall refuse or be unable to enter into the Contract as provided with these documents, it shall be liable to SEPTA to the extent of SEPTA’s damages occasioned by such withdrawal, or refusal, or inability to enter to a contract.

E. MODIFICATIONS TO SEPTA'S FORM OF CONTRACT
If an award of Contract is made as a result of this RFP, the proposed form of Contract which the Proposer will be required to execute is attached to this RFP, and as such the Proposers are urged to review the Contract carefully. SEPTA may, at its sole discretion consider minor modifications to the terms of the proposed Contract. The Proposer must specifically request such modifications by providing the proposed language within the Questions & Answers phase. Any minor modifications submitted will be reviewed and either denied or accepted by SEPTA. Any subsequent requests for modifications may result in the proposal being deemed non-responsive and may lead to canceling any recommendation to award to a Proposer that makes such a request outside of the allotted period.

The Contract requires that all tasks described in the RFP and/or Proposal shall be the Proposer's sole responsibility and shall be performed by the Proposer and its subcontractors/subconsultants. As a result of the negotiation process (see RFP Section 2, "Selection Process"), SEPTA may elect to revise the services described in the RFP and the Proposal. The single document as amended through Addenda and negotiations shall then become an Attachment to the Contract instead of the RFP and Proposal. SEPTA expressly reserves the right to approve and/or modify, at its sole discretion, both form and substance of any written Contract entered into pursuant to this RFP.
F. **INSURANCE**  
Proposer and its subcontractor(s)/subconsultant(s) shall be required to provide, at their own cost and expense the insurance required in the Contract.

G. **PERFORMANCE EVALUATION**  
During the performance of the work, SEPTA will conduct at a minimum annually, a formal performance evaluation of the Contract (See Attachment 8).

H. **TAXES**  
Proposer, as a result of any contract entered into pursuant to this RFP, may be subject to certain business taxes imposed by, but not limited to, municipal, school district, Commonwealth of Pennsylvania and/or the Federal government.

As to the sales tax imposed by the Commonwealth and some municipalities, Proposer is directed to the provisions in Pennsylvania law found at 72 P.S. 72 §7201 et seq. SEPTA makes no representation that these statutes are the only relevant statutes that apply to this Request for Proposal.

Proposer acknowledges that nothing in this RFP constitutes legal advice by SEPTA thereon. Proposer, to whatever extent that Proposer deems necessary, must obtain its own legal advice on any question concerning relevant taxes. Proposer is responsible for making its own investigation to determine whether or not it is subject to municipal, school district, Commonwealth of Pennsylvania or Federal taxes and for paying for such tax if applicable. Proposers are hereby informed that SEPTA is obligated by law to furnish to governmental entities, upon their request, the name and address of any person or firm with whom SEPTA has a contract for goods and/or services.

I. **PROPOSAL SECURITY – Not Used**

J. **DISCREPANCIES – DUTY OF PROPOSER TO CLARIFY AMBIGUITIES**  
Should a Proposer find any discrepancy or ambiguity, or omission from the scope of work, or should it be in doubt as to their meaning, the Proposer must at once notify SEPTA’s Contract Administrator who will, if determined to be necessary, send a written addendum for clarification purposes to all Proposers. Only written modifications issued as addenda will effect changes in the RFP and/or Contract Documents. Failure of Proposer to clarify ambiguities prior to proposal submittal constitutes a waiver of their right to raise any such ambiguity.

K. **ADDENDA**  
The contents of all addenda to Proposers are to be incorporated in the proposal and will become part of the RFP and/or Contract Documents.

L. **CERTIFICATION REGARDING LOBBYING**  
By signing and submitting a proposal, the Proposer agrees to furnish the Certification Regarding Lobbying. The signed Certification may be submitted concurrent with the submission of the Technical Proposal. If the Certification is not submitted along with
the Technical Proposal, it shall be submitted within five (5) calendar days of proposal submittal, unless SEPTA grants, in writing, an extension (See Attachment 5).

M. CERTIFICATION REGARDING COMPLIANCE WITH IMMIGRATION REFORM AND CONTROL ACT OF 1986
By signing and submitting a proposal, the Proposer agrees to furnish the Certification Regarding Compliance with Immigration Reform and Control Act of 1986 in compliance with the requirements stated in 8 U.S.C. §1324 (a). The signed Certification must be submitted with the submission of the technical proposal (See Attachment 9).

N. NON-COLLUSION REQUIREMENT
In the event Proposer is recommended to the SEPTA Board for award, the Proposer hereby agrees to sign an Affidavit of Non-Collusion, if requested by SEPTA, in form acceptable to SEPTA prior to the award, if any, of the contract.

O. SEPTA’s RFP PROTEST PROCEDURE
The definitions, policies and procedures cited below are applicable to this section only.

1.0 PURPOSE

1.1 This section describes the policies and procedures governing the receipt and resolution of protests in connection with an Invitation for Bid (IFB) or Request for Proposal (RFP). This procedure is applicable to all procurements in excess of $100,000. Bid/proposal protests for procurements of less than $100,000 shall be informally handled by the Assistant General Manager of Procurement, Supply Chain & DBE of Procurement or his/her designee.

2.0 DEFINITIONS

2.1 "Interested Party" means any bidders/proposers.

2.2 "days" means business days.

2.3 “Filed” means the date of receipt by The Office of SEPTA’s Assistant General Manager of Procurement, Supply Chain & DBE of Procurement or his/her designee (hereinafter Assistant General Manager of Procurement, Supply Chain & DBE of Procurement).

2.4 “Federal/State Law or Regulation” means any valid requirement imposed by Federal, State, or other Statute or regulation.

2.5 “Presumptive Contractor/Consultant” means the bidder/proposer that is in line for award of the contract in the event that the protest is denied.
2.6 “Protestant” is an Interested Party who is aggrieved in connection with the solicitation or award of a contract and who files a protest.

3.0 TYPES OF PROTESTS/ TIME LIMITS

3.1 Pre-Bid/Proposal Protest is based upon alleged restrictive specifications or alleged improprieties in SEPTA’s procurement process. A Protestant must file a pre-bid/proposal protest no later than five (5) days prior to bid opening date by 4:30 p.m. Philadelphia prevailing time.

3.2 Pre-Award Protest is based upon alleged improprieties of a Bid/Proposal. A Protestant must file a pre-award protest no later than five (5) days after the Protestant knows or should have known of the facts giving rise thereto by 4:30 p.m. Philadelphia prevailing time.

3.3 Post-Award Protest is based upon the award of a contract. A Protestant must file a post-award protest no later than five (5) days after the notification to the unsuccessful firms of SEPTA’s intent to award, or no later than five (5) days after an unsuccessful firm becomes aware of SEPTA’s intent to award a contract, whichever comes first, by 4:30 p.m. Philadelphia prevailing time.

4.0 CONTENTS OF PROTEST

4.1 Protests must be in writing, and filed directly with the Office of SEPTA’s Assistant General Manager of Procurement, Supply Chain & DBE of Procurement, at the address indicated in the solicitation, and must contain the following information:

a. The name, address and telephone number of the Protestant; and

b. Identity of the IFB or RFP (by number and description); and

c. A detailed factual statement of the grounds for protest; and

d. The desired relief, action or ruling.

5.0 ACTION BY SEPTA

5.1 Procurement Process Status

Upon timely receipt of a protest, SEPTA will delay the opening of bids until after resolution of the protest for protests filed prior to the bid opening, or withhold award until after resolution of the protest for protests filed after bid opening. However, SEPTA may open bids or award a contract whenever SEPTA, at its sole discretion, determines that:
a. The items or work to be procured are urgently required; or

b. Delivery or performance will be unduly delayed by failure to make the award promptly; or

c. Failure to make prompt award will otherwise cause undue harm to SEPTA or a funding source.

If the protest is filed before the award of the contract, SEPTA will advise the Presumptive Contractor/Consultant of the pending protest.

5.2 If deemed appropriate, SEPTA may conduct an informal conference on the merits of the protest with all Interested Parties invited to attend.

5.3 Response to the Protest

SEPTA’s Assistant General Manager of Procurement, Supply Chain & DBE of Procurement will respond in detail to each substantive issue raised in the protest within a reasonable time after the protest is filed. SEPTA’s response shall address only the issues raised originally by the Protestant.

When, on its face a protest does not state a valid basis for protest or is untimely, the Assistant General Manager of Procurement, Supply Chain & DBE of Procurement may summarily dismiss the protest without requiring a detailed response.

5.4 Rebuttal to SEPTA Response

The Protestant may submit a written rebuttal to SEPTA’s response, addressed to the Assistant General Manager of Procurement, Supply Chain & DBE of Procurement, but must do so within five (5) days after receipt of the original SEPTA response. SEPTA will not address new issues raised in the rebuttal. After receipt of the Protestant’s rebuttal, the Assistant General Manager of Procurement, Supply Chain & DBE of Procurement will review the protest and notify the Protestant of his/her final decision.

5.5 Request for Additional Information

Failure of the Protestant to comply with a request for information as specified by SEPTA’s Assistant General Manager of Procurement, Supply Chain & DBE of Procurement, may result in determination of the protest without consideration of the additional information if subsequently produced. If any Interested Party requests information from another Interested Party, the request shall be made to SEPTA’s Assistant General Manager of Procurement, Supply Chain & DBE of Procurement, and, if SEPTA so directs, shall be complied with by the other party within five (5) days.
5.6 Request for Reconsideration

If data becomes available that was not previously known, or there has been an error of law, a Protestant may submit a request for reconsideration of the protest. SEPTA’s Assistant General Manager of Procurement, Supply Chain & DBE of Procurement will again review the protest considering all currently available information. The Assistant General Manager of Procurement, Supply Chain & DBE of Procurement’s determination will be made within a reasonable period of time, and his/her decision will be considered final.

5.7 Decision

Upon review and consideration of all relevant information the determination as issued by SEPTA will be final.

6.0 CONFIDENTIALITY OF PROTEST

Material submitted by a Protestant will not be withheld from any Interested Party, except to the extent that the withholding of information is permitted or required by law or regulation. If the Protestant considers that the protest contains proprietary material which should be withheld, a statement advising of this fact must be affixed to the front page of the protest submission and the allegedly protected information must be so identified whenever it appears.

7.0 FEDERAL TRANSIT ADMINISTRATION (FTA) INVOLVEMENT

Where procurements are funded by the FTA within five (5) business days from receipt of SEPTA’s final decision, the Protestant may file a protest with the FTA only where the protest alleges that SEPTA failed to have or failed to adhere to its protest procedures or there was a violation of Federal Law or Regulation. Any protest to the FTA must be filed in accordance with FTA Circular 4220.1F.

[END OF SECTION]
Request for Proposal
The Leasing and Servicing of Bus Tires

SECTION 2 – SELECTION PROCESS

I. TECHNICAL EVALUATION CRITERIA

The following criteria in descending order of importance will be used for the evaluation of Proposals according to SEPTA Procedures:

1. Project Approach:

   The Project Approach considers the Proposer’s specification per size of tire, and the execution of methods of an on-site service, which is to include, but is not limited to: Key personnel, supervision, employees, man-hours, equipment, and inventory control.

   a. Proposed tires: Provide specifications per tire size, original tread depth, mileage rating, ply rating, regroovable depth, retreading companies & methods to be used etc.
   b. Provide organizational chart for all Contractor's on-site employees up to project manager.
   c. Provide list of equipment including brand names and model numbers that shall be utilized to execute this contract.
   d. Provide sample tire usage predictions per location, per week.
   e. Provide floor plans for Contractor's tire shop, per location.
   f. Provide detailed method of inventory control: tire cards or electronic means.

2. Service Approach:

   The Service Approach addresses the delivery and achievement of all the provisions and service requirements identified within the specifications of the project. These provisions and service requirements should include but are not limited to: Servicing of the tires, repairing of the tires, balancing of the tires, inventory control, delivery of the tires, and wheel cleaning, etc.

   a. Provide OOS criterion for tires.
   b. Provide tolerances and methods for tire repair, regrooving and retreading.
   c. Provide tire balancing tolerances.
   d. Provide lists and MSDS sheets of wheel cleaners that will be utilized on SEPTA’s wheels and wheel polishing methods/products & methods to be used.
3. **Implementation Approach:**

The Implementation Approach addresses the start-up of the project on SEPTA’s sites which includes but is not limited to: Electrical provisions at each location, requirements needed for the furnished equipment, monthly schedules of necessary staff to operate each location, and any other necessary site adjustments.

a. Provide implementation plan per location.
b. Provide electrical requirements per shop.
c. Provide any special shop requirements for Contractor's equipment.
d. Provide the prospective monthly shift schedule for Contractor's employees per location.

4. **Past Performance:**

Past Performance considers the Proposer’s performance in previous tire leasing contracts. The past performance addresses capability, quality of work, on-time delivery performance, and will include referrals.

a. Provide contacts for the contractor's 3 largest lease contracts. This includes the fleet size and number of service locations.

II. **SELECTION**

A. SEPTA shall create a Selection Committee, composed of several SEPTA staff members which shall independently evaluate each Proposal on the evaluation criteria based upon the application of adjectival ratings. The standards and qualifications that follow have been developed to serve as indicators of expected performance or compliance with the requirements of the RFP. SEPTA may seek the assistance of external experts and/or consultants during the evaluation process. The adjectival ratings are as follows:

   **Superior:**
   Exceeds in all or most aspects the minimum requirements of the RFP. Offers solutions and responses to the Scope of Services that have a high probability of success. Provides cost effective advantages for the program and SEPTA. Response requires no modifications to conform and comply with the critical elements of the RFP.

   **Very Good:**
   Meets in all aspects and in some cases exceeds the minimum requirements of the RFP. Offers solutions and responses to the Scope of Services that have a high probability of success. Provides cost effective advantages for the program and SEPTA. No significant weaknesses or deficiencies. Response requires little or no modifications to conform and comply with the critical elements of the RFP.
Acceptable: Meets the minimum requirements of the RFP; Responses and solutions offer no significant advantages; reasonable probability of success; Weakness and/or deficiencies require some modifications to conform and comply with the critical elements of the RFP.

Marginal: Responses and solutions to the Scope of Services provide minimum probability of success. Significant weaknesses and deficiencies in the responses and solutions offered. Responses require significant modifications to conform and comply with the requirements of the RFP.

Unacceptable: Responses and solutions fail to meet the minimum requirements of the RFP. Information provided is insufficient to evaluate the response. Major revisions required to cure deficiencies.

These adjectival ratings are only guides to assist SEPTA in evaluating Proposals, and they do not mandate the automatic selection of a particular Proposal.

B. After making an evaluation of the technical proposals on the basis of the criteria set forth above, SEPTA may conduct interviews and request and receive additional information as it deems necessary from any Proposer deemed to be responsive to the RFP. If interviews are conducted, Proposers who are deemed to be non-responsive and/or have no reasonable chance of being selected will not be interviewed.

C. After all Proposals have been evaluated in accordance with the criteria set forth above, the Price Proposals will be reviewed and price will be considered in the overall evaluation. If any Proposal is determined to be acceptable based on the Technical Evaluation, interviews (if conducted), and Price, SEPTA may, without discussion or negotiation, proceed to award the Contract to that firm.

D. However, if no Proposal is acceptable without negotiation, those firms whose Proposals are determined by SEPTA to be within the competitive range may be contacted by letter from SEPTA to formally schedule negotiations. Competitive range will be determined by SEPTA and will consist of those firms whose proposals are determined to have a reasonable chance of being selected for award based on the technical evaluations and price.

E. No information, financial or otherwise, will be provided to any Proposer about any Proposals from other Proposers.

F. After all negotiations and discussions have been completed, each of the Proposers within the competitive range with whom negotiations have been conducted will be afforded the opportunity to submit a BEST AND FINAL OFFER (BAFO) (including Options). The BAFO shall be each Proposer’s most favorable Price Proposal for the Technical Proposal and business/contractual terms which have been clarified and
agreed upon during discussions and negotiations. The request for BAFOs will set forth the specific time and date for the submission of the BAFO. The BAFO (including Options) will be evaluated by SEPTA.

III. AWARD

A. As stated in Section I, Paragraph IV (General Requirements), E (Modifications to SEPTA’s Form of Contract) if any Proposer fails to submit minor modifications during the Questions & Answers phase and attempts to submit them subsequently may result in the proposal being deemed non-responsive. SEPTA may cancel a recommendation to award to a firm that makes such requests outside the allotted period.

B. SEPTA will make an award, if any, only to a firm that has been determined by SEPTA to be fully responsive and responsible to the RFP requirements, while taking into consideration the staff’s evaluation of the Technical Proposals, interviews (if conducted), and the BAFO. A recommendation to the SEPTA Board will be made of the firm that is the most advantageous to SEPTA.

[END OF SECTION]
Southeastern Pennsylvania Transportation Authority

Part II

Contract

for

The Leasing and Servicing of Bus Tires
# Contract
## for
### The Leasing and Servicing of Bus Tires

**Table of Contents**

1. Incorporation of Recitals ...................................................................................... 1
2. Contract Documents ............................................................................................. 1
3. Engaging of Contractor/Consultant ..................................................................... 2
4. Time of Performance ........................................................................................... 2
5. Data Available to Contractor/Consultant ............................................................. 2
6. Personnel To Be Used in Providing Services ...................................................... 2
7. Contractor/Consultant to Cooperate with SEPTA’s Designated Project
   Representatives ................................................................................................. 3
8. Total Contract Price ............................................................................................. 3
9. Method of Payment .............................................................................................. 4
10. Audit and Inspection of Books and Records ........................................................ 4
11. Overpayments ...................................................................................................... 5
12. All Information and Findings to Remain Confidential ........................................ 5
13. Data to Become Property of SEPTA ................................................................... 5
14. Interest of Contractor/Consultant ......................................................................... 5
15. Assignment of Rights, Delegation of Duties Restricted ...................................... 6
16. Subcontracting ..................................................................................................... 6
17. Interpretation of Scope ......................................................................................... 7
18. Changes ................................................................................................................ 7
19. Infringement of Patents, Trademarks and Copyrights ......................................... 8
20. Covenant Against Contingent Fees ..................................................................... 8
21. Termination for Convenience of SEPTA ............................................................. 8
22. Termination of Contract for Cause ...................................................................... 9
23. Indemnification .................................................................................................... 9
24. Insurance ............................................................................................................ 10
25. Personnel Security Measures ............................................................................. 14
26. Notices ............................................................................................................... 14
27. Compliance with Federal, State and Local Laws and Contract Requirements .. 15
28. Governing Law, Forum Selection, and Consent to Jurisdiction ........................ 15
29. Waiver of Breach of Contract ............................................................................ 15
30. SEPTA Equal Employment Opportunity/Affirmative Action Contractual
    Requirements ..................................................................................................... 15
31. Disputes.............................................................................................................. 16
32. Third Party Contract Rights ............................................................................... 16
33. Prohibited Interest .............................................................................................. 16
34. Integration ........................................................................................................... 16
35. Severability ......................................................................................................... 17
36. Disadvantaged Business Enterprise (DBE) Requirements ................................ 17
37. Joint and Several Liability ................................................................................... 17
38. Warranties .......................................................................................................... 17
39. Performance Bond ............................................................................................... 18
40. Liquidated Damages – Not Used ........................................................................ 19
41. Delivery ............................................................................................................... 19
<table>
<thead>
<tr>
<th>Attachment</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Technical Proposal</td>
<td>21</td>
</tr>
<tr>
<td>2</td>
<td>Scope of Services</td>
<td>23</td>
</tr>
<tr>
<td>3</td>
<td>Price Proposal</td>
<td>25</td>
</tr>
<tr>
<td>4</td>
<td>Federal Transit Administration (FTA) Provisions for Contracts</td>
<td>41</td>
</tr>
<tr>
<td>5</td>
<td>Certification Regarding Lobbying</td>
<td>48</td>
</tr>
<tr>
<td>6</td>
<td>Disadvantaged Business Enterprise (DBE) Requirements</td>
<td>50</td>
</tr>
<tr>
<td>7</td>
<td>SEPTA Solicitation Statistics</td>
<td>62</td>
</tr>
<tr>
<td>8</td>
<td>Project Progress And Performance Evaluation Form</td>
<td>64</td>
</tr>
<tr>
<td>9</td>
<td>Certification Regarding Compliance With Immigration Reform and Control Act of 1986</td>
<td>67</td>
</tr>
<tr>
<td>10</td>
<td>Commonwealth of Pennsylvania Contract Requirements</td>
<td>69</td>
</tr>
<tr>
<td>11</td>
<td>SEPTA EEO/AA Contractual Requirements</td>
<td>80</td>
</tr>
</tbody>
</table>
Contract
for
The Leasing and Servicing of Bus Tires

THIS CONTRACT, entered into this _______ day of ____________________, 20_______, by and
between the Southeastern Pennsylvania Transportation Authority ("SEPTA"), a body corporate
and politic exercising the power of the Commonwealth of Pennsylvania as an agency and
instrumentality thereof, with offices located at 1234 Market Street, Philadelphia, Pennsylvania
and __________________________________________________________ (hereinafter called
"Contractor/Consultant"), a ______________________________, organized under the laws of
____________________ with principal offices located at ______________________________
_________________________________________________________________.

W I T N E S S E T H:

WHEREAS, SEPTA is involved in an undertaking known as The Leasing and Servicing of Bus
Tires (hereinafter known as the "Project"); and

WHEREAS, SEPTA desires to engage Contractor/Consultant to perform certain technical and
professional services in connection with the Project as more fully set forth hereinafter; and

WHEREAS, Contractor/Consultant has agreed to comply with all requirements of the Contract as
set forth in the accompanying Attachments 1 through 11 attached hereto and made part hereof.

NOW, THEREFORE, in consideration of the mutual covenants herein contained, the parties
hereto, intending to be legally bound hereby, agree as follows:

1. Incorporation of Recitals

The recitals above are hereby incorporated into the Body of the Contract.

2. Contract Documents

Attachments 1 through 1, inclusive, are hereby incorporated into this document and the
Attachments are deemed to be a part thereof.

Attachments 4 and 10 are a notice and a summary of notices by SEPTA of the requirements
that the Federal Government and Commonwealth of Pennsylvania impose on contracts which
they fund in whole or in part. Contractor/Consultant acknowledges that Attachments 4 and
10 do not constitute legal advice by SEPTA thereon. Hence, Contractor/Consultant, to
whatever extent Contractor/Consultant deems necessary, must obtain its own legal advice on
these requirements.
3. **Engaging of Contractor/Consultant**

SEPTA hereby agrees to engage Contractor/Consultant to perform, and Contractor/Consultant hereby agrees to perform, all the services hereinabove referenced and hereinafter described and more fully set forth in Attachments 1 through 11.

4. **Time of Performance**

   a. Contractor/Consultant shall perform all the services required under the Contract within a total of 1,825 calendar days from the effective date stated in SEPTA's written Notice to Proceed.

   b. Contractor/Consultant shall commence performance promptly upon the effective date stated in SEPTA's Notice to Proceed. Time is of the essence in the performance of services under the Contract.

   c. Contractor/Consultant understands and agrees that any costs incurred prior to the effective date stated in a Notice to Proceed are not allowable costs and Contractor/Consultant will not be reimbursed by SEPTA for any such costs.

   d. Contractor/Consultant shall meet all other time limits set forth in Attachments 1 through 11.

5. **Data Available to Contractor/Consultant**

   All SEPTA maintained information, reasonably available and necessary for carrying out the services required to be performed under the Contract, shall be furnished to Contractor/Consultant. Contractor/Consultant shall familiarize itself with SEPTA operations and with the Project to the extent necessary to furnish the services required under the Contract.

6. **Personnel To Be Used in Providing Services**

   a. **Responsibility for Personnel**
   Contractors/Consultant agrees that all personnel used in performance of the Contract shall be considered employees of Contractor/Consultant or its subcontractors/subconsultants and in no event shall any of the personnel employed in the performance of the Contract be considered employees of SEPTA.

   b. **Only Certain Employees to Perform Services**
   Contractor/Consultant shall provide SEPTA with a list of all Proposer’s (and/or subcontractor’s) managers and field representatives who will perform services under the Contract.

   Contractor/Consultant shall furnish a resume, brief biographical sketch and services history of each person involved with performing services required under the Contract.
Personnel designated within the proposal as "Key Personnel" for the performance of the required services, shall not be removed nor have their level of participation reduced by the Contractor/Consultant prior to the completion of their assignment under the Contract without the prior written approval of SEPTA.

Contractor/Consultant agrees that it will perform all the services required under the Contract using employees of Contractor/Consultant or its authorized subcontractors/subconsultants. Contractor/Consultant further agrees that none of the personnel performing services under the Contract has or shall have any contractual, financial or familial relationship with SEPTA or any of its officers, employees or agents or with any agency providing funds to SEPTA at any time during the course of the Contract.

c. Only Professionally Qualified Employees to Perform Services
All of Contractor/Consultant’s personnel providing services under the Contract shall be technically qualified to perform the services required hereunder and, unless otherwise provided herein, as required by the nature of the services, will be fully licensed in the Commonwealth of Pennsylvania and authorized in conformity with all state licensing requirements and all governmental statutes, ordinances, and other provisions dealing with the services provided by such personnel.

7. Contractor/Consultant to Cooperate with SEPTA's Designated Project Representatives

Contractor/Consultant shall cooperate with and coordinate all of the efforts of its personnel with SEPTA's Project Manager, who shall be responsible for technical direction provided by SEPTA, and SEPTA's Contract Administrator, who shall be responsible for the administration of the Contract on SEPTA's behalf (sometimes collectively referred to as "Project Representatives"). All changes in the services to be performed must receive the prior written authorization of SEPTA’s Contract Administrator. The Project Representatives shall also monitor and review the progress of the Proposer Services in order to aid in the program coordination. The participation by the Project Representatives shall not relieve the Contractor/Consultant from its obligations under the terms of the Contract.

Contractor/Consultant shall take direction, within the scope of services contemplated by the Contract, from SEPTA's Project Representatives in carrying out the Project but shall remain solely professionally responsible for the services.

8. Total Contract Price

Contractor/Consultant agrees to complete performance of all services required by the Contract documents at a total cost to SEPTA not to exceed ______________________ Dollars ($__________________________) which shall be in accordance with pricing submitted in attachment #3 “Price Proposal” or Best & Final Offer (BAFO), if applicable. Said total cost to SEPTA hereinafter referred to as "Total Contract Price."
9. **Method of Payment**

   a. To obtain payment of a portion of the Total Contract Price, Contractor/Consultant may submit to SEPTA, not more than once each calendar month, an invoice for payment for services rendered in the preceding month, in such form and reasonable detail as SEPTA may require. Such invoices shall not be for amounts inconsistent with the actual physical progress of the services Contractor/Consultant has performed on the Project as determined by SEPTA's Project Representatives. If the Contractor/Consultant uses a DBE, each invoice shall include a DBE Invoice Payment Report (a sample copy of the DBE Invoice Payment Report is attached to the Contract). In each invoice Contractor/Consultant shall:

      (1) Certify that all services described were performed in conformity with the terms of the Contract and that it is entitled to receive the amounts specified under the terms of the Contract in accordance with said description.

   b. Payments due to Contractor/Consultant under the Contract shall be made within thirty (30) calendar days after written approval of Contractor/Consultant’s invoice by SEPTA's Project Representatives.

10. **Audit and Inspection of Books and Records**

Contractor/Consultant shall keep written records in reasonable detail of all services performed by it under the Contract. All written records, reports, work sheets, data, and information prepared, generated, or obtained in connection with Contractor/Consultant’s performance of services for SEPTA shall be made available during the term of the Contract and for a period of five (5) years thereafter, together with all books and other data or information, in whatever form contained, relating to Contractor/Consultant’s performance under the Contract. Contractor/Consultant shall permit the audit and examination of the aforementioned material, including the making of excerpts and transcriptions, by appropriate officers or representatives of SEPTA and any governmental funding agency providing financial assistance for the Project, including the United States Department of Transportation, the Office of the Comptroller General of the United States, and the Pennsylvania Department of Transportation.

Contractor/Consultant shall require its subcontractor/subconsultants to keep written records in reasonable detail of all services performed by them for Contractor/Consultant under the Contract and to maintain all books, data, information and records in a form that will support the invoice billed to Contractor/Consultant. Contractor/Consultant shall further require that all written records, reports, work sheets, data, and information prepared, generated, or obtained in connection with such subcontractor’s/subconsultant’s performance of services for Contractor/Consultant shall be made available during the term of the Contract and for a period of five (5) years thereafter to SEPTA, together with all books and other data or information, in whatever form contained, relating to such subcontractor’s/subconsultant’s performance for Contractor/Consultant.
11. **Overpayments**

If at any point SEPTA determines that Contractor/Consultant has been overpaid, SEPTA’s Contract Administrator shall notify Contractor/Consultant in writing of the overpayment. Contractor/Consultant shall remit the amount of the overpayment to SEPTA within thirty (30) calendar days of said notification or notify SEPTA of its disagreement. If Contractor/Consultant does not agree with SEPTA’s determination, it shall follow the dispute process outlined in Paragraph 31, “Disputes.”

12. **All Information and Findings to Remain Confidential**

Contractor/Consultant agrees that all information relating to research investigations (patentable or unpatentable), specifications and other evaluations, drawings, tracings, plans, and other data which have been obtained by Contractor/Consultant from SEPTA or are evolved or developed by Contractor/Consultant (or by others under his direction or supervision) in connection with the performance of the Contract or the efforts in conjunction with employees of SEPTA shall be deemed to be confidential information belonging solely to SEPTA. Further, during the term of the Contract and thereafter for a minimum period of three (3) years after the services, Contractor/Consultant shall not use or disclose such information for any purpose (or permit its usage or disclosure by others under Contractor/Consultant's supervision or direction) except to the extent necessary to perform services under the Contract, unless Contractor/Consultant can demonstrate to the satisfaction of SEPTA that such information was actually known to Contractor/Consultant prior to the Contract or was independently and properly obtained or developed by Contractor/Consultant apart from any connection with SEPTA or its employees, directly or indirectly, without breach of any confidential relationship or was publicly available. Contractor/Consultant, through the use of employment contracts and other legally acceptable methods, shall ensure that during the term of the Contract and for three (3) years after the services, none of its employees or former employees accept any employment or assignment which uses any of the information developed in connection with this Project.

13. **Data to Become Property of SEPTA**

All data, notes and other works developed in the performance of the Contract shall become the sole property of SEPTA and may be used on any other Project without additional compensation to Contractor/Consultant. Contractor/Consultant agrees not to assert or authorize others to assert any rights nor establish any claim under the design patent or copyright laws. Contractor/Consultant, for a period of three years after completion of the Project, agrees to furnish all retained works on the request of SEPTA's Project Representative. Unless otherwise provided in the Contract, Contractor/Consultant shall have the right to retain copies of all works beyond such period.

14. **Interest of Contractor/Consultant**

Contractor/Consultant agrees, for itself and its employees involved in this Project, that it has no interest and shall not acquire any interest, direct or indirect, including any business interest
or other pecuniary or beneficial interest which would conflict in any way whatsoever with performance of services in connection with the Project. In addition, Contractor/Consultant is hereby referred to the provisions of Paragraph 6 “Personnel To Be Used in Providing Services,” of the Contract.

15. Assignment of Rights, Delegation of Duties Restricted

Contractor/Consultant shall not assign any rights arising under the Contract without the prior written consent of SEPTA. Contractor/Consultant shall not delegate, without the prior written consent of SEPTA, any duties in performance of services under the Contract.

16. Subcontracting

a. Subcontracting Restricted

Beyond those subcontractors/subconsultants proposed by the Contractor/Consultant and made part of the Contract, Contractor/Consultant shall not subcontract any portion of the services which are the subject of the Contract without the prior written consent of SEPTA. Contractor/Consultant agrees to be fully liable and responsible for the acts and omissions of subcontractors and subconsultants just as Contractor/Consultant is for the acts and omissions of persons employed by Contractor/Consultant.

b. Award of Subcontracts and Other Contracts for Portion of the Work

(1) Any new or additional or substituted subcontractor/subconsultant proposed by Consultant after the award shall be subject to the prior written approval of SEPTA's Project Representative.

(2) Consultant shall not make any substitution of any subcontractor/subconsultant or for any person or organization that has been previously accepted by SEPTA as part of the Contract unless and until requested to do so by SEPTA and/or unless such substitution is expressly approved by SEPTA in writing. No increase in total contract price shall be allowed for any such substitution.

c. Subconsultant/Subcontractor Relations

The Contractor/Consultant shall deal with each Subcontractor/Subconsultant in accordance with the terms and conditions of a written Contract between the Contractor/Consultant and such Subcontractor/Subconsultant. Said written Contract shall not be inconsistent with any term or condition of the Contract, shall include all terms and conditions required by the Contract and shall in every respect protect SEPTA's interests in the Work and the conduct thereof.

In the absence of good and sufficient reasons, within twenty (20) business days of the receipt of payment from SEPTA by the Contractor/Consultant, the Contractor/Consultant shall pay each Subcontractor/Subconsultant with whom it has contracted their earned share of the payment the Contractor/Consultant received.
In addition, Contractor/Consultant shall pay its Subconsultant(s)/Subcontractor(s) any retainage Contractor/Consultant has withheld from its Subconsultant(s)/Subcontractor(s) within twenty (20) business days after a Subconsultant’s/Subcontractor’s work is satisfactorily completed.

With regard to any claim or dispute with respect to payment of a subconsultant or subcontractor, or supplier at any tier, Contractor/Consultant expressly agrees to defend, indemnify and hold SEPTA harmless in the event any suit is brought on account of a dispute between any of the parties including but not limited to subconsultants, subcontractors, suppliers and materialmen and in particular, Contractor/Consultant shall assume the defense affirmatively at its sole cost whenever such suit is brought in any jurisdiction.

17. Interpretation of Scope

SEPTA's Project Manager and/or Contact Administrator shall have the right to make, in writing, interpretations of the scope of services.

18. Changes

a. The services set forth in Attachments 1 through 11 of the Contract may be reduced, modified or expanded within or beyond the scope of the Contract by written modifications executed by SEPTA and Contractor/Consultant.

Except as provided in paragraph "b" below, in the event that SEPTA requires a reduction, expansion, or modification of the services, SEPTA shall issue to Contractor/Consultant a written notification which specifies such reduction, expansion, or modification. Within fifteen (15) calendar days after receipt of the written notification, Contractor/Consultant shall provide SEPTA's Contract Administrator with a detailed price and schedule proposal for the services to be performed or to be reduced. This proposal may be accepted or rejected by SEPTA or modified by negotiations between Contractor/Consultant and SEPTA. A written Amendment to the Contract shall be executed by both parties.

b. Notwithstanding paragraph "a" above, SEPTA may at any time, by written order, make changes within the general scope of the Contract to the services to be performed by Contractor/Consultant. If any such change causes an increase or decrease in the price of, or the time required for, the performance of any portion of the services under the Contract, SEPTA's Contract Administrator shall make equitable adjustment in any one or more of the following: price; completion schedule; or other affected terms; and shall modify the Contract in writing accordingly. Any claim by Contractor/Consultant for adjustment under this paragraph must be asserted within thirty (30) calendar days from the date of receipt by Contractor/Consultant of the notification of change; provided however that SEPTA's Contract Administrator, if the Contract Administrator decides that the facts justify such actions, may receive and act upon such claim at any time prior to final payment under the Contract. Failure to agree to any adjustment shall be a dispute within the meaning of Paragraph 31 Disputes. However, nothing in this
paragraph shall excuse Contractor/Consultant from proceeding with the Contract as changed.

c. No services for which an additional amount will be charged by Contractor/Consultant shall be furnished without the prior express written authorization of SEPTA's Contract Administrator.

19. Infringement of Patents, Trademarks and Copyrights

Contractor/Consultant shall defend, indemnify and save harmless SEPTA, its Board Members, officers, agents, servants, workers, employees, subsidizers and indemnities from liability of any kind and will pay all costs and expenses, including consequential damages, for or on account of or existing from any infringement or violation or alleged violation of any patent, trademark and/or copyright or any right of any person, firm or corporation resulting from any act, omission or negligence on the part of Contractor/Consultant in performance of the Contract.

20. Covenant Against Contingent Fees

Contractor/Consultant hereby warrants that it has not employed or retained any company or person other than a bona fide employee working for Contractor/Consultant solely to solicit or secure the Contract and that it has not paid or agreed to pay any person or company other than a bona fide employee working solely for Contractor/Consultant, any fee, commission, percent or brokerage fee, gift or other consideration contingent upon or resulting from the award or making of the Contract. In the event of breach or violation of this warrant, SEPTA shall have the right to terminate the Contract without further liability to Contractor/Consultant or to any third party.

21. Termination for Convenience of SEPTA

SEPTA shall have the right to terminate the Contract, in whole or in part, at any time by written notice to the Contractor/Consultant. The Contractor/Consultant shall be paid all reasonable costs as determined by SEPTA in accordance with 48 CFR Subpart 31.2, that specifies the special treatment of certain costs under Subpart 31.2, Section 31.205-42, “Termination Costs.”

Such costs will include contract work performed up to the date of termination; any actual costs associated with termination for convenience, as agreed to by SEPTA; and profit on Work performed up to the time of termination. However, the agreed amount may not exceed the Contract Sum. Furthermore, SEPTA will not pay any anticipatory profits and/or consequential damages claimed by the Contractor/Consultant as a result of termination of the Contract. The amount of profit paid shall be determined by the parties based on the amount of actual work completed. The Contractor/Consultant shall submit promptly its termination claim to SEPTA and SEPTA shall determine the settlement amount to be paid the Contractor/Consultant. If the Contractor/Consultant has any property in its possession
belonging to SEPTA, the Contractor/Consultant shall account for same and dispose of it in the manner SEPTA directs.

22. Termination of Contract for Cause

If Contractor/Consultant fails to remedy to SEPTA's satisfaction the breach or default of any of the terms, covenants, or conditions of the Contract within ten (10) calendar days after receipt by Contractor/Consultant of written notice from SEPTA setting forth the nature of said breach or default and/or if the Contractor/Consultant is suspended or debarred by any federal agency or by the Commonwealth of Pennsylvania, SEPTA shall have the right to terminate the Contract without any further obligation to Contractor/Consultant. Any such termination for cause shall not in any way operate to preclude SEPTA from also pursuing all available remedies against Contractor/Consultant.

In the event that SEPTA elects to waive its remedies for any breach by Contractor/Consultant of any covenant, term or condition of the Contract, such waiver by SEPTA shall not limit SEPTA's remedies for any succeeding breach of that or of any other term, covenant, or condition of the Contract.

In the event that it is ultimately determined by SEPTA that the Contractor/Consultant was not in default or that the failure to perform arose out of causes beyond the control and without fault of the Contractor/Consultant, the termination shall be treated as one of convenience and the Contractor/Consultant's sole rights and exclusive remedies shall be those set forth in Paragraph 21.

The Contractor/Consultant will only be paid the contract price for supplies delivered and accepted, or services performed in accordance with the manner of performance set forth in the contract.

23. Indemnification

In addition to all other obligations of Indemnification specified herein, Contractor/Consultant agrees to release and be liable for and to defend, indemnify and save harmless SEPTA, its Board members, officers, agents, servants, workers, employees, subsidizers and indemnities, the Pennsylvania Department of Transportation, the City of Philadelphia and any and all government funding agencies providing funds or services in connection with this Project (hereinafter collectively referred to as “SEPTA”), from and against any and all loss, cost, damage, liability and expense, including consequential damages, counsel fees, whether or not arising out of any claim, suit or action at law, in equity, or otherwise, of any kind or nature whatsoever, including negligence, arising out of the performance of the work by reason of any accident, loss or damage of property, including the work site, property of SEPTA and Contractor/Consultant, or injury, including death, to any person or persons, including employees of SEPTA, Contractor/Consultant, which may be sustained either during the term of the Contract, or upon or after completion of the Project, whether brought directly by these persons or by anyone claiming under or through them including heirs, dependents and estates.
Contractor/Consultant also agrees for itself and on behalf of its agents, servants, subconsultants/ subcontractors, materialmen and employees to defend, indemnify and hold harmless SEPTA from and against any and all claims of any kind or nature whatsoever regarding subconsultants/subcontractors and materialmen and agrees to assume the defense of SEPTA to any such suit at its cost and expense. The Contractor/Consultant further assumes the risk of loss and damage to materials, machinery and equipment to be incorporated in the Work at all times prior to delivery to the Project site or while in the possession or under the control of the Contractor/Consultant.

Contractor/Consultant, for itself and its employees, Board members, officers, agents, servants, workers, contractors/consultants, subconsultants/subcontractors, licensees and invitees , or any other person working on Contractor/Consultant’s behalf, hereby releases and agrees to be liable for and to defend, indemnify and save harmless SEPTA, even if SEPTA is negligent in whole or in part, for any claims made by an employee, Board member, officer, agent, workman or servant of the Contractor/Consultant’s or any other person working on Contractor/Consultant’s behalf, including claims for compensation or benefits payable to any extent by or for Contractor/Consultant under any workers’ or similar compensation acts or other employee benefit acts, and Contractor/Consultant expressly waives its statutory protection under §303, as amended, of The Pennsylvania Workers’ Compensation Act, 77 P.S. §481 (b).

In addition, Contractor/Consultant shall indemnify SEPTA for any fines and legal fees incurred because employees, agents, or workers supplied by Contractor/Consultant are not authorized to work in the United States.

24. Insurance

The Contractor shall purchase and maintain such insurance as will protect it from claims set forth below which may arise out of or result from the Contractor's operations under the Contract, whether such operations are by itself or by any Subcontractor or by anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable for (Note: All insurance carriers providing this coverage shall have an A.M. Best Rating of “A-” or greater):

1. claims under workmen's compensation, disability benefit and other similar employee benefit acts;

2. claims for damages because of bodily injury, occupational sickness or disease, or death of its employees;

3. claims for damages because of bodily injury, sickness or disease, or death of any person other than its employees;
4. claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the Contractor, or (2) by any other person; and

5. claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.

B. EVIDENCE OF COMPLIANCE

1. Certificates of Insurance
Simultaneously with the execution of the Agreement, the Contractor shall furnish Southeastern Pennsylvania Transportation Authority (SEPTA) with CERTIFICATES OF INSURANCE and any other documents which SEPTA may require, such as copies of policies or endorsements, as evidence of compliance with these Insurance Requirements which are an integral part of the Contract. In the Description of Operations section of the Insurance Certificate please include the RFP number 21-00208-ACAC Lease and Service of Bus Tires.

2. Written Approval Required
Such Certificates or other documents must be approved in writing by the SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY, before a Notice to Proceed will be given.

C. POLICIES TO REMAIN IN FORCE

1. Until completion and acceptance
All insurance coverage which the Contractor is required to provide for the Contract shall be maintained in full force and effect until all of the Work of the Contract shall have been completed and accepted by SEPTA.

2. All policies shall provide for not less than (10) days or more than thirty (30) days written notice to SEPTA before cancellation by the Company issuing the insurance. If such notice is not provided for within the basic terms of the policy, it shall be provided by endorsement or notation on the Certificate.

3. Replacement coverage required
In the event that any or all of the insurance coverages required by the Contract are cancelled, are reduced below the required minimum limits or lapse, then the Contractor will be suspended from further prosecution of the Work until such time as replacement coverage satisfactory to SEPTA has been obtained and is in force.

D. ADDITIONAL INSUREDS REQUIRED
The Contractor shall have all liability policies designated "Additional Insureds Required" endorsed to include the following as Additional Insureds: SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY.
ADDITIONAL INSURED LANGUAGE:

1. SEPTA must be provided with true copies of declaration pages and policies of insurance upon request.

2. SEPTA is to be listed as additional insured on all applicable liability policies excluding Workers Compensation and Professional Liability.

3. Workers Compensation must provide a waiver of subrogation.

4. Each policy shall state that the insurance provided to the additional insureds is primary and non-contributory to any other insurance available to the additional insured.

5. SEPTA must be the certificate holder on all applicable liability coverage with respect to this project and it should be noted on the insurance certificate and policies.

6. SEPTA must be provided with proof of insurance that demonstrates compliance with these requirements as well as all limit as and other mandated aspects of coverage.

E. CONTRACTUAL LIABILITY (HOLD HARMLESS) COVERAGE
   Policy shall be written or endorsed to include coverage for the liability assumed by the terms of the Contract and the Indemnification Agreement. Certificate or policy will state that the coverage applies to the Contract described as: The Leasing and Servicing of Bus Tires.

F. WAIVER OF LIABILITY FOR PREMIUMS
   All policies wherein the parties designated in Paragraph C. above are included as additional insureds shall contain a Waiver of Liability for the payment of premiums covering those additional Insureds.

G. SELF-INSURANCE RETENTION LANGUAGE
   Self-Insurance Retention (SIR) is limited to $50,000 or less, subject to SEPTA’s approval. Every self-insured retention must be declared to SEPTA.

H. The contractor shall, as a condition of the contract, provide and maintain at its own cost and expense the following kinds and amounts of insurance. The insurance required shall be written for not less than any limits of liability specified below or required below, whichever is greater.

1. GENERAL LIABILITY INSURANCE (excluding vehicles)
   Comprehensive General Liability Insurance for Bodily Injury and Property Damage to others. Covering CGL on an “occurrence” basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than $1 Million combined single limit per occurrence and $2 Million aggregate.
a. **Minimum Limits of Liability**
   - Products/Completed Operations Aggregate Per Project $2,000,000
   - Personal and Advertising Injury Limit $1,000,000

b. **Products Completed Operations**
   This insurance must be maintained for at least 12 years after substantial completion and acceptance of the project, or to the applicable Statute of Repose in the jurisdiction where the Project is located, whichever is longer.

   Policy shall be written or endorsed to include as additional Insureds those parties or persons designated and apply on a Primary/Non-Contributory basis.

c. **Additional Insureds**
   Policy shall be written or endorsed to include as additional Insureds those parties or persons designated and apply on a Primary/Non-Contributory basis.

d. Coverage: Premises operation; blanket contractual liability; personal injury liability; products and completed operations; independent contractors, employees and volunteers as additional insureds; cross liability and broad form property damage (including completed operations), explosion, collapse and underground damage (XCU).

2. **AUTOMOBILE LIABILITY**
   Liability Insurance (covering all autos, trucks, and other vehicles used in connection with this Project or Contract) for bodily injury and Property Damage to others.

   a. **Minimum Limits of Liability**
      $1 Million combined Single Limit (Bodily Injury and Property Damage) per occurrence.

   b. **Additional Insureds**
      Policy shall be written or endorsed to include as additional Insureds those parties or persons designated and apply on a Primary/Non-Contributory basis.

   c. **Hired and Other Non-Owned Vehicles**
      Vehicle Liability Policy shall be written or endorsed to include coverage for Hired, Leased or other Non-Owned Vehicles.

3. **WORKER’S COMPENSATION/EMPLOYERS’ LIABILITY INSURANCE**
   Workers Compensation of not less than $1,000,000 and Employer’s Liability Insurance with limit of no less than $1,000,000 per accident for bodily injury or disease. Must include a Waiver of Subrogation where permitted by state law, naming Southeastern Pennsylvania Transportation Authority (SEPTA).
4. **UMBRELLA/EXCESS LIABILITY INSURANCE**

   a. $5 Million Combined Single Limit per Occurrence

   b. $5 Million Annual Aggregate

   c. Policy to apply excess of the Commercial General Liability (following form Per Project Aggregate Limit), Commercial Automobile Liability and Employer’s Liability Coverages and “drop-down” for defense and indemnity in the event of exhaustion of the underlying insurance, to the extent such insurance is used to satisfy the above-noted requirements.

   d. Additional Insureds
      Policy shall be written or endorsed to include as additional Insureds those parties or persons designated and apply on a Primary/Non-Contributory basis.

I. **PAYMENT OF SEPTA CLAIMS**

   Contractor shall require its insurance carrier(s) to make checks in payment of SEPTA claims payable directly to SEPTA.

25. **Personnel Security Measures**

   SEPTA reserves the right to impose personnel security measures upon the Contractor/Consultant and its employees as SEPTA deems necessary and appropriate to ensure the safety of its patrons, employees and property. These measures may include, but are not limited to, registration of all employees of the Contractor/Consultants and its subcontractors/subconsultants who shall be working on SEPTA property, photo identification of all registered employees, and background investigations of all registered employees. In addition, SEPTA reserves the right to institute personnel security measures, which may be imposed at any time during the course of the Work. SEPTA shall assume the costs of such security measures. The Contractor/Consultant and its employees shall cooperate fully with SEPTA in implementing and enforcing security measures on SEPTA property. The Contractor/Consultant shall be notified by SEPTA, in writing, regarding what is required by SEPTA to carry out any personnel security measures that are being imposed on the Contractor/Consultant.

26. **Notices**

   All Notices given by either party to the other shall be effective only if given in writing and sent to the following addresses of the parties, or to such other address as may be designated in writing by the parties:

   TO SEPTA:  Assistant General Manager of Procurement, Supply Chain & DBE Procurement, Supply Chain & DBE Division Southeastern Pennsylvania Transportation Authority 1234 Market Street, 11th Floor Philadelphia, PA 19107-3780
27. Compliance with Federal, State and Local Laws and Contract Requirements

Contractor/Consultant shall comply in performance of services hereunder with all applicable laws, ordinances and regulations, judicial decrees or administrative orders, ordinances and codes of federal, state and local governments. See Attachments 4 and 10.

28. Governing Law, Forum Selection, and Consent to Jurisdiction

All matters or claims arising out of, related to, or in connection with the Contract, the Project or the relationship between the parties shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania without giving effect to the principles of conflicts of laws of such state. All matters, disputes, claims, litigation, or proceedings of any nature whatsoever based upon, arising out of, under or in connection with the Contract, the Project or relationship between the parties shall be solely and exclusively brought, maintained, resolved, and enforced in the state or federal courts located in the City of Philadelphia, Pennsylvania, irrespective of any procedural rules or laws related to venue and forum non convenes, including but not limited to any choices Contractor/Consultant may have under any such rules or law. Contractor/Consultant hereby expressly consents to the jurisdiction of the state and federal courts located in the City of Philadelphia and hereby expressly and irrevocably waives any objection which Contractor/Consultant may have or hereafter may have to jurisdiction or venue in the state and federal courts located in the City of Philadelphia and any claim that such court is inconvenient or lacks personal jurisdiction over Contractor/Consultant. Contractor/Consultant represents and acknowledges that the choice of jurisdiction and venue described above is reasonable and has been freely and voluntarily made by Contractor/Consultant. Further, the choice of jurisdiction and venue described above shall be mandatory and not permissive in nature, thereby precluding the possibility by Contractor/Consultant of litigation or trial in any other jurisdiction, court or venue other than specified above, except that any final judgment may be enforced in other jurisdictions in any manner provided by law.

29. Waiver of Breach of Contract

No waiver of any breach of any covenant, term, or condition of the Contract shall constitute a waiver of such covenant, term, or condition, or of any subsequent breach thereof.

30. SEPTA Equal Employment Opportunity/Affirmative Action Contractual Requirements

Contractor/Consultant covenants and agrees to abide by all stipulations attached hereto and made a part hereof as Attachment 11 for all services to be performed in connection with the Contract.
31. **Disputes**

   a. Disputes arising in the performance of the Contract which are not resolved by agreement of the parties shall be decided in writing by the authorized representative of SEPTA's Assistant General Manager of Procurement, Supply Chain & DBE of Procurement. This decision shall be final and conclusive, unless within ten (10) calendar days from the date of receipt of its copy, the Contractor/Consultant or SEPTA Project Manager mails or otherwise furnishes a written appeal to the Assistant General Manager of Procurement, Supply Chain & DBE of Procurement. The Assistant General Manager of Procurement, Supply Chain & DBE of Procurement may authorize a representative not involved with the initial decision to review the appeal. In connection with any such appeal, the Contractor/Consultant or SEPTA Project Manager shall be afforded an opportunity to offer evidence in support of its position. The decision of the Assistant General Manager of Procurement, Supply Chain & DBE of Procurement, or his/her authorized representative, shall be the final determination of SEPTA.

   b. **Performance During Disputes**

     Unless otherwise directed by SEPTA, Contractor/Consultant shall continue performance under the Contract while matters in dispute are being resolved.

32. **Third Party Contract Rights**

   It is agreed that SEPTA, neither by this paragraph nor by any other provisions in the Contract or other statements prior to or contemporaneous with the Contract creates any right or expectation in any third party or third parties (including, without limitation, subcontractors/subconsultants) enforceable at law or in equity or any other proceeding against SEPTA, its Board Members, officers, agents, servants, workers, employees, subsidizers, indemnities or assigns.

33. **Prohibited Interest**

   No member, officer, or employee of SEPTA or of a local public body during his tenure or one year thereafter shall have any financial interest, direct or indirect, in the Contract or the proceeds thereof.

34. **Integration**

   Subject to SEPTA's right to rely upon substantial representations made by Contractor/Consultant in making the decision to award the Contract to Contractor/Consultant, the Contract represents the entire and integrated contract between SEPTA and Contractor/Consultant and supersedes all prior or contemporaneous negotiation, representation, or contract, either written or oral. The Contract may not be amended, modified, or changed except as provided in Paragraph 18, “Changes.”
35. **Severability**

If any paragraph, clause, section or part of the Contract is held or declared to be void or non-enforceable for any reason, all other paragraphs, clauses, sections or parts shall nevertheless continue in full force and effect.

36. **Disadvantaged Business Enterprise (DBE) Requirements**

The Contractor/Consultant shall fully comply with the DBE requirements as found in Attachment 6 which is attached hereto and made a part hereof.

37. **Joint and Several Liability**

If two or more individuals, corporations, partnerships, or other business associations (or any combination of two or more thereof) shall sign the Contract as Contractor/Consultant, the liability of each such individual, corporation, partner or other business association to perform the obligations hereunder shall be deemed to be joint and several and all notices, payments and agreements given or made by, with or to any such individual, corporation, partner or other business association shall be deemed to have been given or made by, with or to all of them. In like manner, if Contractor/Consultant shall be a partnership or other business association, the members of which are by virtue of state or federal law are subject to personal liability, the liability of each member shall be joint and several.

38. **Warranties**

a. **Title:** Contractor/Consultant covenants and warrants that good title to all the Material and/or Equipment furnished under the Contract shall vest in SEPTA immediately upon delivery and acceptance by SEPTA.

b. **General:** Contractor/Consultant warrants that all Material and/or Equipment meets all requirements and standards set by the Scope of Services. All Material and/or Equipment shall be new, the best of its kind or quality, reasonably fit for its intended use as set forth in the Scope of Services, and of safe, substantial, and durable construction. Contractor/Consultant further warrants that any Material and/or Equipment, shall conform to representations and descriptions, either oral or written, made by the Contractor/Consultant and any literature, sample, or other vehicle of information supplied by Contractor/Consultant prior to the time of the proposal due date for the Contract. Contractor/Consultant further warrants that any sample provided represents a minimum standard of quality for the Material and/or Equipment furnished hereunder.

c. **Payment of Suppliers and Subcontractors:** Contractor/Consultant warrants that all workmen, subcontractors and suppliers will be satisfied by Contractor/Consultant prior to Contractor/Consultant rendering any invoice to SEPTA so that, at the time SEPTA makes payment to Contractor/Consultant, no part of the performance under the Contract shall be subject to any claim or lien.
d. **Material and Workmanship.** In addition to all warranties implied by law, Contractor/Consultant expressly warrants all Material and/or Equipment against any defect in design, material or workmanship which may be discovered during the five-year term of the contract, plus at any time during the thirty-six month run-out phase, after the completion of the five-year term. Contractor/Consultant shall make any necessary repairs to and any replacements of all or parts of the Material and/or Equipment during the period set forth above, at no additional cost to SEPTA.

In the event that the warranty work is to be completed after the expiration of the Contract, the Contractor/Consultant hereby agrees to maintain in force and/or extend all of the insurance as originally required by the Contract when it was in force, with SEPTA and any other entity required by SEPTA named as additional insured. The Contractor/Consultant is to procure a Right of Entry Permit from Procurement, Supply Chain & DBE and may be required to submit proof of insurance before SEPTA will issue the permit.

e. **Additional Warranties.**

(1) If the customary standard warranties for the Material and/or Equipment exceed the period specified above, such warranties shall run to SEPTA.

(2) If separate or additional warranties covering the Material and/or Equipment are furnished by the manufacturer, supplier, or seller of component part or parts of any item of said Material and/or Equipment, SEPTA shall have the right, but not the duty, to benefit from these separate or additional warranties, along with the primary warranties set forth hereinafore. SEPTA shall look only to Contractor/Consultant for fulfillment of all warranty requirements expressed and implied by the making of the Contract.

(3) The existence of any separate or additional warranties which run to the Contractor/Consultant from the manufacturer, supplier, or installer of a component part of an item of Material and/or Equipment shall not relieve Contractor/Consultant of its obligation to repair or replace any of the Material and/or Equipment on account of faulty design, manufacture or workmanship during the warranty period. SEPTA shall not be required to look to any other party for fulfillment of warranty provisions.

39. **Performance Bond**

The Contractor/Consultant shall furnish and maintain properly executed yearly renewable Performance Bonds or an Irrevocable Letter of Credit written by a good and sufficient surety and in a form acceptable to SEPTA, in the amount of fifty percent (50%) of the Annual Contract Sum. If any surety shall become insolvent or bankrupt in a technical or equitable sense, or otherwise become unqualified to underwrite these bonds for fifty percent (50%) of the Annual Contract Sum, or the Contract Sum is adjusted so as to exceed the penalties of such bonds, SEPTA may require, on ten (10) calendar days written notice, the
Contractor/Consultant to furnish new or additional bonds from the same or different sureties so as to be fully secured at all times for fifty percent (50%) of the Annual Contract Sum.

The Performance Bonds must be issued by a fully qualified surety company acceptable to SEPTA and listed as a company currently authorized under 31 CFR Part 223 as possessing a Certificate of Authority as described thereunder.

40. Liquidated Damages – Not Used

41. Delivery
   a. Delivery shall be as required in the Scope of Services.
   b. All items shall be delivered in good condition, complete, ready for operation or use, and in conformity with the Scope of Services and other terms and conditions of this Contract.

42. Inspection

Prior to the Shipment: If SEPTA so elects, the Project Manager may inspect the Material and/or Equipment prior to shipment or delivery. The Contractor/Consultant shall give the Project Manager sufficient advance notice of the date when the Material and/or Equipment will be completed and available for inspection. If the Project Manager has elected to inspect prior to shipment or delivery, Contractor/Consultant shall not ship or deliver Material and/or Equipment without such inspection being made unless Contractor/Consultant has a specific written Waiver of Inspection signed by the Project Manager.

[END OF PAGE]
IN WITNESS WHEREOF, the parties hereto have caused this Contract to be executed by the undersigned duly authorized officers, as of the day and the year first above written.

ATTEST: SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY

CAROL R. LOOBY LESLIE S. RICHARDS
SECRETARY TO THE BOARD GENERAL MANAGER/CHIEF EXECUTIVE OFFICER

ATTEST: CONTRACTOR (name below)

______________________________
(print/type name)

______________________________
SECRETARY

______________________________
(print/type name)

BY: PRESIDENT OR VICE PRESIDENT

Strike out title above that doesn’t apply

______________________________
(print/type name)

APPROVED AS TO FORM:

BY: __________________________, Esq

Office of General Counsel
Southeastern Pennsylvania Transportation Authority

NAECFTEC 11/2020
Technical Proposal

for

The Leasing and Servicing of Bus Tires
At time of award, SEPTA Will Insert Awardee’s Technical Proposal Here
Attachment 2

Scope of Services

for

The Leasing and Servicing of Bus Tires
TITLE

BUS TIRE SERVICE SCOPE AND SPECIFICATIONS

BUS ENGINEERING

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY

Issue Date: 9/28/2021
TECHNICAL SPECIFICATION

1.0 Specification Title

BUS TIRE SERVICE SCOPE AND SPECIFICATIONS

2.0 Prepared By

<table>
<thead>
<tr>
<th>NAME</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pat Breen</td>
<td>4/22/2021</td>
</tr>
</tbody>
</table>

3.0 Reviewed By:

<table>
<thead>
<tr>
<th>Kene Ilonze</th>
<th>4/28/2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joe Kruczynski</td>
<td>4/28/2021</td>
</tr>
</tbody>
</table>

4.0 Approved By

| Pat Breen     | 9/28/2021  |

5.0 Released By

| Pat Breen – 9/28/2021 |
BUS-RADIAL TIRE CONTRACT SPECIFICATION
FOR 30’LF, 40’LF and 60’LF ARTICULATED BUS

I. GENERAL

A. REQUIREMENTS:

1. The Contractor shall furnish, deliver and service a quantity of tires sufficient for a minimum of:
   - Thirty Five (35), 30 foot LF transit buses
   - Twelve Hundred Fourteen (1214), 40 foot low floor buses
   - One Hundred Eighty Five (185), 60 foot articulated buses
   - Twenty Five (25), 40 foot low floor electric buses

   The Contractor shall also furnish an adequate number of spare tires to assure SEPTA continuity of services at all times during the term of the Contract. The radial bus tires which Contractor furnishes shall be constructed and designed to be suitable for use on passenger buses used in city and suburban transportation within the United States of America.

   All tires furnished by the Contractor must meet the requirements of this specification and all applicable Federal, State, and local regulations for services rendered and life cycle of material.

Definitions of terms as used in this Specification:
Bus – one of SEPTA’s revenue passenger vehicles designed and utilized to transport passengers
Wheel and Tire Assembly: a tire mounted on a wheel

Wheel – or rim, aluminum or steel disk to which a tire is mounted.

Retread - a tire casing that been re-vulcanized with new tread, also referred to as a recap tire.

Regroove – a tire, which has had additional, deeper tread cut in.

Radial Tire – A tire design where the reinforcing ply cords in the carcass are perpendicular to the direction of travel and suitable for transit service on SEPTA’s equipment. All radial tires provided by the Contractor must be tubeless and this specification is written under that requirement.

Scrap Tire – a tire which has had all useable tread as defined under this specification worn off and / or has no mileage value.

Donation Tire – a tire which is in serviceable condition, but ownership will be transferred with the bus being donated. (see section J-3)

2. All tires supplied must meet or exceed SEPTA’s minimum requirements as set forth in this Specification and to the latest US federal, state, and local requirements where applicable. Refer to Appendix B for all gross axle weight ratings (GAWR). GVWR may be obtained for each vehicle by summing the GAWR for each vehicle in the table. All SEPTA buses are used in city and suburban service and are governed to 62 MPH.

3. Tires supplied must be uniquely branded and easily identifiable prior to delivery. Tires previously used on another Contract are not acceptable unless mutually agreed upon in writing from SEPTA. Newly retreaded tires that have never been mounted on a wheel for the purpose of this clause are not considered previously used. Retreaded tires shall be marked in a conspicuous and indelible manner indicating that they are retreaded and suitable for service.
B. SERVICE AREA

SEPTA’s service area presently includes locations in Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties. SEPTA operates 24 hours a day, 7 days a week, 365 days a year.

C. SERVICE REQUIREMENTS

On-Site Localized Service

The Contractor agrees to supply and maintain an adequate inventory of mounted tire assemblies at each of SEPTA’s locations to ensure continuity of service at all times for the duration of the Contract. The Contractor will be provided a suitable service area (Refer to chart below) at each of SEPTA’s operating locations for the duration of this Contract. The Contractor, at their option, can elect to place a service shop at as many of these locations as is needed for service of the contact. Every operating location and back shop is not required to have a tire service area for this contract. The Contractor may also provide supplementary off-site storage and workspace. The area shall be for the delivery, repair, inspection, cleaning, and service of tires and wheels. The Contractor shall furnish all tires and safely perform all repairs, re-grooving, and/or retreading of the tires. The retreading of tires may be performed at an off-site location. The storage of tires will be determined by SEPTA and the Contractor once the Contractor is in place. SEPTA will equip each service area with sufficient electrical power and water connections (NO shop air connection) as determined by the Contractor at each location. The Contractor must provide all necessary tools and equipment for mounting and demounting tires on and off wheels, balancing, cleaning, inspection, and repair of tires and wheels. The Contractor's service area at each
location shall be kept in a manner consistent with safe and efficient practices. Housekeeping shall be audited by each location director. The Contractor, prior to operation must, if necessary, obtain all applicable permits and licenses required to perform the requirements of this Contract and / or advise SEPTA as to any required permits and licenses necessary for the performance of this contract.

<table>
<thead>
<tr>
<th>SHOP</th>
<th>MAX AREA FOR SERVICE AND STORAGE</th>
<th>SUPPLEMENTAL CONTAINER AVAILABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allegheny</td>
<td>350 ft²</td>
<td>NO</td>
</tr>
<tr>
<td>Callowhill</td>
<td>500 ft²</td>
<td>NO</td>
</tr>
<tr>
<td>Comly</td>
<td>375 ft²</td>
<td>NO</td>
</tr>
<tr>
<td>Berridge</td>
<td>N/A ft²</td>
<td>N/A</td>
</tr>
<tr>
<td>Frankford*</td>
<td>615 ft²</td>
<td>NO</td>
</tr>
<tr>
<td>Frontier*</td>
<td>1100 ft²</td>
<td>YES</td>
</tr>
<tr>
<td>Germantown</td>
<td>150 ft²</td>
<td>YES</td>
</tr>
<tr>
<td>Midvale*</td>
<td>1800 ft²</td>
<td>YES</td>
</tr>
<tr>
<td>Southern*</td>
<td>1200 ft²</td>
<td>NO</td>
</tr>
<tr>
<td>Victory</td>
<td>500 ft²</td>
<td>NO</td>
</tr>
</tbody>
</table>

*Current tire shop locations

The following service requirements are:

1. It is the Contractor’s sole responsibility to safely mount and demount tires from wheels, store, and transport tire and wheel assemblies in a safe manner at all times and for all circumstances encountered on SEPTA’s properties for this Contract.
2. The Contractor’s shall determine and provide adequate manpower to cover each of the Contractor’s service locations. The Contractor’s personnel shall be properly identified at all times on SEPTA’s properties.

3. The Contractor shall specify location personnel schedules thirty (30) calendar days in advance of deployment. Permanent changes to personnel schedules during the course of the contract must also be reported to the project manager ten (10) calendar days before effective date, temporary changes based on demand need not be reported.

4. The Contractor shall determine and make available an adequate number of personnel to effectively perform the required service as defined by this specification.

5. Contract service personnel shall be employees and/or subcontractors of the Contractor. It is the sole responsibility of the Contractor to supervise, regulate, and ensure compliance with all terms and conditions set forth by this Contract.

6. The Contractor shall notify the location and project management one (1) day prior to the established start time upon any occurrence wherein there is shortage of assigned employees which effects the daily production of service. The Contractor shall make necessary adjustments to personnel to ensure required location production.

7. The Contractor shall service tires and maintain wheels in accordance with Wheel Manufacturer’s recommendation; and furnish all necessary labor and equipment required to mount and de-mount all tires from wheels.
8. The Contractor shall balance all front and center (articulated buses only) wheel and tire assemblies before placement in SEPTA’s tire racks for SEPTA’s use.
   a) Maximum allowable imbalance of 40 in-oz
   b) Maximum 14 oz of weights added (22 oz for wide base)

If the above Maximums are exceeded, the tire and wheel assembly shall not be put in service.

9. The Contractor shall mate wheel and tire assemblies by measuring the outside diameter and mating wheels to the nearest 1/4 inch and indicate said measurement along the tread of each tire using a grease pencil or other legible marker. Further, tire and wheel assemblies, upon delivery to SEPTA’s operating locations, shall be mated according to the above measurements, placed in the appropriate tire rack and marked as “mates”.

10. The Contractor shall provide all required equipment such as: valves, valve caps, weights, repair materials, and labor necessary to repair and maintain tires and wheels.

11. The Contractor shall deliver wheel and tire assemblies to each of SEPTA’s locations; the tires are to be inflated to vehicle placard specifications.

<table>
<thead>
<tr>
<th>Vehicle Manufacturer</th>
<th>Model</th>
<th>Tire Type</th>
<th># of tires</th>
<th>Inflation Placard</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Flyer</td>
<td>MD30</td>
<td>265/70R19.5</td>
<td>6</td>
<td>110</td>
</tr>
<tr>
<td>New Flyer</td>
<td>D40LF*</td>
<td>305/70R22.5</td>
<td>6</td>
<td>120</td>
</tr>
<tr>
<td>New Flyer</td>
<td>DE40LF*/R</td>
<td>305/70R22.5</td>
<td>6</td>
<td>120</td>
</tr>
<tr>
<td>New Flyer</td>
<td>E40LFR</td>
<td>305/70R22.5</td>
<td>6</td>
<td>120</td>
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<tr>
<td>New Flyer</td>
<td>XDE40LF</td>
<td>305/70R22.5</td>
<td>6</td>
<td>125</td>
</tr>
</tbody>
</table>
12. **Wheel Cleaning and Painting Requirements**

a. **Steel Wheels**: Servicing shall include wheel painting with SEPTA approved white enamel / polyurethane or powder-coated using Dupont PFW500-S9 Glacier White or SEPTA approved equal. The painting of the wheels is required to be carried out by the Contractor at an off-site location. A float of painted wheels, supplied by SEPTA, shall be kept alleviating any lost time due to wheel painting. (Steel wheels must be serviced whenever a tire is demounted from the wheel).

    **NOTE**: at the time of Contact Issuance, SEPTA has no steel wheels in service.
    This is a future contingency.

b. **Aluminum Wheels**: Contractor shall provide cleaning for aluminum wheels. With the exception of new unused wheels, each wheel must be cleaned upon delivery as stated below.

    1. All wheels must be cleaned free of dirt and foreign matter on the visible face when mounted: front wheels must be cleaned on the disk face side; rear wheels on the dish face side. The wheel’s visible surface must be cleaned to a bright aluminum finish.
2. Appropriate cleaning methods must be employed which do not alter the integrity of the wheel and / or tire. Refer to latest “ALCOA Wheel Service Manual.”

3. New wheels for Nova Bus only shall be stamped “NOVA” by the contractor in accordance with NOV-141201-AEB (Attached).

4. Contractor must provide each of SEPTA's locations MSDS sheets for all materials, chemicals, cleaners, etc. used and keep up to date records of these MSDS in each tire shop.

5. Chemicals used by the Contractor shall be kept in labeled containers and must not harm the environment of the physical plant at each of SEPTA's location.

13. Wheel maintenance: In the case of Aluminum wheels, wheels shall be inspected and maintained per wheel manufactures’ recommendations (ALCOA Wheel Service Manual – latest revision). Each time the wheels are demounted, the wheels must be inspected for cracks, fatigue, circumference, bead, and sizing of stud holes. A float of aluminum and steel wheels, provided by SEPTA, shall be kept to alleviate any lost time due to wheel maintenance and inspection. The Contractor shall report and make available for inspection any wheels that Contractor deems unfit for service during this Contract.

14. Where possible, wheels must be kept in the same positions, example: front wheels stay as fronts, rear inner wheels stay as inners, etc.

15. The Contractor shall inform SEPTA if additional wheels are necessary to maintain an adequate float and SEPTA may provide additional wheels at any time.
16. The Contractor shall be responsible for the delivery and pickup of all tires to and from all of SEPTA’s operating facilities. If necessary, the Contractor shall be responsible for the delivery and pick up of all tire and wheel assemblies to and from any of SEPTA's operation locations and back shops to ensure continuity of service. SEPTA’s Storeroom Personnel shall be the primary site contact responsible to sign for and delivery and/or pick-up of tire and wheel assemblies. Should the Storeroom Personnel be unavailable due to delivery timing or other conditions at the site, the Operation Foreman shall be the designated back-up for signatures.

17. The Contractor shall maintain all tools and gauges required for tire and wheel inspection and maintenance. Where applicable, measurement tools and gauges shall be kept in good repair and calibrated, as necessary. Calibration records shall be made available for inspection upon request.

18. The Contractor shall fully inspect and determine the fitness of every tire and wheel assembly before delivery to SEPTA. This includes but is not limited to ensuring the following are acceptable for service: tread wear, sidewall wear, abrasions, cuts, etc.

19. Tires delivered for use on “front” wheel positions shall be original tread, no retreads or re-grooves. Any used tires must be tires previously used in SEPTA service and must have a minimum tread depth of 14/32\textsuperscript{nd} of an inch when measured from the lowest tread. Additionally, adjacent treads may not be more than 2/32nds difference in depth.

20. Tires delivered for use on “rear” wheel positions to city operating locations shall be original tread, retread, or regrooved, and if previously used in SEPTA
service, must have a minimum tread depth of 8/32\textsuperscript{nd} of an inch when measured from the lowest tread. Additionally, adjacent treads may not be more than 2/32nds of an inch difference in depth.

21. Tires delivered for use on “rear” wheel positions to \textit{suburban operating locations} shall be original tread or regrooved, no retread, and if previously used in SEPTA service, must have a minimum tread depth of 8/32nd of an inch when measured from the lowest tread. Additionally, adjacent treads may not be more than 2/32nds of an inch difference in depth.

22. The Contractor shall re-groove tires when practical in accordance with applicable codes and laws. Re-grooved and /or retread tires shall be used only on the rear wheels of SEPTA’s city buses. If a tire is retreaded, it shall not be re-grooved.

23. Wheel and tire assemblies shall be placed in SEPTA’s appropriate marked racks at each location for bus type/ tire size as well as “front” or “rear” position designation.

24. All stock must be kept orderly and to ensure employee safety. The storage shall not pose a risk to SEPTA’s employees or Contractor’s personnel. Additionally, all tire storage must be in compliance with current International Fire Code.

25. Any accident or injury to the Contractor’s personnel while performing the requirements of this Contract must be reported in writing to the SEPTA Management at the location at which it occurred.
26. SEPTA agrees to maintain buses in accordance with bus manufacturer’s guidelines and specifications as applicable. In addition, SEPTA will provide and maintain in its locations suitable facilities to maintain proper air pressure of tires and will keep the Contractor’s tires inflated to the recommended specification. Any tires returned to the Contractor indicating that the respective bus needs service, the Contractor must notify SEPTA of the condition of the tires, as well as, the indicated service needed to the respective, identified bus. Note: SEPTA’s policy is to remove a front tire from service with 6/32nds of an inch or less tread depth, 4/32nds of an inch or less for rear tires.

27. SEPTA maintains the right, at its sole discretion, to reasonably determine that any tire or wheel is unsafe. SEPTA may consult with independent sources, manufactures (bus/wheel/tire), Federal, and/or State guidelines when making a reasonable and binding determination.

28. SEPTA shall supply wheels. SEPTA shall be responsible for all changes of the tire and wheel assemblies on and off the buses.

29. SEPTA shall be responsible to document the tire brand numbers from all tire and wheel assembly changes on tire tags, cards, or by electronic means, as provided by the Contractor. The documentation shall be given with each tire delivery to the Contractor to facilitate billing.

30. Within the 6 month period prior to the close of this Contract, or upon notice that a bus fleet with unique tires shall be retired, no new tires shall be added to the Contractor’s float of tires without written concurrence from SEPTA.
D. TIRE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Vehicle Type</th>
<th># of tires</th>
<th>Tire Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>30’ LF Bus</td>
<td>6</td>
<td>265/70R19.5</td>
<td>New Flyer MiDi Aluminum Wheels</td>
</tr>
<tr>
<td>40’ LF Bus</td>
<td>6</td>
<td>305/70R22.5</td>
<td>Novabus LFS Aluminum Wheels</td>
</tr>
<tr>
<td>40’ Low Floor Bus</td>
<td>6</td>
<td>305/70R22.5</td>
<td>New Flyer 40LF Aluminum Wheels</td>
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<tr>
<td>60’ LF Articulated Bus front and rear drive axle only</td>
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<td>305/70R22.5</td>
<td>Novabus 60LFS Aluminum Wheels</td>
</tr>
<tr>
<td>60’ LF center axle only</td>
<td>2</td>
<td>385/55R22.5</td>
<td>Novabus 60LFS Aluminum Wheels</td>
</tr>
<tr>
<td>40’ LF battery elec.</td>
<td>6</td>
<td>315/80R22.5</td>
<td>Proterra Catalyst, 9” wheel</td>
</tr>
</tbody>
</table>

E. LOSS OR DAMAGE:

- Cost for damaged tires shall be included in the rate per mile. The rate per mile paid to the Contractor is for the lease of tires. This rate is all inclusive. **There shall be no additional billing for taxes, fees, or damaged tires.** When the tire is not available for inspection, SEPTA shall be liable for no more than fifty percent (50%) of the current value of a similar tire, unless the Contractor can provide an auditable accounting of the tires accurate mileage prior to the loss.

- The Contractor shall be required to identify all tires that have been removed from service. The Contractor shall make an initial determination if the tires shall be considered as scrap tires or damaged tires. Once the determination is made, the Contractor shall notify SEPTA’s Project Manager and obtain concurrence. All damaged tires shall be coded per one of the following categories and marked as scrap with spray paint:
  - Curb wear
  - Misalignment
- Burnt Bead (Brake/drum)
- Premature wear, (Misalignments, Sidewall damage)
- Other (Specify)________

- No tires may be scrapped without SEPTA’s Project Manager’s approval.
- Scrap tires shall be removed from the locations weekly.
- Title holder to tires will properly dispose of scrap tires. Scrap tires must be
  picked up by a certified PA DEP approved scrap dealer. The Contractor is
  required to provide the Project Manager copies of certifications.

F. RATE OF PAYMENT:

SEPTA shall pay the Contractor on a monthly basis hereinafter described. The amount
of the regular monthly payment shall be computed by using the applicable billing rates
(Rate per Tire Mile, Service Rate, and Wheel
Cleaning, Wheel Repair, and Wheel Painting per wheel per month). SEPTA agrees to
send the Contractor reports of total vehicle miles for each month. The Contractor or
their agent shall have the right, at any reasonable time during business hours, to
review SEPTA’s records for the purpose of verifying actual vehicle mileage. Contractor
shall provide a price per 32\(^{nd}\) of an inch for each tire size at the presentation of the
billing rates. SEPTA may elect at any time to purchase tires with usable tread for the
applicable rate per 32\(^{nd}\) of an inch.
G. **SEPTA’s REPORTS AND TERMS FOR PAYMENT:**

Each month during the life of the Contract, SEPTA shall furnish the Contractor with a mileage report within a reasonable time after receipt of the Contractor’s invoice for the preceding month. SEPTA shall pay the Contractor the applicable charges as negotiated in the Pricing Schedule to cover the mileage run for the month invoiced by the Contractor as shown in SEPTA’s mileage report for that month.

H. **Inventory Reporting and Contractor Engineering Support:**

The Contractor agrees to provide SEPTA with engineering and technical support regarding the tires furnished by the Contractor under the Contract, whenever such information is requested by SEPTA. Support provided by the Contractor herein shall be furnished without additional cost to SEPTA. The Contractor shall provide monthly reports to SEPTA for tire inventory, including SEPTA’s wheels stored off property. Contractor shall also provide on a monthly basis an inventory of all tires removed from service, as well as, all incoming new tires. In addition, the Contractor shall conduct yearly inventories and provide the count to SEPTA’s Management, as well as, an initial inventory of tires utilized by SEPTA’s former Contractor.

I. **ADDITIONAL BUSES:**

When, during the term of the Contract, SEPTA purchases additional buses of any kind, SEPTA may elect to purchase any or all such buses without tires, giving the Contractor sixty (60) days prior written notice of such purchases to supply tires to the continental U.S. Bus Manufacturer’s Facility. SEPTA may have such additional buses equipped with leased tires furnished by the Contractor, at rates specified in this Contract. If the tires required for the additional buses are not included in the Contract, a billing rate shall be negotiated. If an agreement cannot be reached or the needed
type of tire is unavailable from the Contractor, SEPTA shall have the option to equip such additional buses with tires furnished by another party, or the Contractor must furnish tires manufactured by another party and be the title holder. The Contractor shall still be required to service tires furnished by another vendor at the negotiated rate. Any tire lost, stolen, or damaged while in the possession of the vehicle manufacturer, or other seller, or while the vehicle is being delivered to SEPTA, shall be paid for by SEPTA on the basis set forth in the contract.

J. DISPOSITION OF BUSES:

During the term of the Contract, SEPTA may retire buses from service to SEPTA’s Midvale Garage. The Contractor must supply tire and wheel assemblies for the retired buses as needed, deliverable to SEPTA’s Midvale Garage. The wheels for the retired buses are chosen by SEPTA’s Management or SEPTA’s appointed representative. Once retired, these buses fall into 2 categories: SALE, SCRAP, or DONATE.

1. Contractor shall supply scrap tires for SCRAP buses. SEPTA shall notify the Contractor as to the size of tire and quantity needed, and the tire and wheel assemblies shall be delivered. A scrap tire is any tire that is of the correct size for the vehicle as to not impose a hazard if installed. Only 4 wheels are placed on the SCRAP bus (8-10 on an articulated bus). Tires supplied by the Contractor for this purpose need not be PA DOT compliant for service as these buses will not be used in service or driven on public roads. These tires are intended to support the vehicle’s weight only and facilitate movement entirely on SEPTA’s property to SEPTA’s scrap yard. Typically, tires that have been declared “scrap” by the Contractor and would otherwise require disposal are usually adequate for this purpose. Scrap tires are to be provided to SEPTA at no charge. No additional billing for scrap tires will be accepted.
2. SALE buses are buses that have been removed from service but shall be sold as a running vehicle. Tires for this purpose must be PA DOT compliant and drivable on any public road. SEPTA shall pay the Contractor the rate per 32\textsuperscript{nd} of an inch of tread for these tires at the negotiated rate. Tires intended for front positions should be marked with a large spray paint “x” on the in facing side.

3. DONATION buses, that would otherwise be scrapped, that shall be donated (full ownership transfer) to another public transit operator within the United States free of charge. Up to 20 buses per year may be donated to a transit operator only in a Federally declared disaster area. The exact tires are to be chosen & provided by the Contractor free of charge to SEPTA and the recipient. These tires must be suitable to transport the bus to any location in the contiguous United States and provide some service thereafter. Title & responsibility of the tires is transferred to the recipient entity upon departure from SEPTA property, akin to a vehicle sale. The Contractor may provide reasonable “advertisement” stickers that can be applied on the exterior of the bus by the entrance and exit doors and/or interior header panel. Disposition of any advertisement is up to the recipient.

K. TITLE TO TIRES:

SEPTA will not transfer, sublet, or lend the tires furnished by the Contractor, or permit tires to be used by anyone other than SEPTA, without prior written consent of Contractor. Title to all tires and any equipment furnished shall be and remain at all times in Contractor's name and upon purchase by SEPTA shall continue to remain in Contractor's name until it shall have received full payment of all sums due under the terms of the Contract.
L. EXPERIMENTAL PRIVILEGE:

SEPTA shall have the right, at any time during the term of the Contract, to purchase, lease and/ or otherwise acquire tires from another manufacturer (or manufacturers) for the purpose of equipping up to ten (10) percent of SEPTA's buses used in revenue service. Tires so acquired will be compared with supplier's tires by SEPTA for evidence of improved mileage, performance, quality, and safety.
Important: Federal OSHA Regulations require all employers to make sure their employees who service rims/wheels understand the safety information contained in this manual. Do not let your employees service rims/wheels unless they are thoroughly trained and completely understand this safety information.

Laws, regulations, industry standards and maintenance and safety codes govern the installation, use and maintenance of Arconic products and may vary widely. It is the responsibility of the owner, OEM, fleet, installer and/or user, consistent with their roles, to install, use and maintain Arconic products according to all applicable laws, regulations, codes and industry standards.

If you are a service technician do not service rims/wheels unless you are thoroughly trained and completely understand this safety information.

Heavy & Medium Duty Truck | Trailer | Bus | Motor Home
LIMITED WARRANTY FOR ALCOA® WHEELS

(Rev. February 2019)

This limited warranty applies to new Alcoa Wheels, including forged aluminum wheels for medium duty and heavy duty trucks, trailer trucks, bus, RV or motorhome wheels (“Wheels”) and the surface or rim flange treatments applied to the Wheels. “Transit Wheels” means Wheels used on transit vehicles, such as buses and vans, whose primary purpose is to transport people. The warranties set forth in this document apply to all Alcoa Wheels manufactured by Arconic and sold by Arconic or its authorized distributor to an original purchaser of the Wheel or the end user of the Wheel.

Arconic warrants that the Wheel is free from defects in material and workmanship for the applicable time period set forth below, provided that Arconic does not warrant against and does not provide remedies for immaterial cosmetic defects such as minor discoloration, buffing marks, or nicks:

(a) Except as stated in (b) of this section, Wheels are warranted for 60 months from the date of manufacture as shown on the Wheel.

(b) Transit Wheels and RV and motorhome Wheels are warranted for 120 months from the date of manufacture as shown on the Wheel.

Arconic agrees, without charge, to repair or replace a Wheel that fails in normal use or service (see the qualifications section below) because of defects in material and workmanship.

Arconic warrants the Dura-Bright® surface treatment against:

(i) Filiform corrosion (worm or hair like lines underneath surface protective treatment and emanating from damage to the surface treatment); and

(ii) Blistering or peeling due to loss of adhesion of the surface treatment.

The Alcoa Dura-Bright® surface treatment warranty is for the applicable period of time set forth below:

(a) Except as stated in (b) of this section, Alcoa Dura-Bright surface treatment on Wheels is warranted for 60 months from the date of manufacture as shown on the Wheel.

(b) Alcoa Dura-Bright® surface treatment for RV and motorhome Wheels is warranted for 120 months from the date of manufacture as shown on the Wheel.

Arconic warrants the Alcoa Dura-Flange® rim flange treatment against wear which creates a sharp edge that would require maintenance for 24 months from the date of manufacture as shown on the Wheel.

For 36 months from the date of manufacture as shown on the Wheel, Arconic warrants the Alcoa® Dura-Black™ surface treatment against:

(i) Filiform corrosion (worm or hair like lines underneath surface protective treatment and emanating from damage to the surface treatment); and

(ii) Blistering or peeling due to loss of adhesion of the surface treatment.

If the Alcoa Dura-Flange® rim flange treatment or the Alcoa Dura-Bright® or Alcoa Dura-Black™ surface treatments fail in normal use or service (see the qualifications section below) to meet the foregoing warranties on a Wheel, Arconic agrees, without charge, to replace the Wheel with a like or similar product.

Repair or replacement, as provided for in this limited warranty, are subject to adherence to Arconic’s return material authorization process.

Qualifications: Arconic is not liable for, does not warranty, and will not repair or replace or make adjustment, with respect to any Wheel or surface or rim flange treatment on such Wheel that has been subjected to misuse, abuse, or improper modification, including any of the following:

(a) Using a tire which is oversized according to standards recommended by the Tire and Rim Association, Inc. or other recognized tire and rim agencies such as ETRO (Europe);

(b) Failure to install, use and maintain Wheels in strict conformity with all applicable laws, regulations, codes and industry standards;

(c) Loading the Wheel beyond the applicable maximum Wheel load as specified by Arconic;

(d) Inflating tires beyond the applicable maximum pressure as specified by Arconic;

(e) Except as permitted by the Service Manual for Alcoa Wheels (“Service Manual”), changing the original condition of the Wheel by alteration or by subjecting it to any processing or changes, such as welding, straightening, painting, coating, installing a new tire valve, or heat treating;

(f) Accidents or abnormal or severe operating conditions, including without limitation tire fires, brake fires, severe brake system drags or seizures or running with a flat tire;

(g) Failure to follow maintenance, instructions or warnings set forth in the Service Manual, Technical Bulletins or other literature for Wheels. Recommended maintenance includes, without limitation, using proper torque, periodic cleaning, polishing, replacing the valve, inspecting rim flange wear and following maintenance procedures and periodically inspecting tires and system components connected to the Wheel for damage and loose lug nuts;

(h) Nicks, scratches and other surface bluses resulting from neglect, road salt, harsh conditions, improper maintenance, cleaning, road debris, curbing, accident or operation;

(i) Rim flange wear (unless the rim flange has been treated with Dura-Flange®);

(j) Using a spacer or adaptor of any kind;

(k) Damaging the surface during tire mounting and installation due to the use of improper tools or balancing with wheel weights; or

(1) Damage due to cleaning with strong chemicals (acids or alkaline) or abrasives, such as abrasive brushes, steel wool, or scouring pads; or

(m) Further use of a Wheel after discovery of a defect.

THERE IS NO WARRANTY THAT THE WHEEL SHALL BE MERCHANTABLE OR FIT FOR ANY PARTICULAR PURPOSE, NOR IS THERE ANY OTHER WARRANTY, EXPRESS OR IMPLIED, EXCEPT SUCH AS IS EXPRESSLY SET FORTH HEREIN. ARCONIC SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, INDIRECT OR SPECIAL DAMAGES FOR ANY BREACH OF WARRANTY. ARCONIC’S LIABILITY AND THE EXCLUSIVE REMEDY AVAILABLE TO ANY PARTY IS LIMITED TO REPAIR OR REPLACEMENT OF THE WHEEL AS STATED IN THIS LIMITED WARRANTY

THIS LIMITED WARRANTY DOES NOT APPLY TO AND ARCONIC MAKES NO WARRANTY WHATSOEVER WITH RESPECT TO GOODS MANUFACTURED BY THIRD PARTY SUPPLIERS, SUCH AS TIRE PRESSURE MONITORING SYSTEMS AND VALVE FILTERS. ANY WARRANTIES WITH RESPECT TO SUCH GOODS ARE LIMITED TO THOSE WHICH ARE OFFERED BY SUCH SUPPLIERS AND ARE TRANSFERABLE.

This limited warranty should be used in conjunction with the Service Manual and the Dura-Bright Wheels Cleaning Guide. The Service Manual contains important safety information and warnings. Failure to read and understand that information may result in serious injury or death. If you do not have copies of the Service Manual or cleaning guide, you may obtain copies free of charge at www.alcoawheels.com or by contacting Arconic Wheel and Transportation Products at (800) 242-9898 or the address below:

Arconic Wheel and Transportation Products
1616 Harvard Avenue Cleveland, OH 44105

If you have a warranty claim, click here.

Still have questions? Call us directly at (800) 242-9898, option #1.

The Alcoa trademarks are owned by Alcoa USA Corporation and used by Arconic Inc. and its subsidiaries under license from Alcoa USA Corporation.

To obtain information on free training on proper installation and maintenance procedures, contact Arconic Wheel and Transportation Products at 800-242-9898 or on the web at www.alcoawheels.com.

Publications available free from Arconic:

• Service Manual for Alcoa Wheels
• Dura-Bright® Wheels Cleaning Guide
• Maintaining Aluminum Wheels Rim Flange Wear
• Transit Hub Bore Gage

Safety Training Videos available online at www.alcoawheels.com:

• Proper Wheel Maintenance
• Disc Wheel Inspection (TIA)
• Wheel and Tire Safety: “Everybody’s Job”

Information available through industry and government organizations:

TIA (Tire Industry Association)
Info available at www.tireindustry.org
or 301-430-7280

RMA (Rubber Manufacturers Association)
Info available at www.rma.org/tire-safety
or 202-682-4800

OSHA (Occupational Safety and Health Administration)
of US government
Info available at www.osha.gov
or 800-311-OSHA

TMC (Technology & Maintenance Council)
Info available at tmc.trucking.org
or 703-838-1765

DOT (U.S. Department of Transportation)
Info available at www.transportation.gov
or 855-368-4200
# Table of Contents

## How to use this manual

This manual is written in a style called structured text.

Throughout the manual you will find numbers which look like this (See Section 3-1).

These numbers are cross references to other sections of the manual.

The numbers (3-1) refer to section 3, subtopic 1. You will find the section number and subtopic number under the heading in each section.

<table>
<thead>
<tr>
<th>Section #</th>
<th>Page #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Safety</td>
<td>2</td>
</tr>
<tr>
<td>2 Deflating and Demounting Tubeless Truck &amp; Bus Tires</td>
<td>4</td>
</tr>
<tr>
<td>3 Inspection and Maintenance</td>
<td>5</td>
</tr>
<tr>
<td>3-1 Inspect thoroughly and frequently</td>
<td>5</td>
</tr>
<tr>
<td>3-2 Wheel alteration</td>
<td>5</td>
</tr>
<tr>
<td>3-3 Heat damage</td>
<td>6</td>
</tr>
<tr>
<td>3-4 Dimensional checks</td>
<td>7</td>
</tr>
<tr>
<td>3-5 Tire Wear or Ride Problems</td>
<td>8</td>
</tr>
<tr>
<td>3-6 Cracked or damaged wheel checks</td>
<td>8</td>
</tr>
<tr>
<td>3-7 Mounting area</td>
<td>9</td>
</tr>
<tr>
<td>3-8 Bolt Holes</td>
<td>10</td>
</tr>
<tr>
<td>3-9 Disc Area</td>
<td>10</td>
</tr>
<tr>
<td>3-10 Rim Area (Drop Center, Valve Hole, and Bead Seat)</td>
<td>11</td>
</tr>
<tr>
<td>3-11 Valves</td>
<td>12</td>
</tr>
<tr>
<td>3-12 Identification</td>
<td>13</td>
</tr>
<tr>
<td>3-13 Rim Flange Wear</td>
<td>14</td>
</tr>
<tr>
<td>3-14 Corrosion</td>
<td>18</td>
</tr>
<tr>
<td>3-15 Dura-Flange® maintenance</td>
<td>19</td>
</tr>
<tr>
<td>3-16 Corrosion Prevention (non Dura-Bright® surface treated wheels)</td>
<td>19</td>
</tr>
<tr>
<td>3-17 Dura-Bright® surface treated wheels cleaning and maintenance</td>
<td>20</td>
</tr>
<tr>
<td>4 Mounting Alcoa Wheels with Tubeless Tires</td>
<td>21</td>
</tr>
<tr>
<td>4-1 Mounting Tubeless Tires on Alcoa Wheels</td>
<td>21</td>
</tr>
<tr>
<td>4-2 Inflating Tire/Wheel Assembly</td>
<td>23</td>
</tr>
<tr>
<td>4-3 Rim Width to Tire Matching</td>
<td>25</td>
</tr>
<tr>
<td>4-4 Balance weights</td>
<td>26</td>
</tr>
<tr>
<td>5 Wheel Installation</td>
<td>27</td>
</tr>
<tr>
<td>5-1 Recommendations for proper installation of wheels</td>
<td>27</td>
</tr>
<tr>
<td>5-2 Wheel Nuts</td>
<td>28</td>
</tr>
<tr>
<td>5-3 How to Measure Stud Standout</td>
<td>29</td>
</tr>
<tr>
<td>5-4 Hub-Piloted Mounting System (Single, dual and wide base wheels, two-piece flange nuts)</td>
<td>29</td>
</tr>
<tr>
<td>5-5 Tightening Hub Piloted, Two-Piece Flange Nuts</td>
<td>30</td>
</tr>
<tr>
<td>5-6 Mounting Tool for Alcoa Wheels</td>
<td>32</td>
</tr>
<tr>
<td>5-7 Keep wheel Hub-Piloted Nuts Tight</td>
<td>33</td>
</tr>
<tr>
<td>5-8 Stud Piloted Mounting System (Single and Widebase)</td>
<td>33</td>
</tr>
<tr>
<td>5-9 Stud Piloted Mounting System (Dual Wheels)</td>
<td>35</td>
</tr>
<tr>
<td>5-10 Stud Piloted Mounting System (Steel Inner/Aluminum Outer Dual Wheels)</td>
<td>35</td>
</tr>
<tr>
<td>5-11 Tightening Stud Piloted, Ball Seat Cap Nuts</td>
<td>37</td>
</tr>
<tr>
<td>5-12 Keep Stud Piloted Wheel Nuts Tight</td>
<td>39</td>
</tr>
<tr>
<td>5-13 Incorrect assemblies</td>
<td>40</td>
</tr>
<tr>
<td>6 OSHA Regulations</td>
<td>41</td>
</tr>
<tr>
<td>7 Glossary of Terms</td>
<td>46</td>
</tr>
<tr>
<td>7-1 Glossary of Common Terms</td>
<td>46</td>
</tr>
<tr>
<td>7-2 Wheel measurement</td>
<td>48</td>
</tr>
<tr>
<td>8 Conversion Tables</td>
<td>49</td>
</tr>
<tr>
<td>8-1 Inch Fraction, Decimal and Millimeter Equivalents Chart (Up to 1 Inch)</td>
<td>49</td>
</tr>
<tr>
<td>8-2 Conversion Factors</td>
<td>50</td>
</tr>
</tbody>
</table>
1 Safety

**WARNING** An inflated tire and wheel assembly contains enough air pressure to cause an explosive separation.

Unsafe handling or failure to follow approved mounting and demounting procedures can lead to serious injury or death.

Study, understand and follow the procedures contained in this manual to ensure your safety.

**WARNING** Tire and rim servicing can be dangerous and must only be performed by trained personnel using proper procedures and tools.

Failure to read and comply with all of these procedures may result in serious injury or death.

Laws, regulations, industry standards and maintenance and safety codes govern the installation, use and maintenance of Arconic products and may vary widely. It is the responsibility of the owner, OEM, fleet, installer and/or user, consistent with their roles, to install, use and maintain Arconic products according to all applicable laws, regulations, codes and industry standards.

Safety is serious business. All tire shops must know and follow OSHA work regulations...no matter how small the shop. Under U.S. federal law any individual handling tire/wheel assemblies must be trained in OSHA regulations as mentioned in section 6 prior to servicing/handling truck tire and wheel assembly.

Safety is everybody’s business. Do not attempt to service any wheel assembly without proper training.

Proper equipment is important. Be sure you have the recommended tools and equipment on hand and use them according to manufacturer’s instructions.

Tubeless wheels and tires require equal care. Even though tubeless assemblies have fewer parts than multi-piece wheels, they still require respect and proper handling.

**Pay particular attention during crucial steps:**
- Removal of tire and wheel assemblies from vehicles
- Demounting tires from wheels
- Wheel inspections
- Inflation of tires
- Handling and storing of inflated tire and wheel assemblies

Safety and service information is readily available. Wheel, tire and service equipment manufacturers offer service manuals and other training materials. Stay up to date on proper procedures and keep current instructional materials handy in the shop. Study safety and service information and use it on the job.

Completely deflate any tire by removing the valve core before removing the tire/wheel assembly from the axle if there is known or suspected damage to the tire or wheel or if the tire has been operated at 80% or less of its recommended operating pressure. Demount, inspect and match all tire and rim parts before re-inflating in a restraining device.

**NEVER** use starter fluid, propane, ether, gasoline, or other flammable materials and/or accelerants to lubricate the beads and or seat of a tire. This practice can cause the explosive separation of the tire/wheel during servicing or during highway use, which may result in serious injury or death.

**NEVER** inflate beyond 40 psi to seat any tire beads.

**NEVER** stand, lean, or reach over the tire rim/wheel assembly in the restraining device during inflation. Even if a tire is in a restraining device, inflating beyond 40 psi when trying to seat the beads is a **DANGEROUS PRACTICE** that may break a tire bead or the rim/wheel with explosive force and possibly result in serious injury or death.

Any inflated tire mounted on a wheel contains explosive energy. The use of damaged, mismatched or improperly assembled tire and wheel components can cause the assembly to separate with explosive force. If struck by an exploding tire, wheel component, or the air blast, you or someone else may be seriously injured or killed.

Mismatching tire and rim diameters is dangerous. A mismatched tire and rim assembly may separate and can result in serious injury or death. This warning applies to 15” and 15.5”, 16” and 16.5”, 17” and 17.5”, 22” and 22.5”, 24” and 24.5” tire and rim assemblies as well as other sized assemblies.

**NEVER** assemble a tire and rim unless you have positively identified and correctly matched the tire and rim diameter.

If an attempt is made to seat the tire bead by inflating on a mismatched rim/wheel, the tire bead will break with explosive force and may result in serious injury or death.
Statistics show that in most industries, at worst only one in 1000 serious accidents results in a fatality, but when the accident involves tire and wheels, statistically one in every 10 serious accidents is a fatality. That is 100 times more often than in most other industries.

**1 in 1000**

**TYPICAL INDUSTRY**

**1 in 10**

**THE SERVICE INDUSTRY**

---

**WARNING**

IF YOU DO NOT KNOW HOW TO USE TIRE SERVICING TOOLS - STOP!
TIRE SERVICING MUST ONLY BE PERFORMED BY TRAINED PERSONNEL.
FAILURE TO FOLLOW PROPER PROCEDURES CAN RESULT IN SERIOUS INJURY OR DEATH.

- **ALWAYS** wear adequate protective eyewear (or face shield), protective footwear and ear protection while servicing tires to avoid injury.
- **NEVER** use a tire tool for anything except demounting and mounting tires.
- **NEVER** use an extension or “cheater” bar with the irons.
- **ALWAYS** use soft-faced hammers with driving tire irons or assembling components.
- **NEVER** use a hammer with a loose or cracked handle.
- **NEVER** use a bent, cracked, chipped, dented or mushroomed tool. Keep tools clean and inspect them frequently.
- **NEVER** alter or apply heat to any tire service tool.

---

**Typical Tire Service Tools**

<table>
<thead>
<tr>
<th>Bead Unseating Tools</th>
<th>Tubeless Tire Iron Set</th>
<th>Rim Mallets</th>
<th>Restraining Devices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Shop</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Farm/OTR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plastic Faced</td>
<td>Portable</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brass</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rubber</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ALWAYS WEAR SAFETY GLASSES**

Source: OSHA 3421-10N 2011

**NOTICE:** For information on tube type wheels, contact Arconic at (800) 242-9898 Option 1.
Deflating & Demounting Tubeless Truck & Bus Tires

**ALWAYS** completely deflate the tire assembly before attempting to demount a tire from a tire/wheel assembly. Remove the valve core and insert a wire down the valve stem to ensure complete deflation.

**NEVER** demount a tire from a rim unless it is completely deflated.

**Lubricate the beads** of the tire and bead seat of the wheel. Then use a slide impact bead unseating tool, duck bill hammer with a rubber mallet, or other bead unseating tools. Both beads must be loosened before demounting a tire.

For aluminum wheels, a mat should be placed on the floor to prevent damage to the mounting surface of the wheel.

**Figures 2-1 through 2-3. Identify the short side of the drop center wheel well.** Single piece tubeless rims and wheels must be demounted from the short side of the drop center well. On steel disc wheels, the short side is typically located opposite the disc. Aluminum wheels typically have symmetrical drop centers so tires can be demounted from either side. However, on certain non-symmetrical aluminum wheels, the short side of the drop center well is located on the disc side.

**Figure 2-4. Lubricate and unseat both beads in the bead seat area of the tire and wheel.** Position the assembly with the short side of the drop center well facing up.

**Figure 2-5. Insert tire irons** on either side of the valve stem approximately 6 inches (152 mm) apart. Pry the top bead over the rim flange and force the bead opposite the tire irons in the drop center well.

**Figure 2-6. Remove one tire iron and insert the curved end between the bead and rim.** Pry the rest of the top bead over the rim flange. Repeat this process until the first bead is entirely free from the rim.

**Figure 2-7. Stand the tire on its tread.** Slide the flat end of the tire iron between the bead and the rim flange; make sure the tip is completely over the rim flange.

**Figure 2-8. Pry the tire iron and allow the rim/wheel to drop.** **IMPORTANT!** Make sure your feet are clear of the rim. If necessary, rock or bounce the assembly to remove the tire from the tire/wheel.

**ALWAYS** completely deflate the tire assembly before attempting to demount a tire from a tire/wheel assembly. Remove the valve core and insert a wire down the valve stem to ensure complete deflation.

**NEVER** demount a tire from a rim unless it is completely deflated.

**Lubricate the beads** of the tire and bead seat of the wheel. Then use a slide impact bead unseating tool, duck bill hammer with a rubber mallet, or other bead unseating tools. Both beads must be loosened before demounting a tire.

For aluminum wheels, a mat should be placed on the floor to prevent damage to the mounting surface of the wheel.

**Figures 2-1 through 2-3. Identify the short side of the drop center wheel well.** Single piece tubeless rims and wheels must be demounted from the short side of the drop center well. On steel disc wheels, the short side is typically located opposite the disc. Aluminum wheels typically have symmetrical drop centers so tires can be demounted from either side. However, on certain non-symmetrical aluminum wheels, the short side of the drop center well is located on the disc side.

**Figure 2-4. Lubricate and unseat both beads in the bead seat area of the tire and wheel.** Position the assembly with the short side of the drop center well facing up.

**Figure 2-5. Insert tire irons** on either side of the valve stem approximately 6 inches (152 mm) apart. Pry the top bead over the rim flange and force the bead opposite the tire irons in the drop center well.

**Figure 2-6. Remove one tire iron and insert the curved end between the bead and rim.** Pry the rest of the top bead over the rim flange. Repeat this process until the first bead is entirely free from the rim.

**Figure 2-7. Stand the tire on its tread.** Slide the flat end of the tire iron between the bead and the rim flange; make sure the tip is completely over the rim flange.

**Figure 2-8. Pry the tire iron and allow the rim/wheel to drop.** **IMPORTANT!** Make sure your feet are clear of the rim. If necessary, rock or bounce the assembly to remove the tire from the tire/wheel.
3 Inspection & Maintenance

3-1 Inspect thoroughly and frequently

Safe operation requires thorough examination of wheels and attaching hardware, at frequent intervals, both on and off the vehicle.

Wheels that are in service need to be inspected at regular intervals to ensure proper and safe performance.

It is not always possible to predict the useful life of a wheel. Wheels eventually wear out, but generally, older wheels and wheels operating in extreme conditions should be examined more frequently for obvious signs they should be removed from service.

Examine all exposed areas frequently. Clean wheels and look for cracks, corrosion, wear or other damage. Also check the inner dualed wheel when the outer wheel is removed.

During tire changes, thoroughly examine the entire wheel. Pay particular attention to the rim contour and the surfaces of the rim.

Hidden Damage

Do not exceed maximum wheel load. Users must compare OEM vehicle load ratings to maximum wheel load ratings and inflation pressures which are roll-stamped onto the wheel. See Section 3-12.

Do not overinflate a tire/wheel assembly. Use the tire/wheel manufacturer’s recommended pressure, and under no circumstances exceed the cold tire/wheel pressures as listed by the tire/wheel manufacturer which is moulded/stamped on the tire and wheel. Before mounting the tire, perform a wheel fitment check to ensure proper clearance from any obstructions.

Wheel damage can be hidden beneath the tire, so whenever a tire is removed, thoroughly examine the complete wheel. Remove all grease and road dirt. Use a wire brush or steel wool to remove rubber from the bead seats.

3-2 Wheel Alteration

Arconic Wheel and Transportation Products does not approve of any form of alteration to wheels except minor cosmetic buffing for appearance purposes. Sanding and/or grinding is permitted to properly maintain the rim flange area of the wheel.

Welding, brazing or other heat application must never be used to repair or straighten a wheel. Use of adapter plates or bead-locks are not approved on Alcoa Wheels.

Alcoa Wheels should not be painted or otherwise coated in any way that may interfere with the mounting surfaces.

Any wheels that show signs of alteration should be removed from service and scrapped.

The wheel identification required by DOT is stamped on all wheels. Wheels must be taken out of service if this identification is not legible.

WARNING Welding, brazing or otherwise heating any area of an Alcoa aluminum wheel will weaken the wheel. Weakened or damaged wheels can lead to an explosive separation of tires and wheels or wheel failure on the vehicle.

Explosive separations of tires and wheels or wheel failure on the vehicle could cause serious injuries or death.

Never attempt to weld, braze or heat any surface of an Alcoa aluminum wheel.
3-3 Heat Damage

**WARNING** Excessive heat from fire, brake malfunction, wheel bearing failure, tire failure or other sources may weaken the metal and cause the wheel/tire assembly to separate explosively. Exploding tire/wheel assemblies can cause serious injury or death. Immediately and permanently remove from service any wheel that has been exposed to excessive heat.

Wheels must be inspected for exposure to excessive heat before being returned to service. A wheel that has been subjected to excessive heat may appear charred or burned, or may appear to be in good condition if it has been cleaned. Do not use any wheel that has been overheated regardless of appearance. Even if a wheel does not appear to be obviously burned, inspect the labels, tire bead, brake drum and high temperature nylon spacer for evidence of charring, melting, blistering or burning. Any wheel run with a flat tire longer than the time necessary to immediately pull off the road should be checked for excessive heat damage.

A wheel may discolor from excessive heat. It can appear a dull grayish color and will not polish to a bright finish as an undamaged Alcoa Wheel would.

Starting in January 2009, the Alcoa Logo on the wheel may not show heat damage. Inspect all axle end components for signs of exposure to excessive heat. Check the brake drums (Disc Pads on discs), high temperature nylon spacer and tire beads for heat damage. If these components show signs of overheating, the entire assembly, including the wheel, should be replaced. A blistered, charred, blackened or cracked-looking logo decal on an Alcoa wheel may indicate that the wheel has been exposed to excessive heat as shown in picture (Figure 3-1), or discoloration as shown in (Figure 3-4).

Wheels manufactured starting in January 2009, will have a 1 inch clear round heat indicator located next to the roll stamp on the inside shown in Figures 3-4/3-5, along with the same 1 inch clear round heat indicator located on the tire side drop well as shown in Figure 3-6.

If either of these round labels show signs of blistering, or have a charred, blackened, or cracked appearance, this may indicate the wheel has been exposed to excessive heat.

IF ANY OF THE ABOVE CONDITIONS ARE SEEN, REMOVE THE WHEEL FROM SERVICE IMMEDIATELY AND PERFORM DIMENSIONAL CHECKS PER SECTION 3-4. THIS INCLUDES ANY HEAT DAMAGE TO THE TIRE, DISCOLORATION TO THE WHEEL, AND OR BRAKE DRUM, AND ANY BURNT OR CHARRED LABELS.
3-4 Dimensional Checks

Dimension, Heat Damage and other checks

**WARNING** Wheels that have been subjected to high pressure tire and rim separation or excessive heat damage may no longer have sufficient dimension and contour to retain the tire bead while under pressure.

Exploding tire/wheel assembly can cause serious injury or death.

Immediately and permanently remove from service any wheel that has been exposed to high pressure tire/wheel separation or excessive heat.

**WARNING** Wheels that have been run flat or have other physical damage may no longer have sufficient dimension and contour to retain the tire bead while under pressure.

Rims that lack proper dimension and contour can have an explosive separation of the tire and rim, causing serious injury or death.

Any wheel that has been in service must be inspected prior to mounting. Follow the procedures for dimensional checks described in this section during each wheel inspection.

**Best Inspection Method** - Figure 3-7 shows the TRA Ball Tape

Measure the circumference of the bead seat on the open side (Figure 3-7) with a ball tape. All wheels should be inspected prior to mounting.

The circumference of the bead seat on the open side of the wheel should be checked at each tire change. The open side is the side opposite the disc face. In the case of center flange wide base wheels, or wheels with insets less than 3 inches, both rim flanges should be checked. If the circumference of the bead seat does not match the required dimension as indicated by the TRA certified ball tape, immediately and permanently remove the wheel from service.

Ball tapes used for measuring wheel circumference can be purchased from the Tire and Rim Association, Inc., 175 Montrose West Avenue, Copley, Ohio 44321, (330) 666-8121 www.us-tra.org. For instructions on the proper use of ball tape, reference the current Tire and Rim Association yearbook.

**2nd Best Inspection Method**

If a ball tape is unavailable

**ACCEPTABLE** Figure 3-8: Photo above shows a carpenter square that is contacting both bead seats.

**UNACCEPTABLE** Figure 3-9: Photo shows an undersized wheel that you can easily place a credit card (approximately .030 in. or .76mm) between the square and the wheel.

**THIS INSPECTION TECHNIQUE ONLY APPLIES TO DUAL OR DISC FACED WHEELS**

Check all wheels at each tire change for proper contour of the open side of the rim. Place the long leg of a carpenters square across the center of the disc side of the wheel. Extend the short leg across both rim flanges of the wheel as shown above. Repeat this process at four equidistant points around the wheel.

The short leg should touch both rim flanges at each point. If a space greater than the thickness of a credit card (or .030 in. or .76mm feeler gauge) appears between the short leg and the rim flange opposite the disc, the wheel should be removed from service and scrapped.

**3rd Best Inspection Method** - Rolling wheel as described on this page.

If a ball tape or carpenters square is unavailable, roll the unmounted wheel a minimum of 10 feet over a smooth, flat, level, clean surface such as asphalt or concrete pavement. Any deviation from rolling in a straight line is an indication of a deformed rim contour. Remove the wheel from service until it can be properly checked with a ball tape.

**WARNING** Wheels that have been subjected to high pressure tire and rim separation or excessive heat damage may no longer have sufficient dimension and contour to retain the tire bead while under pressure.

Exploding tire/wheel assembly can cause serious injury or death.

Immediately and permanently remove from service any wheel that has been exposed to high pressure tire/wheel separation or excessive heat.

**WARNING** Wheels that have been run flat or have other physical damage may no longer have sufficient dimension and contour to retain the tire bead while under pressure.

Rims that lack proper dimension and contour can have an explosive separation of the tire and rim, causing serious injury or death.

Any wheel that has been in service must be inspected prior to mounting. Follow the procedures for dimensional checks described in this section during each wheel inspection.

IF YOU DO NOT FULLY UNDERSTAND ANY OF THESE INSPECTION METHODS AS DESCRIBED IN THIS SECTION CONTACT ARCONIC WHEEL AND TRANSPORTATION PRODUCTS AT 800-242-9898 FOR CLARIFICATION. (TMC RP 247)
3-5 Tire Wear or Ride Problems

If you experience tire wear or ride problems it may be helpful to check radial run out. Remove the wheel from the vehicle, deflate and remove the tire (see Section 2, for recommendations and instructions for demounting tubeless tires).

Remount the wheel on the vehicle or balance without the tire. Be sure to follow proper installation procedures to assure the wheel is properly centered on the hub. Place a dial indicator as illustrated in Figure 3-10 to trace the bead seats of the wheel. Rotate the wheel noting the amount of variation shown on the dial indicator. Note: Alcoa aluminum wheels should be tested for radial run out only at the bead seat surface. A total indicator reading of .030 inches or less is acceptable.

Figure 3-10: Inspect tire mounting according to instructions.

Tire wear can also be caused by improperly seated tires. Inspect the tire for proper seating on the wheel if the tire beads are not seated properly. Remove the wheel from the vehicle, deflate and break the bead seats (see Section 2 for recommendations and instructions for demounting tubeless tires). Adequately lubricate the tire/wheel bead seats and properly re-seat the tire beads. Reinflate the tire in a restraining device. Refer to OSHA rule 1910.177, paragraph b. See Section 6.

3-6 Cracked or Damaged Wheel Checks

**WARNING** Cracked or damaged wheels may fail and come off the vehicle.

Wheels that fail or come off the vehicle while it is moving can cause serious injury or death.

Immediately and permanently remove cracked or damaged wheels from service.

Visually inspect wheels for cracks or damage. Remove wheels from service with known or suspected damage. Reference Sections 3-7 thru 3-10.
3-7 Mounting Area

Bolt hole cracks are usually caused by improper torquing (see Section 5-5), excessive loading or insufficient mounting flange support by the hub or brake drum. Remove wheel from service and scrap.

Figures 3-11 and 3-12 are cracks starting from the bolt hole. Causes are: undersized diameter of wheel support surface (see specifications on next page), support surface not flat, incorrect attachment parts and insufficient torque (see Section 5-11). Remove wheel from service and scrap.

Inspect the hub/drum contact area thoroughly for cracks or other damage.

**Support surface diameters**

Support surface should be flat and match the diameter recommended in Chart 3-1 or 3-2.

**Chart 3-1: ISO 4107**

<table>
<thead>
<tr>
<th>STUDS</th>
<th>BOLT CIRCLE</th>
<th>MOUNTING TYPE</th>
<th>MIN. DISC FLAT CLEARANCE DIAMETER</th>
<th>STUD SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>205 mm</td>
<td>HUB</td>
<td>255 mm</td>
<td>18 mm</td>
</tr>
<tr>
<td>8</td>
<td>222.25 mm</td>
<td>HUB</td>
<td>280 mm</td>
<td>20 mm</td>
</tr>
<tr>
<td>8</td>
<td>275 mm</td>
<td>HUB</td>
<td>325 mm</td>
<td>20 mm</td>
</tr>
<tr>
<td>10</td>
<td>285.75 mm</td>
<td>HUB</td>
<td>345 mm</td>
<td>22 mm</td>
</tr>
<tr>
<td>10</td>
<td>335 mm</td>
<td>HUB</td>
<td>390 mm</td>
<td>22 mm</td>
</tr>
</tbody>
</table>

**Chart 3-2: SAE J694**

<table>
<thead>
<tr>
<th>STUDS</th>
<th>BOLT CIRCLE</th>
<th>MOUNTING TYPE</th>
<th>MIN. DISC FLAT CLEARANCE DIAMETER</th>
<th>STUD SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>205 mm</td>
<td>HUB</td>
<td>255 mm</td>
<td>18 mm</td>
</tr>
<tr>
<td>8</td>
<td>6.5”</td>
<td>HUB</td>
<td>8.30”</td>
<td>.563”</td>
</tr>
<tr>
<td>8</td>
<td>275 mm</td>
<td>HUB</td>
<td>345 mm</td>
<td>22 mm</td>
</tr>
<tr>
<td>8</td>
<td>225.25 mm</td>
<td>HUB</td>
<td>280 mm</td>
<td>20 mm</td>
</tr>
<tr>
<td>8</td>
<td>275 mm</td>
<td>HUB</td>
<td>325 mm</td>
<td>20 mm</td>
</tr>
<tr>
<td>10</td>
<td>8.75”</td>
<td>STUD</td>
<td>11.32”</td>
<td>.750” / .1125”</td>
</tr>
<tr>
<td>10</td>
<td>285.75 mm</td>
<td>HUB</td>
<td>345 mm</td>
<td>22 mm</td>
</tr>
<tr>
<td>10</td>
<td>11.25”</td>
<td>HUB</td>
<td>13.56”</td>
<td>.875”</td>
</tr>
<tr>
<td>10</td>
<td>11.25”</td>
<td>STUD</td>
<td>13.56”</td>
<td>.750” / .1125”</td>
</tr>
<tr>
<td>10</td>
<td>335 mm</td>
<td>HUB</td>
<td>390 mm</td>
<td>22 mm</td>
</tr>
</tbody>
</table>
3-8 Bolt Holes

Check bolt holes for enlargement, and elongation, and any damage which can occur if the wheel nuts are not kept tight. Dirt streaks or rust radiating from stud holes may indicate loose wheel nuts.

If wheels are run loose, both stud piloted wheels and hub piloted wheels can be damaged. Look for wallowed out or elongated ball seats on stud piloted wheels. On hub piloted wheels look for elongated stud holes. Over torquing can lead to damaged ball seats on stud piloted wheels and can damage the disc surface of hub piloted wheels. Remove damaged wheels from service and scrap.

3-9 Disc Area

Inspect both sides of disc area for hand hole cracks. Remove damaged wheels from service and scrap.

Hand Hole Crack/Hand Hole to Nave

Exceeding wheel load capacity or damage to the Hand Hole can lead to cracks in the disc area. Remove wheel from service and scrap.
Check the entire rim area for nicks, gouges and cracks. Loss of air may be caused by cracks in areas throughout the drop center, around the valve hole, and in the bead seat area. Remove the damaged wheel from service and scrap.

**Drop Center crack**

Drop center cracks are normally caused by exceeding load or inflation capacity, or corrosion from excessive air line moisture or improper tire mounting lubricants. Arconic recommends Severe Service® wheels if the issue is overload or significant travel on unimproved roads. Please see the Product Spec Guide for Alcoa Wheels for part numbers and wheel descriptions of the Severe Service® wheels. Permanently remove damaged wheel from service and scrap.

**Valve Hole crack**

Valve hole cracks are normally caused by exceeding load or inflation capacity, rough finish on the valve hole surface, over-torquing of the valve nut, or corrosion. Permanently remove damaged wheel from service and scrap.

**Bead Seat crack**

Bead seat cracks may be caused by exceeding load or inflation capacity, improper manufacturing, tire tool damage, damage by hammer, impact damage, or rim is too narrow for the tire. Immediately and permanently remove damaged wheel from service and scrap.
3-11 Valves

It is recommended that valve stems be replaced at every tire change.

Replacement valves may be obtained from your authorized Distributor of Alcoa Wheels. Metal valve stem caps are required per DOT instead of plastic. DO NOT USE RUBBER GROMMETS OR O- RINGS. DO NOT USE UNPLATED BRASS VALVES.

When replacing valve stems, it is recommended that the threads and O-ring or grommet be lubricated with a non-water based tire lubricant. Use silicone, viton or EPDM grommets.

Clean the valve seat and valve hole thoroughly after removal of the valve. Remove all dirt, grease and oxidation. Make sure all contact areas are dry. Check for sharp edges or burrs. Remove with fine emery cloth if found.

Apply a layer of non-water based tire lubricant in the valve hole and the outer and inner side wheel surface, up to 1 inch or 2 centimeters in diameter around the valve hole.

Before installing the valve, apply a thin coat of non-water based tire lubricant on the shaft and base of the valve stem where the O-ring or grommet is located. Do not use any other lubricants that are water-based or contain metals.

Arconic recommends valve stem torque 9 to 11 ft-lbs, (12 to 15 Nm).

Refer to OEM Specifications for TPMS valves.

Valve Extensions

Distributors of Alcoa Wheels offer different valve extensions. A quality extension of 150 mm (6 inches) will enable tire pressure checks and adjustment of the inner tire of a regular dual fitment.

A valve stem stabilizer must be used if metal valve extensions are used. The mass of metal valve extensions and rotation may cause forces that can lead to cracks in the valve hole area of the wheel or the valve stem.

Only use plastic valve extensions obtained from your authorized Distributors of Alcoa Wheels.
3-12 Identification

Since 1977, all Alcoa aluminum disc wheels have been identified with a stamping that shows the wheel load rating, maximum inflation pressure, date of manufacture, part number, wheel description and DOT marking designation. See Chart 3-3 and Figure 3-23.

Prior to June 1996, all Alcoa heavy duty truck wheels had the Alcoa identification symbol on the outside of the disc near the hand hole in line with the valve location. This marking was phased out on heavy duty truck wheels manufactured after June 1996.

Alcoa Wheel identification is usually located 180 degrees from the valve stem on the open side of the wheel. Wheel identification required by the DOT must be legible. Wheels should be taken out of service if this identification is not legible and scrapped.

<table>
<thead>
<tr>
<th>Wheel Load Rating</th>
<th>Maximum Inflation Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAX LOAD 3355 kg (7400LB)</td>
<td>MAX PRESS. 900 kPa (130PSI)</td>
</tr>
<tr>
<td>PART NO. ULTRA 1DB</td>
<td>22.5 x 8.25 - 168</td>
</tr>
<tr>
<td>T-DOT</td>
<td></td>
</tr>
</tbody>
</table>

**Chart 3-3**

Alcoa wheels may have markings in the rollstamp to designate certification in other regions as follows:

- Wheels approved by INMETRO, the Instituto Nacional de Metrologia, are designated with the symbol.
- Wheels approved by the Japanese Ministry of Transportation, are designated with the symbol.

All Dura-Bright® surface treated wheels are designated by the letters “DB” following the part number such as 883671DB.

**Note:** Dura-Bright® wheels produced after November 2002 have Alcoa Wheel part numbers ending with “DB” (earlier wheels have part numbers ending in a 4 or 7). Not all Alcoa Wheels are available with the Dura-Bright® surface treatment.

All Dura-Flange® wheels are designated by the letters “DF” following the part number such as 883677DF.

All Dura-Bright® / Dura-Flange® wheels are designated by the letters “DD” following the part number such as 883673DD.

A new logo label was introduced in January 2009.
**Owner/in-service identification**

Some fleets mark their names and/or in-service date. When marking wheels use the following guidelines:

1. Use “Lo-Stress” stamps or equivalent.
2. Stamp on outside disc should be placed near the center bore.
3. Stamps on rim should be as close to the roll stamp as possible.

**Note:** Use of an impression stamp on Dura-Bright® surface treated wheels may affect the appearance and performance of the Dura-Bright® surface treatment in the area around the stamp.

### 3-13 Rim Flange Wear

Rim flange wear is not a warrantable condition. Only Dura-Flange® wheels have a 24 month warranty on rim flange wear.

Irregular wear on the surface of the rim flange is caused by abrasion from the tire and/or debris. Rim flange wear occurs most often in applications with heavy or shifting loads. If your wheels are experiencing excessive rim flange wear, consider using an Alcoa Dura-Flange® aluminum wheel. These wheels have been specially treated to significantly reduce rim flange wear. Remove wheels from service when rim flange wear is excessive.

Excessive wear can be determined using an Arconic approved wear gauge and the procedures detailed below. If rim flange wear becomes sharp and/or cuts the tire, contact Arconic Wheel and Transportation Products for recommended maintenance procedures at (800)242-9898 or at www.alcoawheels.com.

### Rim Flange Wear Gauge Instructions

**THESE GAUGES ARE TO BE USED FOR RIM FLANGE WEAR ONLY. THEY ARE NOT A BEAD SEAT ANGLE OR DIAMETER TOOL.**

To obtain a gauge(s) (P/N 000700) at no charge and information about free training on installation and maintenance procedures, contact Arconic Wheel and Transportation Products at (800) 242-9898 or on the web at www.alcoawheels.com.
Determining Rim Flange Wear

STEP 1. Remove the wheel/tire assembly from the vehicle. Remove the valve core per section 2-1 to deflate the tire completely, demount the tire from the wheel according to OSHA regulations, TMC Recommended Practices (RP 209) for tire and rim safety procedures and/or the Service Manual for Alcoa Wheels.

STEP 2. After the tire is demounted, verify that circumference of the bead seat on the open side is acceptable (see Section 3-4). Check the wheel flange with the Rim Flange Wear Gauge for Alcoa Wheels to determine if the wheels must be removed from service for excessive rim flange wear (Figures 3-25 and 3-26).

STEP 3. If the wheel is serviceable by the rim flange gauge, examine the wheel flange edge for sharpness by using a rubber sharpness gauge. These gauges are constructed with a section of tire or a suitable piece of rubber attached to a block of wood (Figure 3-27). By running the sharpness indicator gauge along the wheel in the area of the wear, determine if the wear is sharp enough to cut or damage the rubber on the sharpness indicator (Figure 3-28). If the rubber is cut, then follow the edge removal instructions below.

If the flange cuts or appears close to being sharp enough to cut the rubber on the sharpness indicator gauge, the edge can be removed by following the edge removal procedures on the following page. If the rubber is not cut, then the wheel can be returned to service without further work to the rim flange.

**CAUTION** Do not run unprotected hands or fingers across worn rim flange areas of used wheels.

Worn rim flange areas are sharp and can cut hands or fingers.

Always wear gloves when handling used wheels or when testing for edge sharpness.

Figure 3-26: Serviceable

Figure 3-27: Not serviceable (scrap wheel)

Figure 3-28: A rubber sharpness gauge or a suitable piece of rubber attached to a block of wood.

Figure 3-29: Run the sharpness indicator gauge along the wheel in the area of the wear to determine if the wear is sharp enough to cut or damage the rubber on the sharpness indicator.

NOTICE

Examine the tire for cuts in the bead area and side wall. If no damage occurred to these areas, return the tire to service. Cut tires should be removed from service. The tire should be inspected at this time for any other damage.

NOTICE

Check the wheel at every tire change for rim flange wear and any sharp edges. Following this practice will significantly reduce the possibility of a rim flange cutting into the tire.
CAUTION: Removing sharp edges with hand or power tools produces metal filings and sparks. Many power tools have edges that are sharp or may become hot during use. Some power tools produce excessive noise when used.

Metal filings can be sharp and, when projected by the action of power tools, can cause serious skin or eye damage. Excessive noise from power tools can harm hearing. Sharp edges can produce cuts and hot surfaces can cause burns.

Always wear appropriate safety gear such as protective eye wear, gloves, protective clothing and hearing protection when using hand or power tools.

**Edge Removal Procedures**

There are many tools available to remove the sharp edge on the wheel caused by rim flange wear. Here are some examples of commonly used tools below:

**File:** A file can be used very effectively to remove the edge (Figure 3-30).

**Air or Electric Powered Sander:** This tool provides a very quick and effective method of removing the sharp edge. Technicians should use care to keep a uniform edge when using these tools (Figure 3-31).

**Air or Electric Grinder:** This tool is another quick and effective method of removing the sharp edge caused by rim flange wear. The grinding pads may "gum up" from the aluminum that is removed (Figure 3-32, 3-33). Care must be used to avoid gouging the wheel.

**Die Grinder:** Used with a sanding wheel, cutting stone or grinding tool, this is a version of an electric grinder. This tool is very quick and effective as well, but care must be taken to remove metal as uniformly as possible and not to gouge the wheel (Figure 3-33).

Always wear PPE at all times.
**Rim Flange Wear (Continued)**

**STEP 4.** Figure 3-34 shows the result of removing the sharp edge on the rim flange. With whatever tool is selected, work the tool around the wheel's circumference removing only enough material to eliminate the sharp edge. This should only be a small amount of metal. Perform this work on both flanges if there is evidence of sharpness. Take care to make sure the edge removal is as uniform as possible and avoid gouging the wheel.

**STEP 5.** After the edge is removed, run the sharpness indicator gauge (Figure 3-27) along the flange where the sharp edge was removed to check for any remaining sharpness. If the rubber is still cut, perform the steps again to remove the sharp edge. Always remove the minimum amount of material necessary to eliminate the sharp edge.

**STEP 6.** Check the rim flange height with the Rim Flange Wear gauge to make sure there is adequate height remaining to safely support the tire. Figure 3-25 shows how this gauge is used. Be sure to move the gauge all around the wheel's circumference and make sure that no area of the flange is below what the gauge indicates is acceptable. If the entire wheel flange is within the limits of the rim flange wear gauge, the wheel may be returned to service.

**STEP 7.** Always inspect the wheel for any other conditions that would warrant removal from service. Consult the Service Manual for Alcoa Wheels or the TMC User’s Guide to Wheels and Rims for information on Out of Service Conditions.

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**WARNING**

Welding or brazing the rim flange or any area of an Alcoa aluminum wheel will weaken the wheel. Weakened or damaged wheels can result to an explosive separation of tire from wheels.

Explosive separations of tires from wheels or wheel failure on the vehicle could cause serious injury or death.

Never attempt to weld or braze any surface of an Alcoa aluminum wheel.

**WARNING**

Returning wheels to service with inadequate flange height as determined by the Rim Flange Wear Gauge can lead to an explosive separation of tires and wheels.

Explosive separations of tires and wheels on the vehicle could cause serious injury or death.

Flange heights that fall below the gauge for Alcoa Wheels have inadequate rim flange height to support the tire on the rim. Immediately and permanently remove any wheel from service that has inadequate rim flange height.

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**NOTE:** Always follow safe mounting procedures and inflation procedures using OSHA approved tire restraining device. See the Service Manual for Alcoa Wheels or OSHA safety wall charts and procedures.
3-14 Corrosion

Certain service environments can lead to corrosion. Some of the more common corrosive materials are: salt, magnesium chloride and calcium chloride compounds used for snow removal and highly alkaline materials. If the inflation media to fill the tire is not dry, the areas of the wheel under the tire can corrode severely.

**CAUTION** The use of liquid tire balancers or sealants on Alcoa Wheels may cause extremely rapid corrosion of the wheel rim surface. Alcoa Wheels corroded by the use of liquid tire balancers or sealants will not be replaced under the Arconic limited warranty for Alcoa Wheels.

Severely corroded wheels are unsuitable for service.

The Hub Bore Gauge (P/N 000701) for Alcoa Wheels is made for wheels used in the transit industry. The corrosion on the hub bore/center hole as shown here are from wheel end systems using a full hub.

The Hub Bore Gauge fits indicating severe hub bore corrosion. Remove any severely corroded wheel from service immediately and scrap.

ACCEPTABLE
Figure 3-37: Hub Bore Gauge does not fit. This wheel is acceptable for use.

UNACCEPTABLE
Figure 3-38: Hub Bore Gauge fits indicating severe hub bore corrosion. Remove any severely corroded wheel from service immediately and scrap.
3-15 Dura-Flange® Maintenance

Dura-Flange® has a **24 month warranty** against wear which creates a sharp edge that requires maintenance per Section 3-13.

Minor wear or minor pitting is not a warrantable condition.

Edge re-conditioning of any kind cannot be performed on Dura-Flange® wheels including those methods as described in Section 3-13.

![Figure 3-39: ACCEPTABLE PITTING](image)

3-16 Corrosion Prevention (non-Dura-Bright® surface treated wheels)

The following information is for standard forged aluminum wheels without the Dura-Bright® surface treatment. See Section 3-17 for specific instructions on the care and cleaning of Alcoa Dura-Bright® surface treated wheels.

1. Clean frequently with high pressure water. The use of a mild detergent will speed the cleaning process. Do not use harsh alkaline cleaners.

2. When tires are removed the entire wheel must be cleaned and inspected, see Section 3. With a wire brush, remove any foreign materials from the tire side of the rim. Do not use a wire brush to remove dirt and corrosion materials from the appearance surface of the wheel. Generously coat the entire air chamber surface with an approved surface protectant and lubricant each time the tire is removed (see Section 4-1).

3. To maintain the original appearance of Alcoa Wheels, the following procedures are recommended:
   a. After installing new wheels and prior to operating the vehicle, use a sponge, cloth or soft fiber brush to wash exposed wheel surfaces with a mild detergent and warm water solution.
   b. Rinse thoroughly with clean water.
   c. Wipe dry to avoid water spots.
   d. Apply polish to the cleaned surface.
   e. Clean truck wheels as frequently as required to maintain their appearance.
Dura-Bright® Wheels are the easy maintenance way to bright, shiny wheels that stay that way when properly maintained. Dura-Bright® wheels clean easily with mild soap and water, and eliminate the need for harsh cleaning products.

Dura-Bright® Wheels are maintained best with an off-the-shelf car wash, a mild (near neutral) detergent or a cleaning solution that has been diluted to a pH between 3-11 for Dura-Bright® EVO or 5-9 for Dura-Bright® XBR and prior generations.

Do not use Hydrofluoric Acid (HF), Hydrochloric Acid (HCl) or Sulfuric Acid (H₂SO₄) on Dura-Bright® Wheels.

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**Step 1: Cool down**
Before cleaning, allow the wheels to cool down to a temperature below 95°F (35°C).

**Step 2: Pre-rinse**
Rinse wheels thoroughly to remove any loose and visible dirt/debris.
- Rinsing the wheel with water helps to prevent scratching and abrasion.
- Use a water hose or power washer to remove soil, sand, etc.

**Step 3: Prepare cleaning solution**
- Add a mild detergent (e.g. common dish soap liquid) to the water at the specified dilution ratio before applying to vehicle.
- The pH level should be 3-11 for Dura-Bright® EVO (5-9 for Dura-Bright® XBR) in diluted/ready-to-use state.
- If using multiple solutions, each solution must fall within the pH range of 3-11 for Dura-Bright® EVO (5-9 for Dura-Bright® XBR). Do not use Hydrofluoric Acid (HF), Hydrochloric Acid (HCl) or Sulfuric Acid (H₂SO₄) on Dura-Bright® Wheels.

**Step 4: Clean the wheel**
- Apply soap or detergent generously on wheel surface with either a spray applicator, a clean, soft bristled brush or soft sponge.
- Abrasive tools and scouring pads (e.g. 3M Scotch-Brite®) should not be used.

**Step 5: Rinse the wheel**
- Rinse the wheel thoroughly with clean water to remove all remaining soap and dirt.
- If you intend to dry your wheels, be sure to use a soft cloth free of debris.

---

If soils attached to the surface do not come off with cold water, try warm water and wipe with a soft towel or chamois cloth. Use warm water and a mild detergent (with assistance of a commercial high pressure power washer, if available). Always dilute the detergent according to the manufacturer’s recommendation; never use the detergent straight without diluting with water. Once in service, Dura-Bright® wheels can become nicked or scratched by road debris and/or mechanical damage. If this occurs, continue to follow the normal washing and cleaning instructions provided above.

The mounting area on Dura-Bright® wheels can become scratched, marred or discolored when mounted against another wheel, hub or drum. Components such as high temperature nylon spacers, can prevent scratches. Contact Field Service team for Alcoa Wheels if you have any questions.

**Note:** pH value can be found in chemical MSDS (Material Safety Data Sheet) from the product manufacturer. If the cleaner is in concentrated form, contact your cleaning chemical supplier to determine pH levels and follow all manufacturer cleaning instructions.

The full Dura-Bright® cleaning procedure can be reviewed in the Dura-Bright® Cleaning Guide available in print and online at www.alcoawheels.com. Only the Warranty Center for Alcoa Wheels can authorize warranty claims and justify warranty returns. Dura-Bright® and Dura-Flange® claims can only be authorized and determined by the Warranty Center for Alcoa Wheels.
4 MOUNTING ALCOA WHEELS WITH TUBELESS TIRES

4.1 Mounting Tubeless Tires on Alcoa Wheels

**NOTICE**

For information on tube type wheels, contact Arconic at (800) 242-9898 Option 1.

**NOTICE**

Aluminum non-symmetrical Alcoa Wheels require special tire mounting techniques.

---

**WARNING**

Mounting damaged tires or wheels can lead to an explosive separation of tires and wheels.

Explosive separations of tires from wheels can cause serious injury or death.

Inspect tires and wheels for damage before removing from vehicle. If damage is found, the tire must be completely deflated before loosening cap nuts. Immediately and permanently remove damaged tires or wheels from service.

---

**WARNING**

Use of inner tubes in tubeless wheels will hide slow leaks. Slow leaks may indicate cracked or damaged wheels which lead to wheel failures. See Section 3-10.

Wheel failures can cause accidents which may result in serious injury or death.

(Never use an inner tube on an Alcoa tubeless wheel!) Immediately and permanently remove cracked or damaged wheels from service and scrap.

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Only properly trained technicians should service tire/wheel assemblies.

Before mounting, be sure that the tire is properly matched to the rim.

1. Do not gouge or nick the wheel. If changing by hand, place aluminum wheels on a clean floor and use a protective mat when mounting tires. Additional care should be used when mounting Alcoa Dura-Bright® surface treated wheels since minor nicks and scratches cannot be polished out (see Section 3-17, page 20 for specific cautions, care and maintenance procedures). If using a tire changing machine, care should be taken to prevent gouging the aluminum wheel.

2. Always use a rubber, leather-faced or plastic mallet.

3. Inspect the tire/wheel for damage. Do not use a damaged or severely corroded wheel (Section 3-14).

4. Clean the wheel disc face and the tire bead seat areas. Be sure the wheel is dry before applying tire lubricant.

5. Identify the short side of the drop center well. Single-piece tubeless rims and wheels must be mounted from the short side of the drop center well. Aluminum wheels typically have symmetrical drop centers so tires can be mounted from either side. However, on certain aluminum wheels, the short side of the drop center well is located on the disc side. See Figure 4-2.

---

**Figure 4-1:** Mount either side

**Figure 4-2:** Mount short side
### 6. Generously lubricate wheel rim flanges, drop well, and tire beads using non-water based lubricant. A non-water based commercial bead lubricant should be used since water can cause corrosion. However, thin vegetable oil soap solutions with a water base are approved.

Tire beads should be mounted over the rim flange closest to the wheel well. Push bead over flange as far as possible.

Never lubricate the rim or tire bead with a flammable solution. This can lead to an explosion during tire inflation.

![Figure 4-3](image)

#### NOTICE
- Not all tire changing machines work alike. Be sure to read the operating or instruction manual for your particular machine before attempting to mount or demount tires.
- Do not exceed inflation pressure printed on wheel.
- When match mounting tires to Alcoa Aluminum Wheels refer to TMC RP 243.

### 7. Push the tire bead onto the rim as far as possible. Using the curved end of the tire iron (with the stop resting on the rim flange) take small bites to work the remaining section of the bead onto the rim/wheel.

Start the second tire bead into the well, holding it in position with foot or self-locking pliers clamped to the rim of the flange. Insert the curved end of the tire iron with the stop towards the rim and push the iron outwards to work the bead over the flange.

![Figure 4-4](image)

### 8. Take small bites, repeat the operation progressively around the rim. Keep the tire bead in the well with your foot or with self-locking pliers. Continue until the second tire bead is full mounted over the flange.

![Figure 4-5](image)
Inflating Tire/Wheel Assembly

WARNING Never use a volatile or flammable material, such as ether or gasoline, as an aid to seating the tire beads on the wheel. The use of these materials lead to an uncontrolled pressure build-up in the tire and may result in an explosion with damage to the wheel and cause personal injury.

Explosive separation of the tire from the wheel can occur while seating beads in this manner, while adding pressure to the tire on or off the vehicle, or later on the road. Loss of vehicle control can result, which can cause serious injury or death.

Only use approved mechanical or pneumatic bead seating devices.

WARNING A pressurized tire/wheel assembly can explode and separate violently.

This violent separation can cause serious injury or death.

Always contain the tire/wheel assembly in an OSHA compliant restraining device during inflation.

1. Before inflating any tire rim/wheel assembly, be sure to read, understand and comply with ALL WARNINGS. Use only dry air for tire inflation. Be sure that in-line air dryer is maintained properly.

2. After mounting the tire on the rim, if needed use a compressed air tank with a quick release valve to seal the beads. Do not exceed 5 psi before placing the assembly in a OSHA compliant restraining device.

3. Place the assembly in an OSHA compliant restraining device, such as a tire safety cage. Figure 4-6 is an example of one type of a restraining device. Manufacturers recommend that OSHA compliant restraining devices be freestanding and located at least one foot away from any flat or solid surface.

4. Inflate the tire, with the valve core removed, using a clip-on air chuck with an in-line valve or pressure regulator and a sufficient length of hose. Inflate to 20 psi in OSHA compliant restraining device. IMPORTANT! Look for distortions, undulations, or other irregularities in the tire sidewall. Listen for any popping or snapping sounds. See Figure 4-7. The OSHA compliant restraining device should not be bolted to the floor.

If ANY of these conditions are present — STOP! DO NOT approach tire. Before removing from OSHA compliant restraining device, completely deflate tire remotely. Remove clip-on air chuck. Mark tire as damaged for a potential “zipper rupture” (render tire immediately unservicable, non-repairable and scrap).

5. Visually inspect tire rim/wheel assemblies throughout the inflation process for improper seating. When inflating a tire, stay out of the trajectory. See “Trajectory” WARNING in OSHA Regulations (Section 6 - Appendix A). DO NOT stand or lean any part of your body against, or reach over, the OSHA compliant restraining device during inflation.

Place tire/wheel assembly inside a OSHA compliant restraining device. See Section 6. Refer to tire manufacturer’s recommendation for proper tire pressure. Using a clip-on air chuck or a self-locking straight chuck with remote valve and pressure gauge, inflate the tire/wheel assembly to proper pressure. Be sure to stay out of the trajectory of potential exploding parts or air blasts.
6. Continue to inflate until the beads are seated on the wheel. Inspect both sides of the tire to be sure that the beads are evenly seated. NEVER inflate beyond 40 psi to seat any tire beads.

If the beads are not seated at 40 psi — STOP! Completely deflate, remove from the restraining device, and demount the tire to determine the problem. Reposition the tire on the rim, relubricate, and reinflate.

7. After the tire beads are seated, continue to inflate the tire to its recommended inflation pressure. IMPORTANT! Look for distortions, undulations, or other irregularities in the tire sidewall, such as in Figure 4-7. Listen for any popping or snapping sounds.

If ANY of these conditions are present — STOP! DO NOT approach tire. Before removing from restraining device, completely deflate tire remotely. Remove clip-on air chuck. Mark tire as damaged and potential “zipper rupture”. Render tire unservicable, non-repairable and scrap. Refer to RMA or TMC 232.

8. Do not overinflate. Use the tire manufacturer’s recommended pressure, but under no circumstances exceed cold tire pressures roll stamped on the wheel. If none of these “zipper” conditions are present, remove clip-on air chuck, install the valve core, and adjust the inflation pressure to the recommended operating inflation pressure.

9. Before removing the tire wheel assembly from the restraining device, always visually inspect for proper & concentric seating of the beads and all parts.

10. Conduct a final inspection. Heavy duty truck tires have a “guide rib” or “mounting ring” molded into the sidewall next to the tire bead. When the tire is inflated this molded ring should be evenly spaced from the rim flange all the way around the wheel. Check the position of the mounting ring before removing the assembly from the inflation cage. If the ring and wheel are not concentric, deflate the assembly in the cage, re-lube and remount the tire. Check for air leaks. Install a suitable valve cap.
## 4-3 Rim Width to Tire Matching

Rim to tire matching chart for medium and heavy trucks.

<table>
<thead>
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<th>TIRE SIZE (for both radial and bias tires)</th>
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<td>12R24.5</td>
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</tr>
</tbody>
</table>

**CHART 4-1**

Reference only. Refer to tire manufacture documentation for tire fitment information

* Source: 2015 TRA Yearbook and ETRTO
4-4 Balance Weights

Alcoa wheels are fully machined and do not require balancing. However, the tire/wheel combination may need to be balanced. Internal balancing compounds are not recommended. Use of coated balancing weights is recommended to avoid staining and corrosion of wheel surface.

Always follow the recommended procedures of the balancing weight manufacturer. It may be necessary to reduce the tire pressure when installing clip-on weights to allow clearance of the weight clamp between the tire and rim flange.

Adhesive weights should only be applied to a clean surface on the brake side of the rim flange. Balance weights should be installed in a location where they will not contact the brake components during vehicle operation. Proper pre-cleaning is an essential factor for adhesive balance weights. It is recommended to review the surface cleaning techniques & products with the manufacturer or supplier of balancing weights. Relocating wheels from a cold place to a warmer place may cause condensation on wheel surfaces which can negatively affect the adhesion.

Improperly installed weights could ‘come off’ during use and damage the vehicle and/or surrounding objects and cause personal injury.

Excessive rim flange wear (see Service Manual for Alcoa Wheels Section 3-13) could dictate the use of ‘stick-on’ or adhesive balancing weights if there is inadequate rim flange to properly hold a clip on (knock on) style weight.

Powder, Granulate, Liquid Balancers or Liquid Sealants

Balancing with powder, granulates or liquids is not recommended, nor is sealing tire punctures with liquid sealants. Powder, granulates or liquid balancers as well as liquid sealants may harm tubeless tires. Consult the tire manufacturer’s recommendation for information about tire compatibility.

Arconic Policies do not endorse any specific brand or type of balancing powder or granulates. The use of these balancers on Alcoa Wheels may clog valves. A filtered valve core is recommended when using balancing powder or granules. The use of these materials will not void the limited warranty, (see Section 3-11 of the Service Manual for Alcoa Wheels), unless inspection of the wheel shows anomalies related to its use.

Caution: The use of liquid tire balancers or sealants in Alcoa Wheels may cause galvanic corrosion at the valve hole area as well as corrosion to the valve itself and/or may cause extremely rapid corrosion of the wheel rim surface. Corrosion at the bead seat areas can allow loss of inflation pressure. Corrosion at the valve hole will also result in a loss of inflation pressure.

Severely corroded wheels are unsuitable and should be permanently removed from service and scrap.

Alcoa wheels corroded by the use of liquid tire balancers or sealants will not be replaced under the Arconic limited warranty for Alcoa Wheels.

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**CAUTION** Clip-on balance weights are not recommended for Dura-Flange® wheels.

The usage of clip-on style balance weights will not adequately engage the hardened Dura-Flange® coating. Arconic recommends adhesive style balance weights for this application.

**CAUTION** The use of liquid tire balancers or sealants in Alcoa wheels may cause extremely rapid corrosion of the wheel/rim surface. Alcoa Wheels corroded by the use of liquid tire balancers of sealants will not be replaced under the Arconic limited warranty for Alcoa Wheels.

Severely corroded wheels are unsuitable for service.
5 Wheel Installation

5-1 Recommendations for proper installation of wheels

1. Make sure all wheel nuts are properly torqued. Dirt/rust streaks radiating from the bolt/stud holes can indicate loose wheel nuts. (See Section 3) If the wheel becomes loose the wheels bolt/stud holes can become elongated (egg-shaped) or damaged as shown in Section 3-8. If wheel nuts are loose you may break studs and/or develop cracks at the wheel bolt/stud holes. This condition may cause the wheel to loosen and disengage from the vehicle.

2. On ball-seat wheels be sure the end of the socket is smooth or cover the wheel mounting surface with a protective shield prior to tightening the cap nuts. The end of the socket will mar the wheel around the cap nuts if it is not smooth.

3. Keep all component contact surfaces smooth and clean. Dirt or projections on mounting surfaces may lead to loose wheels. Remove all projections resulting from burrs, nicks, etc. Be sure that loose dirt does not fall onto mounting surface during assembly.

4. Do not introduce any foreign objects such as spacers or top hats into the contact surface areas of the mounting system unless approved by Arconic. Do not paint Alcoa forged aluminum wheels.

5. Additional care should be used when mounting Alcoa Dura-Bright® surface treated wheels since minor nicks and scratches cannot be polished out (Section 3-17, for specific cautions, care and maintenance procedures).

6. High temperature nylon spacers are a protection gasket designed to be placed between the wheels and also the brake drum/wheel contact surfaces. High temperature nylon spacers can be used when the tire/wheel assemblies are removed and reinstalled.

WARNING Wheels that are not properly installed or maintained may not be safe.

Failure to follow proper wheel installation or maintenance practices may result in serious injury or death.

Follow the proper wheel installation and maintenance practices as contained in this Service Manual for Alcoa Wheels. For training on proper installation and maintenance, available free of charge from Arconic, or for the most recent updates, contact Arconic Wheel and Transportation Products at 1-800-242-9898 or on the web at www.alcoawheels.com.

NOTICE

Do not exceed maximum wheel load. Customer must compare OEM vehicle load rating to maximum wheel load rating.

Refer to tire manufacturer’s recommendation for proper tire pressure. Before mounting the tire perform a wheel fitment check to insure proper clearance from any obstructions.

NOTICE

Check for and replace bent, broken, cracked or damaged studs. When replacing broken studs, always replace the studs on each side of the broken stud. If two or more studs are broken, replace all the studs for that wheel position. Check with the stud manufacturer for regular maintenance and stud replacement practices.

All wheel fastener hardware should be grade 8 or metric conversion 10.9. Follow the hardware manufacturer’s recommendations when replacing studs.
5-2 Wheel Nuts

There are many types of nuts and studs in use, and their design and specifications are not standardized. The “R” and “L” on cap nut part numbers indicate right and left-hand threads respectively. Arconic recommends the following wheel nuts for use with Alcoa aluminum truck wheels:

**FLANGE NUTS**

- **2-piece, 26.25 mm height, 33mm hex head flange nut.** Mounts single and dual wheels to wheel centering hubs. Right hand threads used on both sides of vehicle. P/N 39874 (supersedes P/Ns 39701 and 39691); M22-1.5 RH threads.

- **2-piece, 78.5 mm height, 33mm hex head flange nut.** Mounts dual wheels with 32mm bolt holes to wheel centering hubs. Right hand threads used on both sides of vehicle. P/N 430732; M22x1.5 RH threads.

- **2-piece, 50mm height 33mm hex head flange nut.** Mounts single wheels to wheel centering hubs with 32mm bolt holes. Right hand threads used on both sides of vehicle. P/N 430632; M22x1.5 RH threads.

  *Available in Dacromet corrosion resistant coating, P/N 578732.*

**CAP NUTS**

- **1-1/8” X 16 cap nut.** Mounts standard single wheels and wide base wheels to 1-1/8” studs. Also mounts outer dual wheel to 1-1/8” inner cap nut. P/N 5996R, 5996L (replaces P/N 5552R, 5552L).


- **Inner cap nut, inner thread 3/4” x 16, outer thread 1-1/8” x 16.** For use with steel inner dual wheel and aluminum outer dual wheel with 1.31” (1-5/16) to 1.44” (1-7/16) stud standout. P/N 7896R, 7896L (Grade 8).

- **Inner cap nut for use with standard length studs (1.31” [1-5/16] to 1.44” [1-7/16]) stud standout) or longer studs not to exceed 1.88” (1-7/8) stud standout. Full internal and external threads, counter bore 5/16” deep at open end. Prevents stud from bottoming out in cap nut. P/N 5988R, 5988L (Grade 8). For use with studs with exposed shoulders. Do not use with steel inner dual wheel.

**WARNING** Use of chrome-plated wheel nuts which have chrome plating on the surfaces that contact the wheel can cause reduced and inconsistent wheel clamping.

This condition can cause wheels to loosen and disengage from the vehicle, causing serious injury or death. Never use wheel nuts with chrome-plated contact surfaces. Use only recommended hardware on Alcoa aluminum wheels.

FOR MEDIUM DUTY MOUNTING HARDWARE, SEE THE M-SERIES DATA SHEETS ON WWW.ALCOAWHEELS.COM.

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**NOTICE**

One-piece flange nuts are not approved for use on any Alcoa Wheel application.
5-3 How to Measure Stud Standout

Stud standout is measured from the axle end mounting surface (the hub, for inboard mounted drums, and the drum, for outboard mounted drums) to the first complete thread at the outside end of the stud.

5-4 Hub Piloted Mounting System. Single Dual & Wide Base Wheels, Mounting Two-Piece Flange Nuts

NOTICE

Do not exceed maximum wheel load. Customer must compare OEM vehicle load rating to maximum wheel load rating.

Refer to tire manufacturer’s recommendation for proper tire pressure. Before mounting the tire perform a wheel fitment check to ensure proper clearance from any obstructions.

NOTICE

Check for and replace bent, broken, cracked or damaged studs. When replacing broken studs, always replace the studs on each side of the broken stud. If two or more studs are broken, replace all the studs for that wheel position. Check with the stud manufacturer for regular maintenance and stud replacement practices.

All wheel fastener hardware should be grade 8 or metric conversion 10.9. Follow the hardware manufacturer’s recommendations when replacing studs.

Most U.S. manufacturers of highway trucks, tractors and trailers equipped with the hub piloted wheel mounting system requires wheel studs and flange nuts with metric threads. Most frequently these are M22x1.5.

Most states/provinces have laws which dictate full thread engagement or thread engagement past the nut body. Make sure you know the laws for the states/provinces in which you operate and comply with them.

Note: Some stud piloted ball seat wheels have the same number of holes and bolt circle diameter as hub piloted wheels. Never mix hub piloted & stud piloted wheels.

Hubs designed for steel hub piloted wheels may not have enough pilot length to locate dual aluminum wheels. Pay close attention to pilot length, particularly when converting from steel to aluminum duals. Measure the hub pilot tab length to make sure the hub properly centers the wheels. The pilot tab length for sufficient centering must be ≥ 5 mm (0.20”) or more for mounting single wheel and ≥ disc thickness + 5mm (0.20”) for mounting dual wheels.

When mounting painted steel inner dual wheels with outer aluminum wheels, be cautious of excessive paint (3.5 mil) build-up and flaking on the inner steel wheel. Excessive paint can reduce the clamping force and allow the wheels to become loose.

Typical assembly of hub piloted single and dual wheels use 33mm hex head two-piece flanged nuts, Part No. 39874. If hex nuts with greater overall height are used, more stud length is required.
Two-Piece Sleeved Flange Nuts

Sleeved flange nuts serve two purposes:
1. May increase thread engagement.
2. Reduce stud hole misalignment.

When using sleeved flange nuts:
- There are two kinds of sleeved flange nuts, single mount and dual mount as shown. One that aligns outer wheels only.
- One that goes into the inner dual wheel. Either sleeve cap nut is acceptable for Alcoa wheels.
- All threads in the sleeve do not need to be engaged with the wheel bolt for proper installation.
- Always use wheels and hardware that are designed for use with sleeved flange nuts.

Two-Piece Sleeved Flange Nuts

Single mounted wheels require sleeved flange nuts with a short sleeve.

Dual mounted wheels require sleeved flange nuts with a long sleeve.

5-5 Tightening Hub Piloted, Two-Piece Flange Nuts

Two-piece flange nuts must be properly tightened. Refer to the chart below for industry standard torque of two-piece flange nuts.

<table>
<thead>
<tr>
<th>NUT THREAD</th>
<th>TORQUE LEVEL FT-LB LUBRICATED</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/16” - 16</td>
<td>300 - 400</td>
</tr>
<tr>
<td>7/8” - 14</td>
<td>350 - 400</td>
</tr>
<tr>
<td>M20 x 1.5</td>
<td>280 - 330</td>
</tr>
<tr>
<td>M22 x 1.5</td>
<td>450 - 500</td>
</tr>
</tbody>
</table>

CHART 5-1

Source: TMC. Refer to truck manufacturer guidelines for specific recommendations.

Impact wrenches, if used, should be carefully adjusted to apply torques within the limits recommended. Nuts should be tightened in recommended criss-cross sequences.

WARNING Undertorqued flange nuts allow wheels to run loose and fatigue studs or lose nuts. Overtorquing can yield studs causing them to fail.

Both under and overtorquing can lead to wheel detachment which can result in serious injury or death.

Check all parts including wheels, studs and flange nuts. Check mounting faces of wheels, hubs and drums. Check for dirt, corrosion or damage. Remove dirt and rust; replace damaged parts. Follow correct tightening sequences and torque levels.
Before installing two-piece flange nuts, use 1 to 2 drops of motor oil to lightly lubricate the first two or three threads at the tip of each stud, and the contact surfaces between the flange nut and the washer as illustrated below. This will minimize corrosion between the mating surfaces. Lubrication is not necessary with new hardware.

Prior to mounting hub piloted wheels, coat the wheel hub bore. Then push wheels onto the hub so that excess lube will scrape off and not be pushed between the mounting surfaces with a non-water-based lubricant to minimize corrosion and build-up between the wheel and hub pilot. Excessive corrosion build-up between the wheel and hub pilots can make wheel removal difficult. Do not lubricate the face of the wheel, hub or brake drum.

Position one of the hub's pilot pads at the twelve o'clock position. After positioning wheels on the pilot pads, hand tighten all two-piece flange nuts, then tighten to the recommended torque following the proper sequence shown below for your type wheel. After a wheel assembly has been installed and torqued, check the fastener torque again within 5 - 100 miles. Individual fleet conditions will influence the mileage interval. Refer to TMC RP 237 - Retorquing Guidelines for Disc Wheels which establishes guidelines for determining the fleet torque check interval.

**NOTICE**

In service, stud dimensions and condition may change over time due to environmental conditions, multiple re-installations, improper torquing and other factors. Consult your hub and stud manufacturer for maintenance and replacement recommendations.
The Mounting Tools for Alcoa Wheels are designed to:

1. Align wheel bolt holes
2. Seat brake drums that have .980” diameter bolt holes
   (Will not seat brake drums that have bolt holes larger than .980” in diameter)
3. Prevent thread damage to M22x1.5 studs

Assembly Instructions

1. After properly installing the brake drum, install (2) wheel mounting tools to seat the brake drum as indicated in figures below. Do not torque the wheel mounting tools in excess of 400 foot pounds.
2. Install the wheel on the hub, aligning it with the wheel mounting tools.
3. Install lug nuts according to recommended practice. Section 5-5
4. Once flange nut pressure is sufficient to keep the wheel and drum assembly snug against the hub, remove wheel mounting tools individually as needed to follow installation pattern.
5. After all wheel mounting tools are removed, torque flange nuts to required torque levels. (Section 5-5)

WARNING All wheel mounting tools must be removed before vehicle operation. Wheels that are not properly installed or maintained may not be safe.

Failure to follow proper wheel installation or maintenance practices may result in injury or death. Mounting Tool for Alcoa Wheels will not seat brake drums that have bolt holes larger than .980” in diameter.

Follow the proper wheel installation and maintenance practices as contained in the Service Manual for Alcoa Wheels. For additional copies of the manual and other useful items, available free of charge, or for the most recent updates, contact Arconic Wheel and Transportation Products at 800-242-9898 or on the web at www.alcoawheels.com
5-7 Keep Wheel Nuts Tight  
(Hub Piloted)

Flange nuts must be kept tight, the torque, studs and nuts should be checked at regular service intervals. Nuts and studs should be inspected at tire changes to ensure they are in serviceable working condition. If nuts require frequent tightening or studs break frequently, hardware and mounting practices should be reviewed.

NOTE:
1. Tightening wheel nuts to their specified torque is extremely important. Undertightening results in loose wheels which can damage wheels, studs and hubs, and can result in wheel loss. Overtightening can damage studs, nuts and wheels and results in loose wheels as well.

2. All torque wrenches, impact wrenches and any other tools used for tightening flange nuts should be calibrated periodically to ensure the proper torque is applied.

3. Refer to OEM for torque ranges of hardware that is not noted in this manual.

5-8 Stud Piloted Mounting System  
Single & Widebase

The cap nut seat for the stud piloted system is a precision-machined spherical surface. Cap nuts must be properly manufactured to assure correct seating. Never use one or two-piece flange nuts on a wheel designed with ball seats (Section 5-11).

Ball seat cap nuts may be obtained from your Distributor for Alcoa Wheels.

Front wheels are mounted as singles and require 1.8” (45.7mm) minimum stud standout. Most vehicles have 1-1/8-inch studs on the front hubs. Alcoa single cap nuts, Part Nos. 5996R and 5996L, or equivalents, should be used. Some front hubs have 3/4-inch studs. On these hubs, use Alcoa single cap nuts, Part Nos. 5995R and 5995L or equivalents.

High temperature nylon wheel spacers can be used with Alcoa Dura-Bright® surface treated wheels to protect the wheel contact surfaces from marring. High temperature nylon spacers can be placed between the contact surfaces of the Dura-Bright® wheels and the brake drum.

![Diagram of Single Alcoa Aluminum Wheel](image-url)
Do not exceed maximum wheel load. Customer must compare OEM vehicle load rating to maximum wheel load rating.

Refer to tire manufacturer’s recommendation for proper tire pressure. Before mounting the tire perform a wheel fitment check to insure proper clearance from any obstructions.

Notice
Check for and replace bent, broken, cracked or damaged studs. When replacing broken studs, always replace the studs on each side of the broken stud. If two or more studs are broken, replace all the studs for that wheel position. Check with the stud manufacturer for regular maintenance and stud replacement practices.

All wheel fastener hardware should be grade 8 or metric conversion 10.9. Follow the hardware manufacturer’s recommendations when replacing studs.

Alcoa Aluminum Wide Base Wheel

Drum
1-1/8" Stud
Hub
1.8 inch minimum stud standout

Correct wide base wheel mounting with 1-1/8-inch stud located, ball seat mount.

Single Alcoa Aluminum Wheel

Drum
3/4" Stud
Hub
1.8 inch minimum stud standout

Correct single mounting with 3/4-inch stud located, ball seat mount.

Alcoa Aluminum Wide Base Wheel

Drum
3/4" Stud
Hub
1.8 inch minimum stud standout

Correct wide base wheel mounting with 3/4-inch stud located, ball seat mount.
5-9 Stud Piloted Mounting System
Dual Wheels

**NOTICE**
Do not exceed maximum wheel load. Customer must compare OEM vehicle load rating to maximum wheel load rating.

Refer to tire manufacturer’s recommendation for proper tire pressure. Before mounting the tire perform a wheel fitment check to insure proper clearance from any obstructions.

NOTICE
Check for and replace bent, broken, cracked or damaged studs. When replacing broken studs, always replace the studs on each side of the broken stud. If two or more studs are broken, replace all the studs for that wheel position. Check with the stud manufacturer for regular maintenance and stud replacement practices.

All wheel fastener hardware should be grade 8 or metric conversion 10.9. Follow the hardware manufacturer’s recommendations when replacing studs.

Rear wheels are most frequently mounted as duals. Each inner aluminum wheel is attached by 10 inner cap nuts. Arconic Wheel and Transportation Products recommends use of inner cap nuts 5978R, 5978L, or 5988R, 5988L.

Cap nuts recommended by Arconic Wheel and Transportation Products are compatible with Alcoa wheels. Hardware of equal dimensions and strength may be used.

Most vehicles have standard length studs (1.31” [1-5/16"] to 1.44” [1-7/16"] stud standout). Some vehicles use studs longer than standard (up to 1.88” [1-7/8"] standout).

When changing types of brake drums be sure to check for excessive stud standout (greater than 1.88” [1-7/8”]). Most states and provinces have their own standards for fastener engagement. Most of these consist of at least 1 to 2 threads past full thread engagement. Excessive stud standout may cause the inner cap nut to bottom out on the longer stud preventing proper seating of the wheel.

Each outer dual wheel is attached by 10 single cap nuts which thread on the inner cap nuts. Use Alcoa outer cap nuts, Part Nos. 5996R, 5996L or equivalents. Dual wheels should be put on the vehicles with the valve stems 180° apart in order to access the inner wheel valve stem.

**5-10 Stud Piloted Mounting System
Steel Inner/Aluminum Outer Dual Wheels**

**WARNING** Incorrect inner cap nuts used with dual aluminum wheels can bottom out on the unthreaded portion of the stud before the wheels are properly seated.

Improperly seated wheels can run loose, cause stud breakage and detach from the vehicle which can cause serious injury or death. Loose running wheels can lead to stud breakage.

Use only cap nut 5978R or L, 5988R or L, or their equivalent when mounting dual aluminum wheels.

On occasion Alcoa aluminum truck wheels are dualed with a steel inner wheel. When this application occurs it is recommended that a high temperature nylon spacer to be used, because of corrosion issues. In the event a steel inner wheel is used, extreme care must be exercised to properly seat it to the hub or drum before mounting the outer aluminum wheel. Selection of an inner cap nut capable of fixing the steel inner wheel and providing adequate external thread length to secure the outer aluminum dual wheel is critical to a safe assembly. Arconic Wheel and Transportation Products recommends the use of inner cap nuts 7896R and L (Grade 8), or equivalent, for this purpose.
**NOTICE**

Do not exceed maximum wheel load. Customer must compare OEM vehicle load rating to maximum wheel load rating.

Refer to tire manufacturer’s recommendation for proper tire pressure. Before mounting the tire perform a wheel fitment check to insure proper clearance from any obstructions.

**NOTICE**

Check for and replace bent, broken, cracked or damaged studs. When replacing broken studs, always replace the studs on each side of the broken stud. If two or more studs are broken, replace all the studs for that wheel position. Check with the stud manufacturer for regular maintenance and stud replacement practices.

All wheel fastener hardware should be grade 8 or metric conversion 10.9. Follow the hardware manufacturer’s recommendations when replacing studs.

---

**WARNING** Incorrect inner cap nuts used with steel wheels can bottom out on the unthreaded portion of the stud before the wheels are properly seated.

Improperly seated wheels can run loose, cause stud breakage and detach from the vehicle which can lead to serious injury or death. Loose running wheels can lead to stud breakage.

Use only cap nut 7896R or L or its equivalent when mounting steel inner duals.

**WARNING** Inadequate wheel support surface can lead to stud hole-to-stud hole fracture resulting in separation of the outer disc and rim from the vehicle.

Separation of the wheel from the vehicle can cause serious injury or death.

Alcoa aluminum wheels with 11-1/4” diameter bolt circle require a support surface at least 13-3/16” in diameter. Check the outer support surface of the inner steel wheel for flatness and adequate diameter before installing the outer wheel. When the wheels are serviced, check the mounting surfaces of both wheels for stud hole-to-stud hole cracks. If cracks are found, immediately and permanently remove the wheel from service and scrap. For the support surface diameter required by other bolt circle sizes, ask your Arconic Wheel and Transportation Products representative.

**WARNING** Use of two-piece flange nuts on stud piloted wheels or ball seat cap nuts on hub piloted wheels is dangerous.

Using the wrong cap nuts can cause loss of torque, broken studs, and cracked wheels, wheel loss which can lead to serious injury or death.

Use only hardware designed specifically for each wheel type. See Section 5-2 for proper hardware assemblies.

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Correct dual mounting for steel inner/aluminum outer stud piloted ball seat mount.
5-11 Tightening Stud Piloted, Ball Seat Cap Nuts

Wheel cap nuts must be properly tightened.

Refer to the chart below for the proper nut torque of stud piloted, double cap nuts:

<table>
<thead>
<tr>
<th>BALL SEAT RADIUS</th>
<th>NUT THREAD</th>
<th>TORQUE LEVEL FT-LB DRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/8”</td>
<td>3/4” - 16</td>
<td>450 - 500</td>
</tr>
<tr>
<td>7/8”</td>
<td>1/8” - 16</td>
<td>450 - 500</td>
</tr>
<tr>
<td>1 - 3/16”</td>
<td>15/16” - 12</td>
<td>750 - 900</td>
</tr>
<tr>
<td>1 - 3/16”</td>
<td>1/8” - 16</td>
<td>750 - 900</td>
</tr>
<tr>
<td>1 - 3/16”</td>
<td>1-5/16” - 12</td>
<td>750 - 900</td>
</tr>
</tbody>
</table>

**CHART 5-2**
Source: TMC. Refer to truck manufacturer guidelines for specific recommendations.

**WARNING** Undertorqued cap nuts allow wheels to run loose, pounding out (deforming) the ball seats, fatiguing studs or losing nuts. Overtorquing can stretch studs causing them to fail.

Both under and overtorquing can lead to wheels coming off, causing serious injury or death.

Check all parts, including wheels, studs and cap nuts. Check mounting faces of wheels, hubs and drums. Check for dirt, corrosion or damage. Remove dirt and rust; replace damaged parts. Follow correct tightening sequences and torque levels.

**Note:** Never get lubricant on the wheel or nut ball seat or mounting faces.

**WARNING** Lubricants should not be applied to the cap nut seat or to the cap nut-to-wheel contact surface.

Oiled seats can lead to over-torquing which can yield studs causing failure. Failed studs can cause the wheel to detach from the vehicle, causing serious injury or death.

Lubricants must be completely removed from the cap nut seats and contact surfaces if applied accidentally.

On vehicles equipped with the stud piloted, ball seat, mounting systems, wheel studs on the right side of the vehicle have right-hand threads and those on the left have left-hand threads. The “R” and “L” on the studs and nuts indicate right and left-hand threads respectively.
**Note:** The top of the inner cap nut will have thread direction identified on the end of the nut.

**INNER CAP NUT.**
This should be used for dual wheel.

**NOTE:** There are two different inner cap nuts for aluminum and steel wheels. The inner cap nut in Figure 5-3 is for use with dual aluminum wheels.

**INNER CAP NUT LEFT HAND THREADS.**
The letter L should appear on the end of the cap nut.

**INNER CAP NUT RIGHT HAND THREADS.**
The letter R should appear on the end of the cap nut.

After mounting a wheel over the studs, snug up the cap nuts in the order shown in the illustrations that follow. After all the cap nuts have been snugged, tighten the cap nuts to the recommended torques, following the same tightening sequence.

**NOTICE**
In service, stud dimensions and condition may change over time due to environmental conditions, multiple re-installations, improper torquing and other factors. Consult your hub and stud manufacturer for maintenance and replacement recommendations.
After a wheel assembly has been installed and torqued, check the fastener torque again within 5 - 100 miles of operation and retighten the nuts if necessary the recommended torque using the proper sequence. Individual fleet conditions will influence the mileage interval. Refer to TMC RP 237 - Retorquing Guidelines for Disc Wheels which establishes guidelines for determining the fleet torque check interval. To check and retorque an inner nut, it is necessary to loosen the outer nut first, and then tighten the inner nut. Finally, the outer nuts must be retightened to the proper level.

5-12 Keep Stud Piloted Wheel Nuts Tight

Cap nuts must be kept tight, and studs and nuts should be checked frequently. Nuts should be properly retorqued if necessary. At tire changes, nuts and studs should be inspected for cracks and stripped or damaged threads. After each wheel mounting, cap nut torque should be checked with a properly calibrated torque wrench.

Impact wrenches, if used, should be carefully adjusted to apply torque within the limits recommended. Torquing of cap nuts should be tightened in recommended sequences.

Some states/provinces have laws which dictate full thread engagement or thread engagement past the nut body. Make sure you know the laws for the states/provinces in which you operate and comply with them.

When checking the cap nuts on dual disc wheels utilizing the stud piloted ball seat mounting system, loosen every other cap nut and then check the torque of the inner cap nuts. Retorque the loosened outer cap nuts. Repeat procedure with the rest of the nuts. Check all cap nuts for the proper torque after the first use or any removal. Inspect wheels (see Section 3) and check wheel nuts during service stops. Dirt and rust streaks from cap nuts may indicate looseness.

NOTE:

1. If using specialty fasteners (cap nuts) or any hardware not noted above, consult the manufacturer for recommended torque values.

2. Tightening wheel nuts to their specified torque is extremely important. Undertightening results in loose wheels which can damage wheels, studs and hubs, and can result in wheel loss. Overtightening can damage studs, nuts and wheels and result in wheel loss as well.
5-13 Incorrect Assemblies

**WARNING** Use of two-piece flange nuts on ball seat wheels, ball seat cap nuts on hub piloted wheels or single-piece flange nuts in place of 2-piece flange nuts is dangerous.

Using the wrong wheel nuts can cause loss of torque, broken studs and cracked wheels, conditions which can lead to serious injury or death.

Use only hardware designed specifically for each wheel type. See Section 5-2 for proper hardware assemblies.

The following are examples of incorrect wheel assemblies.

Incorrect use of a ball seat cap nut on a hub piloted system. Do not use ball seat cap nuts with hub piloted wheels.

**NOTE:** Notice all the different variations of mounting wheels incorrectly on hubs.
(a) Scope.

(1) This section applies to the servicing of multi-piece and single piece rim wheels used on large vehicles such as trucks, tractors, trailers, buses and off-road machines. It does not apply to the servicing of rim wheels used on automobiles, or on pickup trucks and vans utilizing automobile tires or truck tires designated “LT”.

(2) This section does not apply to employers and places of employment regulated under the Longshoring Standards, 29 CFR part 1918; Construction Safety Standards, 29 CFR part 1926; or Agriculture Standards, 29 CFR part 1928.

(3) All provisions of this section apply to the servicing of both single piece rim wheels and multi-piece rim wheels unless designated otherwise.

(b) Definitions.

Barrier means a fence, wall or other structure or object placed between a single piece rim wheel and an employee during tire inflation, to contain the rim wheel components in the event of the sudden release of the contained air of the single piece rim wheel.

Charts means the U. S. Department of Labor, Occupational Safety and Health Administration publications entitled “Demounting and Mounting Procedures for Truck/Bus Tires” and “Multi-Piece Rim Wheel Matching Chart,” the National Highway Traffic Safety Administration (NHTSA) publications entitled “Demounting and Mounting Procedures for Truck/Bus Tires” and “Multi-Piece Rim Wheel Matching Chart,” or any other poster which contains at least the same instructions, safety precautions and other information contained in the charts that is applicable to the types of wheels being serviced.

Installing a rim wheel means the transfer and attachment of an assembled rim wheel onto a vehicle axle hub. “Removing” means the opposite of installing.

Mounting a tire means the assembly or putting together of the wheel and tire components to form a rim wheel, including inflation. “Demounting” means the opposite of mounting.

Multi-piece rim wheel means the assemblage of a multi-piece wheel with the tire tube and other components.

Multi-piece wheel means a vehicle wheel consisting of two or more parts, one of which is a side or locking ring designed to hold the tire on the wheel by interlocking components when the tire is inflated.

Restraining device means an apparatus such as a cage, rack, assemblage of bars and other components that will constrain all rim wheel components during an explosive separation of a multi-piece rim wheel, or during the sudden release of the contained air of a single piece rim wheel.

Rim manual means a publication containing instructions from the manufacturer or other qualified organization for correct mounting, demounting, maintenance, and safety precautions peculiar to the type of wheel being serviced.

Rim wheel means an assemblage of tire, tube and liner (where appropriate), and wheel components.

Service or servicing means the mounting and demounting of rim wheels, and related activities such as inflating, deflating, installing, removing, and handling.

Service area means that part of an employer’s premises used for the servicing of rim wheels, or any other place where an employee services rim wheels.
Single piece rim wheel means the assemblage of single piece rim wheel with the tire and other components.

Single piece wheel means a vehicle wheel consisting of one part, designed to hold the tire on the wheel when the tire is inflated.

Trajectory means any potential path or route that a rim wheel component may travel during an explosive separation, or the sudden release of the pressurized air, or an area at which an airblast from a single piece rim wheel may be released. The trajectory may deviate from paths which are perpendicular to the assembled position of the rim wheel at the time of separation or explosion. (See Appendix A for examples of trajectories.)

Wheel means that portion of a rim wheel which provides the method of attachment of the assembly to the axle of a vehicle and also provides the means to contain the inflated portion of the assembly (i.e., the tire and/or tube).

(c) Employee training.

(1) The employer shall provide a program to train all employees who service rim wheels in the hazards involved in servicing those rim wheels and the safety procedures to be followed.
   (i) The employer shall assure that no employee services any rim wheel unless the employee has been trained and instructed in correct procedures of servicing the type of wheel being serviced, and in the safe operating procedures described in paragraphs (f) and (g) of this section.
   (ii) Information to be used in the training program shall include, at a minimum, the applicable data contained in the charts (rim manuals) and the contents of this standard.
   (iii) Where an employer knows or has reason to believe that any of his employees is unable to read and understand the charts or rim manual, the employer shall assure that the employee is instructed concerning the contents of the charts and rim manual in a manner which the employee is able to understand.

(2) The employer shall assure that each employee demonstrates and maintains the ability to service rim wheels safely, including performance of the following tasks:
   (i) Demounting of tires (including deflation);
   (ii) Inspection and identification of the rim wheel components;
   (iii) Mounting of tires (including inflation with a restraining device or other safeguard required by this section);
   (iv) Use of the restraining device or barrier, and other equipment required by this section;
   (v) Handling of rim wheels;
   (vi) Inflation of the tire when a single piece rim wheel is mounted on a vehicle;
   (vii) An understanding of the necessity of standing outside the trajectory both during inflation of the tire and during inspection of the rim wheel following inflation; and
   (viii) Installation and removal of rim wheels.

(3) The employer shall evaluate each employee’s ability to perform these tasks and to service rim wheels safely, and shall provide additional training as necessary to assure that each employee maintains his or her proficiency.

(d) Tire servicing equipment.

(1) The employer shall furnish a restraining device for inflating tires on multi-piece wheels.

(2) The employer shall provide a restraining device or barrier for inflating tires on single piece wheels unless the rim wheel will be bolted onto a vehicle during inflation.

(3) Restraining devices and barriers shall comply with the following requirements:
   (i) Each restraining device or barrier shall have the capacity to withstand the maximum force that would be transferred to it during a rim wheel separation occurring at 150 percent of the maximum tire specification pressure for the type of rim wheel being serviced.
   (ii) Restraining devices and barriers shall be capable of preventing the rim wheel components from being thrown outside or beyond the device or barrier for any rim wheel positioned within or behind the device;
   (iii) Restraining devices and barriers shall be visually inspected prior to each day’s use and after any separation of the rim wheel components or sudden release of contained air. Any restraining device or barrier exhibiting damage such as the following defects shall be immediately removed from service:
(A) Cracks at welds;
(B) Cracked or broken components;
(C) Bent or sprung components caused by mishandling, abuse, tire explosion or rim wheel separation;
(D) Pitting of components due to corrosion; or
(E) Other structural damage which would decrease its effectiveness.

(iv) Restraining devices or barriers removed from service shall not be returned to service until they are repaired and reinspected. Restraining devices or barriers requiring structural repair such as component replacement or rewelding shall not be returned to service until they are certified by either the manufacturer or a Registered Professional Engineer as meeting the strength requirements of paragraph (d)(2)(i) of this section.

(4) The employer shall furnish and assure that an air line assembly consisting of the following components be used for inflating tires:

(i) A clip-on chuck;
(ii) An in-line valve with a pressure gauge or a presettable regulator; and
(iii) A sufficient length of hose between the clip-on chuck and the in-line valve (if one is used) to allow the employee to stand outside the trajectory.

(5) Current charts or rim manuals containing instructions for the type of wheels being serviced shall be available in the service area.

(6) The employer shall furnish and assure that only tools recommended in the rim manual for the type of wheel being serviced are used to service rim wheels.

(e) Wheel component acceptability.

(1) Multi-piece wheel components shall not be interchanged except as provided in the charts or in the applicable rim manual.

(2) Multi-piece wheel components and single piece wheels shall be inspected prior to assembly. Any wheel or wheel component which is bent out of shape, pitted from corrosion, broken, or cracked shall not be used and shall be marked or tagged unserviceable and removed from the service area. Damaged or leaky valves shall be replaced.

(3) Rim flanges, rim gutters, rings, bead seating surfaces and the bead areas of tires shall be free of any dirt, surface rust, scale or loose or flaked rubber build-up prior to mounting and inflation.

(4) The size (bead diameter and tire/wheel widths) and type of both the tire and the wheel shall be checked for compatibility prior to assembly of the rim wheel.

(f) Safe operating procedure - multi-piece rim wheels.

The employer shall establish a safe operating procedure for servicing multi-piece rim wheels and shall assure that employees are instructed in and follow that procedure. The procedure shall include at least the following elements:

(1) Tires shall be completely deflated before demounting by removal of the valve core.

(2) Tires shall be completely deflated by removing the valve core before a rim wheel is removed from the axle in either of the following situations:

(i) When the tire has been driven underinflated at 80% or less of its recommended pressure, or
(ii) When there is obvious or suspected damage to the tire or wheel components.

(3) Rubber lubricant shall be applied to bead and rim mating surfaces during assembly of the wheel and inflation of the tire, unless the tire or wheel manufacturer recommends against it.

(4) If a tire on a vehicle is underinflated but has more than 80% of the recommended pressure, the tire may be inflated while the rim wheel is on the vehicle provided remote control inflation equipment is used, and no employees remain in the trajectory during inflation.

(5) Tires shall be inflated outside a restraining device only to a pressure sufficient to force the tire bead onto the rim ledge and create an airtight seal with the tire and bead.

(6) Whenever a rim wheel is in a restraining device the employee shall not rest or lean any part of his body or equipment on or against the restraining device.
After tire inflation, the tire and wheel components shall be inspected while still within the restraining device to make sure that they are properly seated and locked. If further adjustment to the tire or wheel components is necessary, the tire shall be deflated by removal of the valve core before the adjustment is made.

No attempt shall be made to correct the seating of side and lock rings by hammering, striking or forcing the components while the tire is pressurized.

Cracked, broken, bent or otherwise damaged rim components shall not be reworked, welded, brazed, or otherwise heated.

Whenever multi-piece rim wheels are being handled, employees shall stay out of the trajectory unless the employer can demonstrate that performance of the servicing makes the employee's presence in the trajectory necessary.

No heat shall be applied to a multi-piece wheel or wheel component.

g Safe operating procedure-single piece rim wheels.

The employer shall establish a safe operating procedure for servicing single piece rim wheels and shall assure that employees are instructed in and follow that procedure. The procedure shall include at least the following elements:

1. Tires shall be completely deflated by removal of the valve core before demounting.

2. Mounting and demounting of the tire shall be done only from the narrow ledge side of the wheel. Care shall be taken to avoid damaging the tire beads while mounting tires on wheels. Tires shall be mounted only on compatible wheels of matching bead diameter and width.

3. Nonflammable rubber lubricant shall be applied to bead and wheel mating surfaces before assembly of the rim wheel, unless the tire or wheel manufacturer recommends against the use of any rubber lubricant.

4. If a tire changing machine is used, the tire shall be inflated only to the minimum pressure necessary to force the tire bead onto the rim ledge while on the tire changing machine.

5. If a bead expander is used, it shall be removed before the valve core is installed and as soon as the rim wheel becomes airtight (the tire bead slips onto the bead seat).

6. Tires may be inflated only when contained within a restraining device, positioned behind a barrier or bolted on the vehicle with the lug nuts fully tightened.

7. Tires shall not be inflated when any flat, solid surface is in the trajectory and within one foot of the sidewall.

8. Employees shall stay out of the trajectory when inflating a tire.

9. Tires shall not be inflated to more than the inflation pressure stamped in the sidewall unless a higher pressure is recommended by the manufacturer.

10. Tires shall not be inflated above the maximum pressure recommended by the manufacturer to seat the tire bead firmly against the rim flange.

11. No heat shall be applied to a single piece wheel.

12. Cracked, broken, bent, or otherwise damaged wheels shall not be reworked, welded, brazed, or otherwise heated.
Appendix A - Trajectory

WARNING Stay out of trajectory as indicated by shaded area.

NOTE: Under some circumstances the trajectory may deviate from its expected path.

Appendix B - Ordering Information for OSHA Charts

The information on the OSHA charts is available on three posters, or in a manual containing the three charts, entitled “Demounting and Mounting Procedures for Tubeless Truck and Bus Tires,” “Demounting and Mounting Procedures for Tube-Type Truck and Bus Tires,” and “Multi-piece Rim Matching Chart.” Interested parties can download and print both the manuals and posters from OSHA’s Web site at http://www.osha.gov/publications (and type “tire chart” in the search field). However, when used by the employer at a worksite to provide information to employees, the printed posters must be, at a minimum, 2 feet wide and 3 feet long.

Copies of the manual also are available from the Occupational Safety and Health Administration (OSHA Office of Publications, Room N-3101, U.S. Department of Labor, 200 Constitution Avenue NW., Washington, DC 20210; telephone: (202) 693-1888; or fax: (202) 693-2498).

## Glossary of Terms

### 7-1 Glossary of Common Terms

<table>
<thead>
<tr>
<th>TERM</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIR CHAMBER</td>
<td>The area in a mounted tire and rim assembly that contains the air.</td>
</tr>
<tr>
<td>BACKUP DIAMETER</td>
<td>Hub attachment face diameter that mounts to the wheel.</td>
</tr>
<tr>
<td>BEAD SEAT</td>
<td>The tire seating surface of the rim.</td>
</tr>
<tr>
<td>BOLT CIRCLE</td>
<td>The circle defined by the centers of the bolt holes (stud holes) of a wheel, dimensions stated in diameter inches or millimeters.</td>
</tr>
<tr>
<td>BORE</td>
<td>See “HUB BORE.”</td>
</tr>
<tr>
<td>DISC</td>
<td>The center member of a disc wheel.</td>
</tr>
<tr>
<td>DISC FACE</td>
<td>The flat central portion of a disc wheel in which the bolt holes are located and which contacts the drum, hub or mating wheel.</td>
</tr>
<tr>
<td>DISC WHEEL</td>
<td>A rim combined with a center disc which has bolt holes for attaching to a vehicle.</td>
</tr>
<tr>
<td>DOUBLE CAP NUTS</td>
<td>Two wheel nuts used in stud-piloted wheel systems. They include inner cap nuts used to fasten inner wheels to a vehicle and outer cap nuts used to fasten single wheels and outer wheels to a vehicle. These nuts have both right and left hand threads and have ball seats that fit into the wheel ball, and ball seat bolt holes to center and clamp the wheels on the hub.</td>
</tr>
<tr>
<td>DROP CENTER</td>
<td>The well or center portion of the wheel rim.</td>
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<tr>
<td>DUAL WHEEL / DUALABLE</td>
<td>Any wheel that can be mated disc side to disc side with another wheel resulting in an inner and outer dual wheel assembly.</td>
</tr>
<tr>
<td>FLANGE NUT</td>
<td>A nut with a flat face or flange that bears against the wheel; can be one-piece or multi-piece construction. Use on hub piloted wheels.</td>
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<tr>
<td>FOOT-POUNDS</td>
<td>The measure of the amount of torque applied to a cap nut or other part. May be measured with a torque wrench.</td>
</tr>
<tr>
<td>HUB BORE</td>
<td>(Bore) The large hole in the middle of a disc wheel.</td>
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<tr>
<td>HALF DUAL SPACING</td>
<td>The distance from the outside disc face (surface between the wheels as a dual assembly) to the center of the rim.</td>
</tr>
<tr>
<td>HUB PILOTED MOUNTING</td>
<td>A wheel mounting system in which location of the wheel is accomplished by positioning the wheel center hole on a machined pilot, (continuous or interrupted) on the hub. Fastening is accomplished by flange nuts bearing against the flat face of the wheel disc.</td>
</tr>
<tr>
<td>HUB PILOTS</td>
<td>Pads on the hub to locate the center hole of a hub-piloted wheel.</td>
</tr>
<tr>
<td>in.</td>
<td>Abbreviation for inches.</td>
</tr>
<tr>
<td>INNER CAP NUT</td>
<td>The ball seat nut used to install the inner stud-piloted dual wheel to a vehicle. (see Double cap nut)</td>
</tr>
<tr>
<td>INSET</td>
<td>The distance from the wheel mounting surface to the rim centerline when the centerline is placed inboard of the mounting surface.</td>
</tr>
<tr>
<td>kg</td>
<td>Abbreviation for kilogram (weight measurement), equal to 1000 grams.</td>
</tr>
<tr>
<td>kPa</td>
<td>Abbreviation for kilo Pascals (pressure measurement).</td>
</tr>
<tr>
<td>MAXIMUM INFLATION</td>
<td>The highest amount of air pressure allowed, measured at normal ambient temperatures.</td>
</tr>
<tr>
<td>mm</td>
<td>Abbreviation for millimeters.</td>
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<td>NAVE</td>
<td>See “DISC FACE.”</td>
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<td>TERM</td>
<td>DEFINITION</td>
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<tr>
<td>----------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
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<tr>
<td>N-m</td>
<td>Abbreviation for Newton meters</td>
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<td>OFFSET</td>
<td>See “OUTSET.”</td>
</tr>
<tr>
<td>OPEN SIDE</td>
<td>The side of the wheel opposite the disc face.</td>
</tr>
<tr>
<td>OSHA</td>
<td>Abbreviation for the U.S. Department of Labor, Occupational Safety and Health Administration.</td>
</tr>
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<td>OUTER CAP NUT</td>
<td>The ball seat nut used to install the outer wheel of a stud-piloted dual assembly or a single stud-piloted wheel to a vehicle. The outer nut screws onto the inner cap is a dual assembly. (see Double Cap Nut).</td>
</tr>
<tr>
<td>OUTSET</td>
<td>The distance from the mounting surface of the wheel to the rim centerline when the rim centerline is mounted outboard of the hub face. This dimension is the same as the 1/2 DUAL SPACING dimension.</td>
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<tr>
<td>PILOT PAD</td>
<td>See “HUB PILOTS”.</td>
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<tr>
<td>PSI</td>
<td>Abbreviation for pounds per square inch.</td>
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<td>REVERSIBLE</td>
<td>Term applied to a disc wheel which can be reversed on the hub without changing the position of the tire centerline.</td>
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<td>RIM</td>
<td>That portion of the wheel which supports the tire.</td>
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<td>RIM CENTERLINE</td>
<td>A line to the radial axis of the wheel running through the mid point between the rim flanges.</td>
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<tr>
<td>RIM FLANGE</td>
<td>The edge of a rim that has a larger diameter that the tire bead designed to support the tire.</td>
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<td>SINGLE CAP NUT</td>
<td>A cap nut used to secure single wheels or outer dual wheels.</td>
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<td>STUD</td>
<td>A threaded bolt that is used with wheel nuts to fasten wheels or rims to a vehicle.</td>
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<tr>
<td>STUD-PILOTED MOUNTING</td>
<td>A wheel mounting system in which location and fastening of the wheel are both accomplished by nuts which fit corresponding studs at each wheel bolt hole.</td>
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<tr>
<td>TIRE BEAD</td>
<td>That surface of the tire which contacts the angled surface of the wheel rim.</td>
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<td>TORQUE</td>
<td>Rotational force to measure nut tightness.</td>
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<td>WHEEL MOUNTING FACE</td>
<td>See “DISC FACE”.</td>
</tr>
<tr>
<td>wt.</td>
<td>Abbreviation for weight.</td>
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</table>
7-2 Wheel Measurement

How to measure minimum dual spacing

Minimum dual spacing measurement is determined by the tire manufacturer and may be obtained from the tire manufacturer’s handbook. To determine if the Alcoa aluminum dual wheel assembly has adequate minimum dual spacing for the selected tires, double the wheel outset measurement of the Alcoa wheel used. If the doubled outset measurement is equal to or greater than the tire manufacturer’s recommendation, there will be sufficient minimum dual spacing. Wheel inset and outset is given for each Alcoa wheel in the Product Spec Guide for Alcoa Wheels. Both inset and outset wheels are measured from the mounting surface of the wheel to the center line of the rim. Maintaining proper tire inflation and load ratings are essential to maintaining proper minimum dual spacing.
## 8-1 Inch Fraction, Decimal and Millimeter Equivalents Chart (Up to 1 inch)

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</table>
8-2 Conversion Factors

Inches to Millimeters

\[ \text{Inches} \times 25.4 = \text{Millimeters} \]

Millimeters to Inches

\[ \text{Millimeters} \times 0.03937 = \text{Inches} \]

PSI to kPa

\[ \text{PSI} \times 6.8948 = \text{kPa} \]

kPa to PSI

\[ \text{kPa} \times 0.145 = \text{PSI} \]

Pounds to Kilograms

\[ \text{Pounds} \times 0.4536 = \text{kg} \]

Kilograms to Pounds

\[ \text{kg} \times 2.2046 = \text{Pounds} \]

Foot-pounds to Newton Meters

\[ \text{Ft-lbs} \times 1.2558 = \text{N-m} \]

Newton Meters to Foot-pounds

\[ \text{N-m} \times 0.73756 = \text{Ft-lbs} \]
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<thead>
<tr>
<th>MY</th>
<th>Bus</th>
<th>Model</th>
<th>Front Make</th>
<th>Axle Model</th>
<th>GAWR</th>
<th>Rear Make</th>
<th>Axle Model</th>
<th>GAWR</th>
<th>Middle Make</th>
<th>Axle Model</th>
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<td>D40LF</td>
<td>MAN</td>
<td>V8-65L</td>
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Price Proposal

for

The Leasing and Servicing of Bus Tires
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<th>Item</th>
<th>Bus Configuration</th>
<th>No. of Buses</th>
<th>Tire Size</th>
<th>Estim. Vehicle Miles/Yr.</th>
<th>Estim. Tire Qty/Bus Item</th>
<th>Estim. Tire Miles/Yr.</th>
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<td>5,704,351</td>
<td>6</td>
<td>34,226,106</td>
<td>X =</td>
<td></td>
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<td>B.</td>
<td>60' Articulated (Ctr. Axle)</td>
<td>185</td>
<td>385/55 R22.5</td>
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<td>11,408,702</td>
<td>X =</td>
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<td>40' Low-floor</td>
<td>1,214</td>
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<td>42,313,353</td>
<td>6</td>
<td>253,880,118</td>
<td>X =</td>
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<td>30' Bus</td>
<td>35</td>
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<td>606,168</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,459</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>49,045,647</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>305,682,584</td>
</tr>
</tbody>
</table>

**Wheel Maintenance**

<table>
<thead>
<tr>
<th></th>
<th>Price/Wheel</th>
<th>Approx. Units</th>
<th>Price/Unit</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>F.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G.</td>
<td>Steel Wheel Refinishing/Repainting (if needed):</td>
<td>16,000</td>
<td>X</td>
<td>=</td>
</tr>
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<td>H.</td>
<td>Non-Durabright Aluminum Wheel Buffing/Polishing (if needed):</td>
<td>12.00</td>
<td>X</td>
<td>=</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Item</th>
<th>Price/Month</th>
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</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>12.00</td>
<td></td>
</tr>
<tr>
<td>J.</td>
<td>12.00</td>
<td></td>
</tr>
</tbody>
</table>

Estimated Total for Year 1 - All (Individual) Locations (add line items A thru E, + line item G, + line item I):

Estimated Total for Year 1 - Combined Locations (add line items A thru E, + line item G, + line item J):

**Residual Tire Value for Year 1**: Please enter price per 32nd & usable 32nds in the tables below for both Original and Retreads

To determine the value of a tire, the remaining usable 32nds are to be multiplied by the effective rate established for 32nds.
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<thead>
<tr>
<th>Item</th>
<th>Bus Configuration</th>
<th>No. of Buses</th>
<th>Tire Size</th>
<th>Estim. Vehicle Miles/Yr.</th>
<th>Tire Qty/Bus Item</th>
<th>Estim. Tire Miles/Yr.</th>
<th>Price/Tire-Mile</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>60' Articulated</td>
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<td>305/70 R22.5</td>
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<td>1,214</td>
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</tr>
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<td>D.</td>
<td>30' Bus</td>
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<td>X =</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Wheel Maintenance</th>
<th>Price/Wheel</th>
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</thead>
<tbody>
<tr>
<td>F.</td>
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<tr>
<td>G.</td>
<td></td>
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</tr>
<tr>
<td>H.</td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No. of Months</th>
<th>Price/Month</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Proposed Combined Locations:         |
| a) Midvale and Allegheny (based at Midvale) |
| b) Victory and Callowhill (based at Victory) |
| c) Comly and Frankford (based at Comly) |
| d) Germantown and Frontier (based at Germantown) |

Estimated Total for Year 2 - All (Individual) Locations (add line items A thru E, + line item G, + line item I):

| Estimated Total for Year 2 - Combined Locations (add line items A thru E, + line item G, + line item J): |

Residual Tire Value for Year 2: Please enter price per 32nd & usable 32nds in the tables below for both Original and Retreads

To determine the value of a tire, the remaining usable 32nds are to be multiplied by the effective rate established for 32nds.

<table>
<thead>
<tr>
<th>Tire Size</th>
<th>Original</th>
<th>Retread</th>
</tr>
</thead>
<tbody>
<tr>
<td>305/70 R22.5</td>
<td>Price Per 32nd</td>
<td>Usable 32nds</td>
</tr>
<tr>
<td>385/55 R22.5</td>
<td>Price Per 32nd</td>
<td>Usable 32nds</td>
</tr>
<tr>
<td>305/70 R22.5</td>
<td>Price Per 32nd</td>
<td>Usable 32nds</td>
</tr>
<tr>
<td>265/70 R19.5</td>
<td>Price Per 32nd</td>
<td>Usable 32nds</td>
</tr>
<tr>
<td>315/80 R22.5</td>
<td>Price Per 32nd</td>
<td>Usable 32nds</td>
</tr>
</tbody>
</table>
### Bus Configuration

<table>
<thead>
<tr>
<th>Item</th>
<th>Bus Configuration</th>
<th>No. of Buses</th>
<th>Tire Size</th>
<th>Estim. Vehicle Miles/Yr.</th>
<th>Tire Qty/Bus Item</th>
<th>Estim. Tire Miles/Yr.</th>
<th>Price/Tire-Mile</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>60' Articulated</td>
<td>185</td>
<td>305/70 R22.5</td>
<td>5,704,351</td>
<td>6</td>
<td>34,226,106</td>
<td>X</td>
<td>*</td>
</tr>
<tr>
<td>B.</td>
<td>60' Articulated (Ctr. Axle)</td>
<td>185</td>
<td>385/55 R22.5</td>
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<td>X</td>
<td>*</td>
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<td>C.</td>
<td>40' Low-floor</td>
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<td>6</td>
<td>2,530,850</td>
<td>X</td>
<td>*</td>
</tr>
</tbody>
</table>

| Total Items A - E: | 1,459 | 49,045,647 | 305,682,584 |

### Wheel Maintenance

<table>
<thead>
<tr>
<th>Item</th>
<th>Price/Wheel</th>
<th>Approx. Units</th>
<th>Price/Unit</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>F.</td>
<td>Steel Wheel Refinishing/Repainting (if needed):</td>
<td>16,000</td>
<td>X</td>
<td>*</td>
</tr>
<tr>
<td>G.</td>
<td>Aluminum Wheel Cleaning (No Buffing/No Polishing):</td>
<td>16,000</td>
<td>X</td>
<td>*</td>
</tr>
<tr>
<td>H.</td>
<td>Non-Durabright Aluminum Wheel Buffing/Polishing (if needed):</td>
<td>16,000</td>
<td>X</td>
<td>*</td>
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</tbody>
</table>

### No. of Months

<table>
<thead>
<tr>
<th>Item</th>
<th>Price/Month</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>12.00</td>
<td>X</td>
</tr>
<tr>
<td>J.</td>
<td>12.00</td>
<td>X</td>
</tr>
</tbody>
</table>

### Proposed Combined Locations:

- a) Midvale and Allegheny (Based at Midvale)
- b) Victory and Callowhill (Based at Victory)
- c) Comly and Frankford (Based at Comly)
- d) Germantown and Frontier (Based at Germantown)

### Estimated Total for Year 3:
- All (Individual) Locations (add line items A thru E, + line item G, + line item I):
- Combined Locations (add line items A thru E, + line item G, + line item J):

### Residual Tire Value for Year 3:

To enter price per 32nd & usable 32nds in the tables below for both Original and Retreads:

<table>
<thead>
<tr>
<th>Tire Size</th>
<th>Price Per 32nd</th>
<th>Usable 32nds</th>
<th>Price Per 32nd</th>
<th>Usable 32nds</th>
</tr>
</thead>
<tbody>
<tr>
<td>305/70 R22.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>385/55 R22.5</td>
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<td></td>
</tr>
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<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>315/80 R22.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Year 4 - July 1, 2025 to June 30, 2026

<table>
<thead>
<tr>
<th>Item</th>
<th>Bus Configuration</th>
<th>No. of Buses</th>
<th>Tire Size</th>
<th>Estim. Vehicle Miles/Yr.</th>
<th>Tire Qty/ Bus Item</th>
<th>Estim. Tire Miles/Yr.</th>
<th>Price/Tire-Mile</th>
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</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>60' Articulated</td>
<td>185</td>
<td>305/70 R22.5</td>
<td>5,704,351</td>
<td>6</td>
<td>34,226,106</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>B.</td>
<td>60' Articulated</td>
<td>185</td>
<td>385/55 R22.5</td>
<td>5,704,351</td>
<td>2</td>
<td>11,408,702</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>C.</td>
<td>40' Low-floor</td>
<td>1,214</td>
<td>305/70 R22.5</td>
<td>42,313,353</td>
<td>6</td>
<td>253,860,118</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>D.</td>
<td>30' Bus</td>
<td>35</td>
<td>265/70 R19.5</td>
<td>606,168</td>
<td>6</td>
<td>3,637,068</td>
<td>X</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>1,459</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>49,045,647</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>305,682,584</td>
</tr>
</tbody>
</table>

**Total items A - E:**

#### Wheel Maintenance

<table>
<thead>
<tr>
<th>Item</th>
<th>Price/Wheel</th>
<th>Approx. Units</th>
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</thead>
<tbody>
<tr>
<td>F.</td>
<td>Steel Wheel Refinishing/Repainting(if needed):</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>G.</td>
<td>Aluminum Wheel Cleaning (No Buffing/No Polishing):</td>
<td>16,000</td>
<td>X</td>
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<tr>
<td>H.</td>
<td>Non-Durabright Aluminum Wheel Buffing/Polishing(if needed):</td>
<td></td>
<td></td>
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</tbody>
</table>

#### Tire & Wheel Svc.

<table>
<thead>
<tr>
<th>Item</th>
<th>No. of Months</th>
<th>Price/Month</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>12.00</td>
<td>X</td>
<td></td>
</tr>
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**Proposed Combined Locations:**

- a) Midvale and Allegheny (based at Midvale)
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**Estimated Total for Year 4 - All (Individual) Locations (add line items A thru E, + line item G, + line item I):**

**Estimated Total for Year 4 - Combined Locations (add line items A thru E, + line item G, + line item J):**

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**Residual Tire Value for Year 4:** Please enter price per 32nd & usable 32nds in the tables below for both Original and Retreads

To determine the value of a tire, the remaining usable 32nds are to be multiplied by the effective rate established for 32nds.

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</tr>
</thead>
<tbody>
<tr>
<td>305/70 R22.5</td>
<td><img src="price_per_32nd.png" alt="" /> <img src="usable_32nds.png" alt="" /></td>
<td></td>
</tr>
<tr>
<td>385/55 R22.5</td>
<td><img src="price_per_32nd.png" alt="" /> <img src="usable_32nds.png" alt="" /></td>
<td></td>
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<td><img src="price_per_32nd.png" alt="" /> <img src="usable_32nds.png" alt="" /></td>
<td></td>
</tr>
<tr>
<td>265/70 R19.5</td>
<td><img src="price_per_32nd.png" alt="" /> <img src="usable_32nds.png" alt="" /></td>
<td></td>
</tr>
<tr>
<td>315/80 R22.5</td>
<td><img src="price_per_32nd.png" alt="" /> <img src="usable_32nds.png" alt="" /></td>
<td></td>
</tr>
</tbody>
</table>

---

RFP 21-00208-ACAC Page 4 of 6 Proposer: ________________________________
### Year 5 - July 1, 2026 to June 30, 2027

<table>
<thead>
<tr>
<th>Item</th>
<th>Bus Configuration</th>
<th>No. of Buses</th>
<th>Tire Size</th>
<th>Estim. Vehicle Miles/Yr.</th>
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<td>6</td>
<td>2,530,850</td>
<td>X =</td>
<td></td>
</tr>
</tbody>
</table>

Total items A - E: 1,459 miles, 49,045,647 units, 305,682,584 total price.

#### Wheel Maintenance

<table>
<thead>
<tr>
<th>No. of Wheels</th>
<th>Price/Wheel</th>
<th>Approx. Units</th>
<th>Price/Unit</th>
<th>Total Price</th>
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<td></td>
</tr>
</tbody>
</table>

#### No. of Months | Price/Month | Total Price
--- | --- | ---
I. | 12.00 | X = |
J. | 12.00 | X = |

**Proposed Combined Locations:**
a) Midvale and Allegheny (based at Midvale)
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Estimated Total for Year 5 - All (Individual) Locations (add line items A thru E, + line item G, + line item I):

Estimated Total for Year 5 - Combined Locations (add line items A thru E, + line item G, + line item J):

### Residual Tire Value for Year 5:

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<th>Retread Price Per 32nd</th>
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</thead>
<tbody>
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<tr>
<td>385/55 R22.5</td>
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Proposer: ____________________________

Date: ____________________________

Signature: ____________________________

Title: ____________________________
Federal Transit Administration (FTA)
Provisions for Contracts
Section A

Section A - Federal Contract Requirements


A. APPLICABILITY

This article applies to all federally funded if the purchase order is over $3,000; contracts; or subcontracts may involve the international transportation of goods, equipment or personnel by air.

B. The Contractor agrees to comply with the Fly America Act and its regulations. The Contractor agrees to include the requirements of this section in all subcontracts that may involve international air transportation.

FR-02 Buy America Act (49 U.S.C. §5323(j) and 49 CFR Part 661 et seq.)

A. APPLICABILITY

This article applies to all federally funded rolling stock purchases, construction contracts; and contracts for material and supplies for steel, iron or manufactured products over $100,000.

B. The Contractor agrees to comply with the Buy America Act and its regulations.


A. APPLICABILITY

This article applies to all federally funded rolling stock purchases, construction contracts; and contracts for material and supplies which may be transported by ocean vessels.

B. The Contractor agrees: a. to comply with the Cargo Preference Act of 1954 and its regulations. The Contractor agrees to include the requirements of this section in all subcontracts that involve the transport of equipment, material or commodities by ocean vessel.

A. APPLICABILITY

This article applies to all federally funded architectural & engineering and constructions contracts for the design or construction of new buildings or additions to existing buildings.

B. The Contractor agrees that any new building or addition to an existing building will be designed and constructed in accordance with the National Earthquake Hazards Reduction Program Reauthorization Action of 2004 and its regulations. The Contractor will certify to compliance to the extent required by the regulations. The Contractor also agrees to ensure that all work performed under this Contract including work performed by a subcontractor is in compliance with the Act and its regulations and the certification of compliance issued on the Project.


A. APPLICABILITY

This article applies to all federally funded purchase orders over $3,000 and contracts.

B. The Contractor or agrees to comply with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act and its regulations.

FR-06 Clean Water Act (33 U.S.C. §1251 et seq.)

A. APPLICABILITY

This article applies to all federally funded contracts over $100,000.

B. (1). The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Water Act. The Contractor agrees to report each violation to SEPTA and understands and agrees that SEPTA will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

(2). The Contractor also agrees to include these requirements in each subcontract exceeding $100,000 financed in whole or in part with Federal assistance provided by FTA.

A. APPLICABILITY

This article applies to all federally funded purchase orders over $3,000 and contracts.

B. (1) Contractor agrees to provide SEPTA, the FTA Administrator, the Comptroller General of the United States or any of their authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to this Contract for the purposes of making audits, examinations, excerpts and transcriptions. Contractor also agrees, pursuant to 49 C. F. R. 633 to provide the FTA Administrator or his authorized representatives including any PMO Contractor access to Contractor's records and construction sites pertaining to a major capital project, defined at 49 U.S.C. 5302(a)1, which is receiving federal financial assistance through the programs described at 49 U.S.C. 5307, 5309 or 5311.

(2) The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

(3) The Contractor agrees to maintain all books, records, accounts and reports required under this Contract for a period of not less than three years after the date of termination or expiration of this Contract, except in the event of litigation or settlement of claims arising from the performance of this Contract, in which case Contractor agrees to maintain same until SEPTA, the FTA Administrator, the Comptroller General, or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto.

(4) FTA does not require the inclusion of these requirements in subcontracts.


A. APPLICABILITY

This article applies to all federally funded contracts over $100,000.

B. Contractor, if this Contract is for $100,000 or more, shall file the certification required by 49 CFR part 20, "New Restrictions on Lobbying," and shall include this clause in each subcontract for $100,000 or more and shall require its inclusion in all lower tier transactions for $100,000 or more. Each contractor tier shall certify to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. §1352. Each contractor tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made
lobbying contacts on its behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 U.S.C. §1352. Such disclosures are forwarded from contractor tier to tier up to SEPTA.

FR-09 Compliance with FTA Regulations, Policies, Procedures and Directives

A. APPLICABILITY

This article applies to all federally funded purchase orders over $3,000 and contracts.

B. Contractor shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Master Agreement between SEPTA and FTA, as they may be amended or promulgated from time to time during the term of this Contract. Contractor's failure to so comply shall constitute a material breach of this Contract.

FR-10 Clean Air Act (42 U.S.C. §7401 et seq)

A. APPLICABILITY

This article applies to all federally funded contracts over $100,000.

B. (1) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, and its regulations. The Contractor agrees to report each violation to SEPTA and understands and agrees that SEPTA will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

(2) The Contractor also agrees to include these requirements in each subcontract exceeding $100,000 financed under this Contract


A. APPLICABILITY

This article applies to all federally funded construction contracts over $2,000 (including ferry vessels).

B. (1) The Contractor agrees to comply with the Davis-Bacon and Copeland Anti-Kickback Acts.

(2) Withholding - SEPTA shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Contractor under this Contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon
prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the Contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the Contract, SEPTA may, after written notice to the Contractor, sponsor, applicant, or owner, 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.

(3) **Subcontracts** - The Contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the Federal Transit Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The Contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(4) **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.

(5) **Certification of eligibility** - (i) By entering into this Contract, the Contractor certifies that neither it (nor he or she) 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 section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).


**A. APPLICABILITY**

This article applies to all federally funded construction contracts (including ferry vessels), rolling stock purchases and operations/management contracts (except transportation services) over $100,000.

**B. (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 unless they are compensated in accordance with Federal Labor Standards Act (FLSA) regulations.

(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 therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States for liquidated
damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of $10 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.

(3) **Withholding for unpaid wages and liquidated damages** – SEPTA shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or 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, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

(4) **Subcontracts** - The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.

(5) **Disputes** - 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 SEPTA, the U.S. Department of Labor, or the employees or their representatives.

**FR-13 Veterans Employment**

**A. APPLICABILITY**

This article applies to all federally funded construction purchase orders and contracts.

**B.** Contractors working on a federally funded project give a hiring preference, to the extent practicable, to veterans (as defined in 5 USC §2108) who have the requisite skills and abilities to perform the construction work required under the contract. This provision shall not be understood, construed, or enforced in any manner that would require an employer to give preference to any veteran over any equally qualified applicant who is a member any racial or ethnic minority, female, an individual with a disability, or former employee.
FR-14 No Obligation by the Federal Government

A. APPLICABILITY

This article applies to all federally funded purchase orders over $3,000 and contracts.

B. (1) SEPTA and Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying Contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this Contract and shall not be subject to any obligations or liabilities to SEPTA, Contractor, or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying contract.

(2) The Contractor agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.


A. APPLICABILITY

This article applies to all federally funded purchase orders over $3,000 and contracts.

B. (1) The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. § 3801 et seq, and U.S. Department Of Transportation regulations, "Program Fraud Civil Remedies," 49 C.F.R. Part 31, apply to its actions pertaining to this Project. Upon execution of the underlying Contract, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it may make, or causes to be made, pertaining to the underlying Contract or the FTA assisted project for which this Contract work is being performed. In addition to other penalties that may be applicable, the Contractor further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate.

(2) The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 U.S.C. § 5307, the Government reserves the right to impose the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § 5307(n)(1) on the Contractor, to the extent the Federal Government deems appropriate.
(3) The Contractor agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clauses shall not be modified, except to identify the subcontractor who will be subject to the provisions.


A. APPLICABILITY

This article applies to all federally funded purchase orders over $25,000 and contracts.

B. The Contractor is required to comply with Government Wide Suspension and Debarment and must include the requirement in all its lower tier covered transactions.

FR-17 Use of Seat Belts (23 U.S.C. §402, Executive Order 13043)

A. APPLICABILITY

This article applies to all federally funded purchase orders and contracts.

B. Pursuant to Executive order No. 13043 and in accordance with 23 U.S.C. §402, the Contractor is encouraged to adopt and promote on-the-job seat belt use policy and program for its employees and other personnel that operate company-owned, rented, or personally-operated vehicles and include this provision in all subcontracts entered into under this Contract.


A. APPLICABILITY

This article applies to federally funded operations/management, construction, or materials and supplies purchase orders or contracts for items designated by the Environmental Protection Agency, when procuring $10,000 or more per year.

B. Recovered Materials - The Contractor agrees to comply with all the requirements of Section 6002 of the Resource Conservation and Recovery Act, as amended (42 U.S.C. §6962), including but not limited to the regulatory provisions of 40 CFR Part 247, and Executive Order 12873, as they apply to the procurement of the items designated in Subpart B of 40 CFR Part 247.

A. APPLICABILITY

This article applies to the Contractor and its employees that administer any system of records on behalf of the Federal Government under any contract:

B. (1) The Contractor agrees to comply with, and assures the compliance of its employees with, the information restrictions and other applicable requirements of the Privacy Act, 5 U.S.C. § 552a. Among other things, the Contractor agrees to obtain the express consent of the Federal Government before the Contractor or its employees operate a system of records on behalf of the Federal Government. The Contractor understands that the requirements of the Privacy Act, including the civil and criminal penalties for violation of that Act, apply to those individuals involved, and that failure to comply with the terms of the Privacy Act may result in termination of the underlying Contract.

(2) The Contractor also agrees to include these requirements in each subcontract to administer any system of records on behalf of the Federal Government financed in whole or in part with Federal assistance provided by FTA.


A. APPLICABILITY

This article applies to all federally funded purchase orders over $10,000 and contracts.

B. The above statutes apply to the underlying Contract

FR-21 Disadvantaged Business Enterprise – (49 CFR Part 26)

A. APPLICABILITY

This article applies to all federally funded purchase orders over $3,000 and contracts.

B. (1) Policy. It is the policy of the Department of Transportation that disadvantaged business enterprises, as defined in 49 CFR Part 26, shall have the equal opportunity to participate in the performance of contracts financed in whole or in part with federal funds under this agreement. Consequently, the DBE requirements of 49 CFR Part 26 apply to this agreement.

(2) DBE Obligation. SEPTA and its contractors agree to ensure that disadvantaged business enterprises as defined in 49 CFR Part 26 have the 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, SEPTA and its contractors shall take all necessary and reasonable steps in accordance with 49 CFR
Part 26 to ensure that disadvantaged business enterprises have maximum opportunity to compete for and perform contracts. SEPTA and its contractors shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of contracts assisted by the Department of Transportation.

FR-22 Incorporation of Federal Transit Administration (FTA) Terms – (FTA Circular 4220.1F)

A. APPLICABILITY

This article applies to all federally funded purchase orders over $3,000 and contracts.

B. The preceding provisions include, in part, certain Standard Terms and Conditions required by DOT, whether or not expressly set forth in the preceding contract provisions. All contractual provisions required by DOT, as set forth in FTA Circular 4220.1F, are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Agreement. The Contractor shall not perform any act, fail to perform any act, or refuse to comply with any SEPTA requests which would cause SEPTA to be in violation of the FTA terms and conditions.

FR-23 National Intelligent Transportation System Architecture and Standards (ITS)

A. APPLICABILITY

This article applies to all federally funded purchase orders over $3,000 and contracts involving ITS projects.


FR-24 Contracts Involving Experimental, Developmental, or Research Work, Rights in Data

A. APPLICABILITY

This article applies to all federally funded purchase orders over $3,000 and contracts for professional and architectural and engineering services.

B. The Contractor agrees to follow the requirements as set forth in 37 U.S.C. 401 (Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts, and Cooperative Agreements), 49 CFR part 18 (Uniform Administrative Requirements for Grants and Cooperative Agreements to
State and Local Governments), and 49 CFR part 19 (Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Nonprofit Organizations with regard to experimental, developmental or research work; rights in data; copyrights; and intangible property.

FR-25 Transit Employee Protective Agreements

A. APPLICABILITY

This article applies to all federally funded purchase orders over $3,000 and contracts for transit operations.

B. The Contractor agrees to comply with the requirements as set forth in 49 U.S.C. 5310 (Formula Grants For Special Needs of Elderly Individuals and Individuals with Disabilities), 49 U.S. 5311 (Formula Grants for Other than Urbanized Areas), 49 U.S.C. 5333 (Labor Standards), and 29 CFR part 215 (Guidelines, Section 5333(b), Federal Transit Law).

FR-26 Texting While Driving and Distracted Driving

A. APPLICABILITY

This article applies to all federally funded purchase orders over $3,000 and contracts for transit operations.

B. Consistent with Executive Order No. 13513, “Federal Leadership on Reducing Text Messaging While Driving,” October 1, 2009, 23 U.S.C. Section 402 note, and DOT Order 3902.10 “Text Messaging While Driving,” December 30, 2009, FTA encourages each third party contractor to promote policies and initiatives for its employees and other personnel that adopt and promote safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving, and to include this provision in each third party subcontract involving the project.

FR-27 ADA Access

A. APPLICABILITY

This article applies to all federally funded purchase orders over $3,000 and contracts for architectural & engineering, operations/management, rolling stock purchases and construction contracts.

applicable requirements of the following regulations and any subsequent amendments thereto:

(1) U.S. DOT regulations, “Transportation Services for Individuals with Disabilities (ADA),” 49 CFR Part 37;

(2) U.S. DOT regulations, “Nondiscrimination on the Basis of Handicap in Programs and Activities Receiving or Benefiting from Federal Financial Assistance,” 49 CFR Part 27;


(8) U.S. Federal Communications Commission regulations, “Telecommunications Relay Services and Related Customer Premises Equipment for the Hearing and Speech Disabled,” 47 CFR Part 64, Subpart F and

(9) U.S. ATBCB regulations, “Electronic and Information Technology Accessibility Standards,” 36 CFR Part 1194; and

(10) FTA regulations, “Transportation for Elderly and Handicapped Persons,” 49 CFR Part 609;

(11) Any implementing requirements FTA may issue.
FR -28 RIGHTS TO INVENTIONS MADE UNDER A CONTRACT OR AGREEMENT

A. APPLICABILITY

This article applies to all purchase orders and contracts

B. If the Federal award meets the definition of “funding agreement” under 37 CFR Part 401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.
FEDERAL TRANSIT ADMINISTRATION (FTA) REQUIRED PROVISIONS FOR CONTRACTS

EEO/AA Contractual Requirements

In connection with the performance of the Contract, the Contractor shall not discriminate against any employee or applicant for employment because of race, color, age, creed, religion, sex or national origin. The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, creed, religion, sex, age 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; rate of pay or other forms of compensation; and selection for training, including apprenticeship.

Section C - U.S. Department Of Transportation Nondiscrimination Requirements

During the performance of the Contract, the Contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

1. **Compliance with Regulations.** The Contractor shall comply with the Regulations relative to nondiscrimination in federally-assisted programs of the Department of Transportation (hereinafter "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of the Contract.

2. **Nondiscrimination.** The Contractor, with regard to the work performed by it during the Contract, shall not discriminate on the grounds of race, religion, color, sex, age or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the Contract covers a program set forth in Appendix B of the Regulations.

3. **Solicitations for Subcontractors, Including Procurement of Materials and Equipment.** In all solicitations either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the Contractor of the Contractor's obligations under the Contract and the Regulations relative to nondiscrimination on the grounds of race, religion, color, sex, age or national origin.

4. **Information and Reports.** The Contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by SEPTA or the FTA to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to SEPTA, or the FTA, as appropriate, and shall set forth what
efforts it has made to obtain the information.

5. **Sanctions for Noncompliance.** In the event of the Contractor's noncompliance with the nondiscrimination provisions of the Contract, SEPTA shall impose such contract sanctions as it or the FTA may determine to be appropriate, including but not limited to:

   a. Withholding of payments to the Contractor under the Contract until the Contractor complies, and/or

   b. Cancellation, termination or suspension of the Contract, in whole or in part.

   [END OF PAGE]
Restrictions on Lobbying  
(If Contract Sum exceeds $100,000)

1. Certification Requirements

Contractors, at any tier, who apply or bid for a contract of $100,000 or more, shall file the certification required by 49 CFR part 20, "New Restrictions on Lobbying". Each tier certifies to the tier above that it will not and has not used federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, or an employee of a member of Congress in connection with obtaining any federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose any lobbying with non-federal funds that takes place in connection with obtaining any federal award. Such disclosures are forwarded from tier to tier up to SEPTA.

2. Disclosure Requirements

   a. Each contractor who requests and receives from SEPTA a Federal contract shall file with SEPTA a disclosure form, Standard Form - LLL, "Disclosure of Lobbying Activities," as set forth on pages 41 through 43 of this Contract, if such contractor has made or has agreed to make any payment using non-appropriated funds (to include profits from any covered federal action), which would be prohibited under 49 CFR part 20 if paid for with appropriated funds.

   b. Each contractor shall file a disclosure form at the end of each calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed by such contractor under paragraph 2.a. of this section. An event that materially affects the accuracy of the information reported includes:

      (1) A cumulative increase of $25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or

      (2) A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or,

      (3) A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.

   c. Any person who requests or receives from a contractor referred to in paragraph 2.a. of this section a subcontract exceeding $100,000 at any tier under a Federal contract shall file a certification, and a disclosure form, if required, to the next tier above.
d. All disclosure forms, but not certifications, shall be forwarded from tier to tier until received by the Contractor referred to in paragraph 2.a. of this section. That contractor shall forward all disclosure forms to SEPTA.

3. Penalties

a. Any person who makes an expenditure prohibited under 49 CFR part 20 shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such expenditure.

b. Any person who fails to file or amend the disclosure form to be filed or amended if required by this clause, shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

c. Contractors may rely without liability on the representations made by their Subcontractors in the certification and disclosure form.

4. Cost allowability

Nothing in this clause is to be interpreted to make allowable or reasonable any revenues which would be unallowable or unreasonable in accordance with Part 31 of the Federal Acquisition Regulation. Conversely, revenues made specifically unallowable by the requirements in this clause will not be made allowable under any of the provisions of Part 31 of the Federal Acquisition Regulation.
**DISCLOSURE OF LOBBYING ACTIVITIES**

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352

(See reverse for public burden disclosure)

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<td>f. loan insurance</td>
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</table>

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<tr>
<th>4. Name and Address of Reporting Entity</th>
<th>5. If reporting entity in No. 4 is Subawardee, Enter Name and Address of Prime:</th>
</tr>
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<tbody>
<tr>
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</tr>
<tr>
<td>Tier if known:</td>
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<th>6. Federal Department/Agency:</th>
<th>7. Federal Program Name/Description:</th>
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<tbody>
<tr>
<td></td>
<td>CFDA Number, if applicable:</td>
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</tbody>
</table>

| 8. Federal Action Number, if known:   |
|                                        |

| 9. Award Amount, if known: $           |
|                                        |

| 10. a. Name and Address of Lobbying Entity (if individual, last name, first name, MI): |
| b. Individuals Performing Services (including address if different from No. 10a) (Last name, first name, MI): |
| (attach Continuation Sheet(s) SF-LLL-A, if necessary) |

| 11. Amount of Payment (check all that apply): |
| $ actual planned |

| 12. Form of Payment (Check all that apply): |
| a. cash b. in-kind; specify: value nature |

| 13. Type of Payment (check all that apply): |
| a. retainer b. one-time fee c. commission d. contingent fee e. deferred f. other; specify |

| 14. Brief Description of Service Performed or to be Performed and Date(s) of Service, including officer(s), employee(s), or Member(s) contacted, for Payment Indicated in Item 11: |
| (attach Continuation Sheet(s) SF-LLL-A, if necessary) |

<table>
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<tr>
<th>15. Continuation Sheet(s) SF-LLL-A attached:</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

16. Information requested through this form is authorized by title 33 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Signature:
Print Name:
Title:
Telephone No: Date:

---

Authorized for Local Reproduction
Standard Form - LLL

NAECFTEC

11/2020
INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or Contractor make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Use the SF-LLL-A Continuation Sheet for additional information if the space on the form is inadequate. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.

2. Identify the status of the covered Federal action.

3. Identify the appropriate classification of this report. If this is a follow-up report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.

4. Enter the full name, address, city, state and zip code of the reporting entity. Include Congressional district, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or sub award recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Sub awards include but are not limited to subcontracts, subgrants and contract awards under grants.

5. If the organization filing the report in item 4 checks "Subawardee", then enter the full name, address, city, state and zip code of the prime Federal recipient. Include Congressional District, if known.

6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.

7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative Contracts, loans, and loan commitments.

8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number, Invitation for Bid (IFB) number, grant announcement number, the contract, grant, or loan award number, the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001." 

9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.

10. (a) Enter the full name, address, city, state and zip code of the lobbying entity engaged by the reporting entity identified in item 4 to influence the covered Federal action.

(b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).

11. Enter the amount of compensation paid or reasonably expected to be paid by the reporting entity (item 4) to the lobbying entity (item 10). Indicate whether the payment has been made (actual) or will be made (planned). Check all boxes that apply. If this is a material change report, enter the cumulative amount of payment made or planned to be made.

12. Check the appropriate box (es). Check all boxes that apply. If payment is made through an in-kind contribution, specify the nature and value of the in-kind payment.

13. Check the appropriate box (es). Check all boxes that apply. If other, specify nature.

14. Provide a specific and detailed description of the services that the lobbyist has performed, or will be expected to perform, and the date(s) of any services rendered. Include all preparatory and related activity, not just time spent in actual contract with Federal officials. Identify the Federal official(s) or employee(s) contacted or the officer(s), employee(s), or Member(s) of Congress that were contacted.

15. Check whether or not a SF-LLL-A Continuation Sheet(s) is attached.

16. The certifying official shall sign and date the form; print his/her name, title, and telephone number.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Service (0348-0046), Washington, D.C.20503.

NAECFTEC 11/2020
Attachment 5

Certification Regarding Lobbying
Certification Regarding Lobbying

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. 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 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.

2. 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 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.

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

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 section 1352, title 31, U. S. Code. 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.

Signature: ________________________________
Company Name: ________________________________
Title: ________________________________
Date: ________________________________

[END OF SECTION]
Attachment 6

Disadvantaged Business Enterprise (DBE)

Requirements
Disadvantaged Business Enterprise (DBE) Participation solicitation and contract provisions pursuant to U. S. Department of Transportation regulations (Title 49 CFR part 26), FTA Circular 4716.1A, and SEPTA Policy are provided in this Section.

A. **DBE CONTRACT GOALS**

In connection with this solicitation and any resulting contract, SEPTA has not established a goal for Disadvantaged Business Enterprise (DBE) participation. This is in accordance with the DBE Regulations at 49 CFR part 26, which require SEPTA to attempt to use race-neutral means of obtaining DBE participation whenever possible.

B. **DEFINITIONS**

1. "**Affiliation**" has the same meaning the term has in the Small Business Administration regulations, 13 CFR part 121:

   (a) Except as otherwise provided in 13 CFR part 121, concerns are affiliates of each other when, either directly or indirectly:

   (1) one concern controls or has the power to control the other; or
   (2) a third party or parties controls or has the power to control both; or
   (3) an identity of interest between or among parties exists such that affiliation may be found.

   (b) In determining whether affiliation exists, it is necessary to consider all appropriate factors, including common ownership, common management, and contractual relationships. Affiliates must be considered together in determining whether a concern meets small business size criteria and the statutory cap on the participation of firms in the DBE program.

2. **"Contract Sum"** means total contract price, including any change orders and amendments.

3. **"Disadvantaged Business Enterprise"** or **"DBE"** means a for-profit small business concern (a) that is at least fifty-one percent (51%) owned by one or more individuals who are both socially and economically disadvantaged or, in the case of a corporation, in which fifty-one percent (51%) of the stock is owned by one or more such individual(s); and (b) whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it and is certified as such by SEPTA’s DBE Program Office or by Pennsylvania’s Unified Certification Program (PAUCP).

4. **"Joint Venture"** means an association of a DBE firm and one or more other firms to carry out a single, for-profit business enterprise, for which purpose they combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct clearly defined portion of the work to be performed by the joint venture and whose share in the capital contribution, control, management, risks and profits of the joint venture are
5. **"Small Business Concern"** means a small business concern as defined pursuant to Section 3 of the Small Business Act and Small Business Administration regulations implementing it (13 CFR part 121), that also does not exceed the following size determinations:

(a) to be an eligible DBE, a firm (including its affiliates) must be an existing for-profit small business, as defined by Small Business Administration (SBA) standards found in 13 CFR part 121 appropriate to the type(s) of work the firm seeks to perform in DOT-assisted contracts.

(b) In addition to the requirements of (a) above, a firm must also meet the annual gross receipts requirements defined in SBA regulations 13 CFR §121.402

6. **"Socially and Economically Disadvantaged Individuals"** means any individual who is a citizen (or lawfully admitted permanent resident) of the United States and who is:

(a) Any individual which SEPTA finds to be a socially and economically disadvantaged individual on a case-by-case basis.

(b) Any individual in the following groups, members of which are rebuttably presumed to be socially and economically disadvantaged:

(i) "Black Americans" which includes persons having origins in any of the Black racial groups of Africa;
(ii) "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;
(iii) "Native Americans" which includes persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians;
(iv) "Asian-Pacific Americans" which includes 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;
(v) "Subcontinent Asian Americans" which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka;
(vi) Women;
(vii) any additional groups whose members are designated as socially and economically disadvantaged by the SBA, at such time as the SBA designation becomes effective.

C. **SUBMISSION REQUIREMENTS**

1. In connection with this solicitation and any resulting contract, SEPTA has not established goals for Disadvantaged Business Enterprise (DBE) participation. This is in accordance with the DBE Regulations at 49 CRF §26.39, §26.51, which require SEPTA to attempt to use race-neutral means of obtaining DBE participation whenever possible. If your firm utilizes a
certified DBE subconsultant/supplier, a dually executed DBE Participation Schedule which is attached must be submitted for each DBE subconsultant/supplier, with the Technical Proposal and include the following:

(a) The name and address of the DBE firm that will participate in the Contract.
(b) A description of the work that the DBE will perform
(c) The percent of the participation of the DBE firm participating

The Proposer is required to submit a properly executed DBE Participation Schedule for each DBE subconsultant/supplier identified to participate in the Contract.

Within forty-eight (48) hours from notification by SEPTA< Proposer is required to submit a Commitment/Confirmation document for each DBE firm scheduled to participate. The Commitment/Confirmation document represents:

(a) The proposer’s commitment to use a DBE subconsultant/supplier whose participation it submitted to meet a contract goal; and
(b) The DBE subconsultant/supplier’s confirmation that it is participating in the Contract as provided in the Proposer’s commitment.
(c) If the contract goal is not met, Proposer must provide evidence of its Good Faith Efforts in accordance with Paragraph E. Determination of DBE Responsibility.

In accordance with 49 CFR §26.39 (Fostering Small Business Participation), the Proposer is also required to identify all other subconsultants/suppliers scheduled to participate in the Contract by submitting the attached Non-DBE Participation Schedule with their Technical Proposal.

Any questions regarding DBE and or SBE Participation should be directed to SEPTA’s DBE Program Office at (215) 580-7278.

2. The requirements of this section also apply to DBE Proposers for prime contracts. In determining whether a DBE Proposer for a prime contract has met a Contract goal, the work the DBE has committed to perform with its own forces as well as the work it has committed to be performed by DBE subconsultants and DBE suppliers will be counted.

3. SEPTA's DBE Program Office will provide upon request SEPTA's DBE Directory. The DBE Directory is revised on a continual basis; i.e., at least weekly, and identifies all firms eligible to participate as DBEs in SEPTA's program. Additionally, interested persons can obtain access to a state-wide combined directory through SEPTA’s membership in the Pennsylvania Unified Certification Program (PAUCP) at http://www.paucp.com. These DBE directories list the firm’s name, address, phone number, fax number, email address and the types of work the firm has been certified to perform as a DBE.

D. DETERMINATION OF PERCENTAGE OF DBE PARTICIPATION

DBE participation shall be credited toward achieving the DBE Goal as follows:

1. When a DBE participates in a contract, only the value of the work actually performed by the DBE will be counted toward DBE goals.
2. SEPTA will count the entire amount of that portion of a construction contract (or other contract covered by paragraph D.3. below) that is performed by the DBE's own forces, including the cost of supplies and materials obtained by the DBE for the work of the contract, and supplies purchased or equipment leased by the DBE (except supplies and equipment the DBE subconsultant purchases or leases from the prime contractor or its affiliates).

3. SEPTA will count the entire amount of fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of the contract, toward DBE goals, provided SEPTA determines the fee to be reasonable and not excessive as compared with fees customarily allowed for similar services.

4. When a DBE subcontracts part of the work of its contract to another firm, the value of the subcontracted work may be counted toward DBE goals only if the DBE's subconsultant is itself a DBE. Work that a DBE subcontracts to a non-DBE firm does not count toward DBE goals.

5. When a DBE performs as a participant in a joint venture, SEPTA will count a portion of the total value of the contract equal to the distinct, clearly defined portion of the work of the contract that the DBE performs with its own forces toward DBE goals.

6. SEPTA will count expenditures to a DBE contractor toward DBE goals only if the DBE is performing a commercially useful function on that contract, as determined by SEPTA's DBE Program Office.

(a) A DBE is considered to perform a commercially useful function when it is responsible for execution of a specific scope of work in a contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity when ordering the material, and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, SEPTA will evaluate the amount of work subcontracted; industry practices; whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing; and the DBE credit claimed for its performance of the work and other relevant factors.

(b) A DBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation. In determining whether a DBE is such an extra participant, SEPTA will examine similar transactions, particularly those in which DBEs do not participate.

(c) If a DBE does not perform or exercise responsibility for at least 30 percent of the total cost of its contract with its own work force, or the DBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved, SEPTA will presume that the DBE is not performing a commercially useful function.
(d) When a DBE is presumed not to be performing a commercially useful function, SEPTA will accept evidence from the DBE or prime contractor to rebut this presumption. Evidence from independent sources, such as trade journals or independent studies by consultants, is particularly desirable in such circumstances.

7. SEPTA will use the following factors in determining whether a DBE trucking company is performing a commercially useful function:

(a) The DBE must be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there cannot be a contrived arrangement for the purpose of meeting DBE goals.

(b) The DBE must itself own and operate at least one fully licensed, insured, and operational truck used on the Contract.

(c) The DBE receives credit for the total value of the transportation services it provides on the Contract using trucks it owns, insures, and operates using drivers it employs.

(d) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the Contract.

(e) The DBE may also lease trucks from a non-DBE firm, including an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit for the total value of transportation services provided by non-DBE lessees not to exceed the value of transportation services provided by DBE-owned trucks on the contract. The DBE does not receive credit for the total value of the transportation services provided by the lessee, since these services are not provided by a DBE.

(f) For purposes of this paragraph D.7., a lease must indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE.

8. SEPTA will count expenditures with DBEs for materials or supplies toward DBE goals as provided in the following:

(a) If the materials or supplies are obtained from a DBE manufacturer, count 100% of the cost of the materials and supplies toward DBE goals. For purposes of this section, a "manufacturer" is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the Contract and of the general character described by the Specifications.

(b) If the materials or supplies are purchased from a DBE Regular Dealer count 60% of the cost of the materials and supplies toward DBE goals. For purposes of this
section, a "regular dealer" is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the Specifications and required under the Contract are brought, kept in stock, and regularly sold to the public in the usual course of business. To be a regular dealer, the firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question. A person may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business as previously provided if the person both owns and operates distribution equipment. Any supplementing of regular dealers' own distribution equipment shall be by a long-term lease and not on an ad hoc or contract-by-contract basis. Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not regular dealers within the meaning of this paragraph.

(c) With respect to materials or supplies purchased from a DBE which is neither a manufacturer nor a regular dealer, SEPTA will only count the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, toward DBE goals, provided SEPTA determines the fees to be reasonable and not excessive as compared with fees customarily allowed for similar services. No portion of the cost of the materials and supplies themselves will be counted towards DBE goals.

9. SEPTA will not count the participation of a DBE subconsultant toward the prime contractor's DBE achievements until the amount being counted toward the goal has been paid to the DBE.

E. **DBE MODIFICATION(S) OR SUBSTITUTION(S)**

1. If after award a DBE subconsultant included on the DBE Participation Schedule submitted to SEPTA, is terminated, or fails to complete its work on the Contract for any reason, SEPTA must be notified within 48 hours.

2. If after award of the Contract, a DBE subconsultant is terminated, or fails to complete its work on the Contract for any reason, SEPTA will require the prime contractor to make good faith efforts to find another DBE subconsultant to substitute for the original DBE. These good faith efforts shall be directed at finding another DBE to perform at least the same dollar value of work under the Contract as the DBE that was terminated, to the extent needed to meet the Contract goal established by SEPTA.

F. **REPORTING AND RECORDKEEPING REQUIREMENTS**

To ensure that all obligations under the contracts awarded to DBEs are met, SEPTA’s DBE Program Office shall monitor the Contractor’s performance during the life of the Contract.

1. Upon execution of its SEPTA contract, the Contractor shall enter into written subcontract agreement(s) with the DBE(s) listed in its DBE Participation Schedule. Copies of the Contractor’s executed subcontract agreement(s) with DBEs shall be provided to SEPTA’s
DBE Program Office by the Contractor immediately upon execution.

2. The Contractor shall submit a work schedule outlining when the DBE subconsultant(s) will commence and complete work on the project, at such times as prescribed by SEPTA’s DBE Program Office.

3. The Contractor shall keep a regular accounting of actual expenditures of funds made under all contract and subcontract agreements with DBEs; specifically, an accounting of the actual amount of DBE expenditures for each contract. The Contractor shall submit a DBE Invoice Payment Report to SEPTA with each invoice or request for payment from SEPTA.

4. The Contractor shall submit monthly reports of actual contract expenditures to DBE’s by the Contractor. This information must be submitted electronically via SEPTA’s website (http://bizweb.septa.org/bizwebsepta).

5. The Contractor and subconsultant(s) shall permit access to their books, records and accounts by SEPTA (or its designated representative) or the Federal Transit Administration (FTA) for the purpose of investigation to ascertain compliance with these specified requirements. Such records shall be maintained by the Contractor in a fashion which is readily assessable to SEPTA and/or the FTA for a minimum of five (5) years following completion of this Contract.

6. With regard to any claim or dispute with respect to payment of a subconsultant at any tier, Contractor expressly agrees to defend, indemnify and hold SEPTA harmless in the event any suit is brought on account of a dispute between any of the parties including but not limited to subconsultant(s), supplier(s) and material men and in particular, Contractor shall assume the defense affirmatively at its sole cost whenever such suit is brought in any jurisdiction.

G. **FTA DBE AUDIT REQUIREMENT – DBE INVOICE PAYMENT REPORT**

The Contractor shall keep a regular accounting of actual expenditures of funds made under all contract and subcontract agreements with DBEs, specifically, an accounting of the actual amount of DBE expenditures for each contract.

H. **MISCELLANEOUS**

The Contractor is encouraged to utilize the services of financial institutions owned and controlled by socially and economically disadvantaged individuals as defined at 49 CFR part 26.5.

[END OF PAGE]
As specified in the DBE Participation Section included in the Proposal Documents, the Proposer shall furnish to SEPTA’s satisfaction the details of disadvantaged business enterprise participation.

NOTE: Firms must be Pennsylvania Unified Certification Program (PA UCP)-certified prior to being listed on a DBE Participation Schedule.

**PROJECT NAME:** The Leasing and Serving of Bus Tires

**PROPOSAL NO.:** 21-00208-ACAC

### TABLE I. ALL WORK/SERVICES TO BE PERFORMED BY THE DBE FIRM

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**TABLE II. MATERIAL/SUPPLIES TO BE PURCHASED FROM “REGULAR DEALERS”**

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**Signature:**

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- A FULLY COMPLETED DBE PARTICIPATION SCHEDULE, FOR EACH DBE FIRM DESIGNATED TO PARTICIPATE, IS REQUIRED TO BE SUBMITTED WITH THE TECHNICAL PROPOSAL.
- FAILURE OF THE PROPOSER TO SUBMIT FULLY COMPLETED DBE PARTICIPATION SCHEDULE(S) WITH THEIR TECHNICAL PROPOSAL MAY RESULT IN THE REJECTION OF THEIR PROPOSAL.
- PROPOSER MUST SIGN AND DATE ABOVE.
- PROPOSER WILL BE REQUIRED TO PROVIDE A COMMITMENT/CONFIRMATION DOCUMENT FOR EACH DESIGNATED DBE FIRM UPON REQUEST FROM SEPTA.

Proposers are hereby notified that the information contained herein will be verified with the designated DBE firm. Additionally, if and when the award of a contract is made, the DBE firm listed herein will be simultaneously notified of the award.

SEPTA reserves the right to waive informalities herein in its sole reasonable discretion.

1 See Section D. “Determination of Percentage of DBE Participation” for discussion of types of participation and credit given toward achieving the DBE Goal.

2 This must be expressed as a percentage of the Proposer’s total maximum price to SEPTA.
Disadvantaged Business Enterprise (DBE)  
INVOICE PAYMENT REPORT (IPR)

APPLICATION DATE:  
PERIOD FROM:  TO:  

CONTRACTOR NAME:  
AND ADDRESS:  

PROJECT NAME:  
CONTRACT NUMBER:  
PURCHASE ORDER NUMBER:  

PART I: CONTRACT INFORMATION

<table>
<thead>
<tr>
<th>Original Contract Sum:</th>
<th>Original DBE Subcontractor(s) Sum:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Net Change by Change Order:</th>
<th>Net Change by Change Order:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Sum to Date:</td>
<td>DBE Subcontractor(s) Sum to Date:</td>
</tr>
<tr>
<td>$0.00</td>
<td>$0.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Billed to Date:</th>
<th>Retainage:</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.00</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Billed to Date Less Retainage:</th>
<th>$0.00</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Total Previous Invoices Submitted</th>
<th>Retainage:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less Retainage:</td>
<td>$0.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current Amount Due:</th>
<th>$0.00</th>
</tr>
</thead>
</table>

PART II: DBE INFORMATION

<table>
<thead>
<tr>
<th>List DBE Subcontractor(s), DBE Invoice Number(s) and the current DBE Payment Due:</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBE Subcontractor Name</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td></td>
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<tr>
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</tbody>
</table>

The undersigned Contractor certifies that the above listed DBE charges have been incurred by the respective DBE subcontractor(s) and that the DBE firm(s) has(ve) been paid or will be paid this amount from the proceeds of the attached invoice. The Contractor further certifies that records supporting these DBE expenditures, including retainage, shall be maintained and made available to SEPTA or its designee upon request.

Company Official:  
Title:  
(signature)  
Date:  

© SEPTA 2008, rev 7/2014
As specified in the DBE Participation Section included in the Solicitation Documents, the Proposer must furnish to SEPTA the details of non-DBE subconsultant participation.

**PROJECT NAME:** The Leasing and Servicing of Bus Tires

**RFP NO.:** 21-00208-ACAC

1. **WORK/SERVICES TO BE PERFORMED BY SUBCONSULTANTS**

2. **MATERIAL/SUPPLIES TO BE PURCHASED FROM SUPPLIERS**

<table>
<thead>
<tr>
<th>NAME OF FIRM</th>
<th>DESCRIPTION OF WORK/SERVICES TO BE PERFORMED / MATERIAL TO BE SUPPLIED</th>
<th>TOTAL PARTICIPATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Name:</td>
<td></td>
<td>%</td>
</tr>
<tr>
<td>Contact:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tele. No.:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm Name:</td>
<td></td>
<td>%</td>
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<tr>
<td>Contact:</td>
<td></td>
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<td>Address:</td>
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<td></td>
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<tr>
<td>Tele. No.:</td>
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<tr>
<td>Firm Name:</td>
<td></td>
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<td>Contact:</td>
<td></td>
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<tr>
<td>Address:</td>
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<td></td>
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<tr>
<td>Tele. No.:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm Name:</td>
<td></td>
<td>%</td>
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<tr>
<td>Contact:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tele. No.:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Type or Print all information)

**Name of Proposer:**
(type or print)

**Tele. No.:** ( )

**Email:**

**Contact:**
(type or print)

**Title:**

**Signature:**
(type or print)

**Date:**
RE: DBE PARTICIPATION - COMMITMENT/CONFIRMATION

SEPTA RFP No. __________________________
Project Name: ____________________________

<Proposer> is committed to contracting with <DBE Firm> for participation on the SEPTA solicitation referenced above. <DBE Firm> is scheduled to provide the following services and/or materials/supplies:

<Provide a Detailed Description of the Services and/or Materials/Supplies* to be furnished by the named DBE Firm>.
For approximately $<$$,$$$>, or xx% of the total contract.

(*60% of the total agreed price for DBE suppliers will be credited towards the DBE goal)

<table>
<thead>
<tr>
<th>Proposer’s Representative Name/Title (please type or print)</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>DBE Firm’s Representative Name/Title (please type or print)</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
</table>
Attachment 7

SEPTA Solicitation Statistics
Dear Contractor/Consultant/Subcontractor/Subconsultant:

In accordance with Federal Regulation 49 CFR part 26.11, SEPTA must maintain bidding statistics on all contractors/consultants and subcontractors/subconsultants bidding on contracts. Please include copies of this form with your bid/proposal package to any subcontractors/subconsultants. You are required to return the form for each bidder/proposer with your bid/proposal package. This applies to both disadvantaged business enterprises (DBEs) and non-DBEs (a DBE is a firm which meets the criteria set forth in 49 CFR part 26).

Thank you for your assistance with this request. If you should have any questions, comments or suggestions, please contact the Director of SEPTA’s DBE Program Office at 215-580-3710.

The information gathered on this form will be used for statistical purposes only and is set forth under 49 CFR part 26.

Firm Name: [ ]
Firm Address: [ ]
Description of Services: [ ]
NAICS Code: [www.census.gov/epcd/www/naics.html]
Status: DBE [ ] Non-DBE [ ]
Month/Year firm established: [ ]

Company Owner(s) Ethnic Group Membership: (optional)

- Black [ ]
- Hispanic [ ]
- Native American [ ]
- Asian Pacific [ ]
- Subcontinent Asian [ ]
- Other (specify) [ ]

Annual Gross Receipts of the Firm: (check one)

- Less than $500,000 [ ]
- $500,000 - $1 Million [ ]
- $1 Million - $5 Million [ ]
- $5 Million - $10 Million [ ]
- $10 Million - $20 Million [ ]
- Above $20 Million [ ]

Project Name: [ ]
Bid Number: [ ]

Name (Type or Print): [ ]
Date: [ ]

Title: [ ]
Telephone No.: ( )

Signature: [ ]
Facsimile No.: ( )

Email Address: [ ]

Rev 092410
Attachment 8

Project Progress

And

Performance Evaluation Form
# PERFORMANCE EVALUATION
(OTHER THAN ARCHITECT-ENGINEER)

**IMPORTANT:** Be sure to complete both pages of this Performance Evaluation. If additional space is necessary for any item, use Remarks Section on next page.

## 4. TYPE OF REPORT
(Choose one)
- [ ] INTERIM
- [ ] COMPLETION OF SERVICE OR STUDY
- [ ] TERMINATION

## 7. NAME AND ADDRESS OF CONSULTANT

## 8. PROJECT DESCRIPTION AND LOCATION

## 9. OFFICE RESPONSIBLE FOR

A. SELECTION OF CONSULTANT
B. NEGOTIATION/AWARD OF CONTRACT
C. ADMINISTRATION OF CONTRACT

## 10. CONTRACT DATA

<table>
<thead>
<tr>
<th>A. TYPE OF WORK</th>
<th>B. TYPE OF CONTRACT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FIXED PRICE</td>
</tr>
<tr>
<td></td>
<td>COST PLUS FIXED FEE</td>
</tr>
<tr>
<td></td>
<td>OTHER <em>(Specify)</em></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>C. PROJECT COMPLEXITY</th>
<th>D. PROFESSIONAL SERVICES CONTRACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIFFICULT</td>
<td></td>
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<tr>
<td>SIMPLE</td>
<td></td>
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<tr>
<td>ROUTINE</td>
<td></td>
</tr>
</tbody>
</table>

### 11. KEY CONSULTANT DATA

<table>
<thead>
<tr>
<th>A. NAMES</th>
<th>B. ADDRESS</th>
<th>C. SPECIALTY</th>
</tr>
</thead>
</table>

## 12. OVERALL RATING

- [ ] EXCELLENT
- [ ] AVERAGE
- [ ] POOR

## 13. RECOMMENDED FOR FUTURE CONTRACTS?

- [ ] YES
- [ ] NO *(If "NO", explain in REMARKS on reverse)*

## 14. NAME AND TITLE OF RATING OFFICIAL

## 15A. NAME AND TITLE OF REVIEWING OFFICIAL

## 14B. SIGNATURE

## 15B. SIGNATURE

## 14C. DATE

## 15C. DATE

---

NAECFTEC 11/2020
Performance Evaluation (Other than Architect/Engineer)

(Continuation from previous page)

Consultant:

<table>
<thead>
<tr>
<th>Performance Elements</th>
<th>N/A</th>
<th>Excellent</th>
<th>Average</th>
<th>Poor</th>
<th>No Information</th>
<th>Signature &amp; Date</th>
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</thead>
<tbody>
<tr>
<td>Professionalism</td>
<td></td>
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<tr>
<td>Accuracy of Work</td>
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<td>Cooperation</td>
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<td>Completeness</td>
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<td>Coordination</td>
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<tr>
<td>Effectiveness of Management</td>
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<tr>
<td>Timely Performance</td>
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<tr>
<td>Personnel Qualifications</td>
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<tr>
<td>Quality of Presentation</td>
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<tr>
<td>Quality of Work</td>
<td></td>
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</tr>
</tbody>
</table>

REMARKS (Explain all Excellent and Poor ratings.)
Attachment 9

Certification Regarding Compliance

With

Immigration Reform and Control Act of 1986
Certification Regarding Compliance with Immigration Reform and Control Act of 1986

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. Contractor has and will continue to comply with, for the duration of this Contract, the requirements of 8 U.S.C. § 1324a with respect to the hiring, recruiting or referral for employment of an alien in the United States of America.

2. Contractor will:
   1) Complete the Employee Eligibility Form (I-9) for each person that it hires
   2) Utilize the electronic employment verification system (“E-Verify”) designated in Executive Order 12989, and shall keep each I-9 Form on file for at least three (3) years, or one (1) year after employment ends, whichever is longer.

3. Contractor shall require that the provisions of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when the parties entered into this Contract. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Act 43 of 2006, the Illegal Alien Labor on Assisted Act also known and cited as the Prohibition of Illegal Alien Labor on Assisted Projects Act.

Signature: ____________________________________________

Company Name: ____________________________________________

Title: ____________________________________________

Date: ____________________________________________

[END OF SECTION]
Attachment 10

Commonwealth of Pennsylvania
Contract Requirements
Commonwealth of Pennsylvania Contract Requirements

DEFINITIONS:

A. For the purpose of these provisions, the term Contractor is defined as any person, including, but not limited to, a proposer, offeror, supplier, or subgrantee, who will furnish or perform or seeks to furnish or perform, goods, supplies, services, construction or other activity, under a purchase order, contract, or subgrant with SEPTA.

SR-1 Nondiscrimination/Sexual Harassment Clause.

A. APPLICABILITY

This article applies to all purchase orders and contracts.

B. The contractor agrees:

In the hiring of any employee(s) for the manufacture of supplies, performance of work, or any other activity required under any subgrant agreement, contract, or subcontract, a subgrantee, a contractor, a subcontractor, or any person acting on behalf of SEPTA shall not discriminate in violation of the Pennsylvania Human Relations Act (PHRA) and applicable federal laws against any citizen of this Commonwealth who is qualified and available to perform the work to which the employment relates.

Any subgrantee, contractor or any subcontractor or any person on their behalf shall not in any manner discriminate in violation of the PHRA and applicable federal laws against or intimidate any of its employees.

Any subgrantee, contractor or any subcontractor shall establish and maintain a written nondiscrimination and sexual harassment policy and shall inform their employees of the policy. The policy must contain a provision that sexual harassment will not be tolerated and employees who practice it will be disciplined. Posting this Nondiscrimination/Sexual Harassment Clause conspicuously in easily-accessible and well-lighted places customarily frequented by employees and at or near where the grant services are performed shall satisfy this requirement.

Any subgrantee, contractor or any subcontractor shall not discriminate in violation of the PHRA and applicable federal laws against any subgrantee, contractor, subcontractor or supplier who is qualified to perform the work to which the grant relates.

Each subgrantee, contractor and subcontractor represents that it is presently in compliance with and will maintain compliance with all applicable federal, state, and
local laws and regulations relating to nondiscrimination and sexual harassment. Each subgrantee, contractor and subcontractor further represents that it has filed a Standard Form 100 Employer Information Report (“EEO-1”) with the U.S. Equal Employment Opportunity Commission (“EEOC”) and shall file an annual EEO-1 report with the EEOC as required for employers subject to Title VII of the Civil Rights Act of 1964, as amended, that have 100 or more employees and employers that have federal government contracts or first-tier subcontracts and have 50 or more employees. Any subgrantee, any contractor or any subcontractor shall, upon request and within the time periods requested by SEPTA, furnish all necessary employment documents and records, including EEO-1 reports, and permit access to their books, records, and accounts by the granting agency and the Bureau of Small Business Opportunities (BSBO), for the purpose of ascertaining compliance with the provisions of this Nondiscrimination/Sexual Harassment Clause.

Any subgrantee, contractor or any subcontractor shall include the provisions of this Nondiscrimination/Sexual Harassment Clause in every subgrant agreement, contract or subcontract so that those provisions applicable to subgrantees, contractors or subcontractors will be binding upon each subgrantee, contractor or subcontractor.

Each subgrantee’s, contractor’s and subcontractor’s obligations pursuant to these provisions are ongoing from and after the effective date of the agreement through the termination date thereof. Each subgrantee, contractor and subcontractor shall have an obligation to inform the SEPTA if, at any time during the term of the agreement, it becomes aware of any actions or occurrences that would result in violation of these provisions.

SEPTA may cancel or terminate the agreement and all money due or to become due under the agreement may be forfeited for a violation of the terms and conditions of this Nondiscrimination/Sexual Harassment Clause. In addition, the SEPTA may proceed with debarment or suspension and may place the subgrantee, contractor, or subcontractor in the Contractor Responsibility File.

SR–2 ADA Provision

A. APPLICABILITY

This article applies to all purchase orders and contracts.

B. During the term of this agreement, the contractor agrees as follows:

Pursuant to federal regulations promulgated under the authority of the Americans with Disabilities Act, 28 C. F. R. § 35.101 et seq., the contractor understands and agrees that no individual with a disability shall, on the basis of the disability, be excluded from participation in this agreement or from activities provided for under this agreement. As a condition of accepting and executing this agreement, the contractor agrees to comply with the "General Prohibitions Against Discrimination,"
28 C. F. R. § 35.130, and all other regulations promulgated under Title II of the Americans with Disabilities Act which are applicable to the benefits, services, programs, and activities provided by SEPTA through contracts with contractors.

The contractor shall be responsible for and agrees to indemnify and hold harmless SEPTA from all losses, damages, expenses, claims, demands, suits, and actions brought by any party against the Commonwealth as a result of the contractor's failure to comply with the provisions of the above paragraph.

**SR–3 Contractor Integrity Provisions.**

**A. APPLICABILITY**

It is essential that those who seek to contract with SEPTA observe high standards of honesty and integrity. They must conduct themselves in a manner that fosters public confidence in the integrity of SEPTA’s contracting and procurement process.

**DEFINITIONS.** For purposes of these Contractor Integrity Provisions, the following terms shall have the meanings found in this Section:

“**Affiliate**” means two or more entities where (a) a parent entity owns more than fifty percent of the voting stock of each of the entities; or (b) a common shareholder or group of shareholders owns more than fifty percent of the voting stock of each of the entities; or (c) the entities have a common proprietor or general partner.

“**Consent**” means written permission signed by a duly authorized officer or employee of SEPTA, provided that where the material facts have been disclosed, in writing, by prequalification, bid, proposal, or contractual terms, SEPTA shall be deemed to have consented by virtue of the execution of this contract.

“**Contractor**” means the individual or entity, that has entered into this contract with SEPTA.

“**Contractor Related Parties**” means any affiliates of the Contractor and the Contractor’s executive officers, Pennsylvania officers and directors, SEPTA’s Board members or owners of 5 percent or more interest in the Contractor.

“**Financial Interest**” means either:

(1) Ownership of more than a five percent interest in any business; or

(2) Holding a position as an officer, director, trustee, partner, employee, or holding any position of management.

“**Gratuity**” means tendering, giving, or providing anything of more than nominal monetary value including, but not limited to, cash, travel, entertainment, gifts, meals, lodging, loans, subscriptions, advances, deposits of money, services, employment, or contracts of any kind. The exceptions set forth in the Governor’s Code of Conduct,
Executive Order 1980-18, the 4 Pa. Code §7.153(b), shall apply.

“Non-bid Basis” means a contract awarded or executed by SEPTA with Contractor without seeking bids or proposals from any other potential proposer or offeror.

B. In furtherance of this policy, Contractor agrees to the following:

Contractor shall maintain the highest standards of honesty and integrity during the performance of this contract and shall take no action in violation of state or federal laws or regulations or any other applicable laws or regulations, or other requirements applicable to Contractor or that govern contracting or procurement with SEPTA.

Contractor shall establish and implement a written business integrity policy, which includes, at a minimum, the requirements of these provisions as they relate to the Contractor activity with the SEPTA and SEPTA employees and which is made known to all Contractor employees. Posting these Contractor Integrity Provisions conspicuously in easily-accessible and well-lighted places customarily frequented by employees and at or near where the contract services are performed shall satisfy this requirement.

Contractor, its affiliates, agents, employees and anyone in privity with Contractor shall not accept, agree to give, offer, confer, or agree to confer or promise to confer, directly or indirectly, any gratuity or pecuniary benefit to any person, or to influence or attempt to influence any person in violation of any federal or state law, regulation, executive order of the Governor of Pennsylvania, statement of policy, management directive or any other published standard of the Commonwealth in connection with performance of work under this contract, except as provided in this contract.

Contractor shall not have a financial interest in any other contractor, subcontractor, or supplier providing services, labor, or material under this contract, unless the financial interest is disclosed to SEPTA in writing and SEPTA consents to Contractor’s financial interest prior to SEPTA’s execution of the contract. Contractor shall disclose the financial interest to SEPTA at the time of bid or proposal submission, or if no bids or proposals are solicited, no later than Contractor’s submission of the contract signed by Contractor.

Contractor certifies to the best of its knowledge and belief that within the last five (5) years Contractor or Contractor Related Parties have not:

(1) been indicted or convicted of a crime involving moral turpitude or business honesty or integrity in any jurisdiction;

(2) been suspended, debarred or otherwise disqualified from entering into any contract with any governmental agency;

(3) had any business license or professional license suspended or revoked;
(4) had any sanction or finding of fact imposed as a result of a judicial or administrative proceeding related to fraud, extortion, bribery, bid rigging, embezzlement, misrepresentation or anti-trust; and

(5) been, and is not currently, the subject of a criminal investigation by any federal, state or local prosecuting or investigative agency and/or civil anti-trust investigation by any federal, state or local prosecuting or investigative agency.

If Contractor cannot so certify to the above, then it must submit along with its bid, proposal or contract a written explanation of why such certification cannot be made and SEPTA will determine whether a contract may be entered into with the Contractor. The Contractor’s obligation pursuant to this certification is ongoing from and after the effective date of the contract through the termination date thereof. Accordingly, the Contractor shall have an obligation to immediately notify SEPTA in writing if at any time during the term of the contract if becomes aware of any event which would cause the Contractor’s certification or explanation to change. Contractor acknowledges that SEPTA may, in its sole discretion, terminate the contract for cause if it learns that any of the certifications made herein are currently false due to intervening factual circumstances or were false or should have been known to be false when entering into the contract.

Contractor shall comply with the requirements of the Lobbying Disclosure Act (65 Pa.C.S.3A01 et seq.) regardless of the method of award. If this contract was awarded on a Non-bid Basis, Contractor must also comply with the requirements of the Section 1641 of the Pennsylvania Election Code (25 P.S. §3260a).

When Contractor has reason to believe that any breach of ethical standards as set forth in law, the Governor’s Code of Conduct, or these Contractor Integrity Provisions has occurred or may occur, including but not limited to contact by a SEPTA officer or employee which, if acted upon, would violate such ethical standards, Contractor shall immediately notify the SEPTA contracting officer or SEPTA’s Office of the Inspector General in writing.

Contractor, by submission of its bid or proposal and/or execution of this contract and by the submission of any bills, invoices or requests for payment pursuant to the contract, certifies and represents that it has not violated any of these Contractor Integrity Provisions in connection with the submission of the bid or proposal, during any contract negotiations or during the term of the contract, to include any extensions thereof. Contractor shall immediately notify SEPTA in writing of any actions for occurrences that would result in a violation of these Contractor Integrity Provisions. Contractor agrees to reimburse SEPTA for the reasonable costs of investigation incurred by SEPTA' Office of the Inspector General for investigations of the Contractor’s compliance with the terms of this or any other agreement between the Contractor and SEPTA that results in the suspension or debarment of the Contractor.
Contractor shall not be responsible for investigative costs for investigations that do not result in the Contractor’s suspension or debarment.

Contractor shall cooperate with the Commonwealth’s Office of the Inspector General in its investigation of any alleged Commonwealth agency or employee breach of ethical standards and any alleged Contractor non-compliance with these Contractor Integrity Provisions. Contractor agrees to make identified Contractor employees available for interviews at reasonable times and places. Contractor, upon the inquiry or request of an Inspector General, shall provide, or if appropriate, make promptly available for inspection or copying, any information of any type or form deemed relevant by the Office of the State Inspector General to Contractor's integrity and compliance with these provisions. Such information may include, but shall not be limited to, Contractor's business or financial records, documents or files of any type or form that refer to or concern this contract. Contractor shall incorporate this paragraph in any agreement, contract or subcontract it enters into in the course of the performance of this contract/agreement solely for the purpose of obtaining subcontractor compliance with this provision. The incorporation of this provision in a subcontract shall not create privity of contract between SEPTA and any such subcontractor, and no third party beneficiaries shall be created thereby.

For violation of any of these Contractor Integrity Provisions SEPTA may terminate this and any other contract with Contractor, claim liquidated damages in an amount equal to the value of anything received in breach of these Provisions, claim damages for all additional costs and expenses incurred in obtaining another contractor to complete performance under this contract, and debar and suspend Contractor from doing business with SEPTA and the Commonwealth. These rights and remedies are cumulative, and the use or non-use of any one shall not preclude the use of all or any other. These rights and remedies are in addition to those the Commonwealth may have under law, statute, regulation, or otherwise.

SR-4 Contractor Responsibility.

A. APPLICABILITY

This article applies to all purchase orders and contracts.

B. For the purpose of these provisions, the term “Contractor” is defined as any person, including, but not limited to, a proposer, offeror, loan recipient, grantee, or subgrantee, who has furnished or seeks to furnish goods, supplies, services, or leased space, or who has performed or seeks to perform construction activity under contract, subcontract, grant, or subgrant with the Commonwealth, or with a person under institutions. The term “Contractor” may include a permittee, licensee, or any agency, political subdivision, instrumentality, public authority, or other entity of the Commonwealth.

1. The Contractor must certify, in writing, for itself and all its subcontractors, that as of the date of its execution of any Commonwealth contract, that neither the
Contractor, nor any subcontractors, nor any suppliers are under suspension or debarment by the Commonwealth or any governmental entity, instrumentality, or authority and, if the Contractor cannot so certify, then it agrees to submit, along with the bid/proposal, a written explanation of why such certification cannot be made.

2. The Contractor must also certify, in writing, that as of the date of its execution of any Commonwealth contract, it has no tax liabilities or other Commonwealth obligations.

3. The Contractor’s obligations pursuant to these provisions are ongoing from and after the effective date of the contract through the termination date thereof. Accordingly, the Contractor shall have an obligation to inform the contracting agency if, at any time during the term of the contract, it becomes delinquent in the payment of taxes, or other Commonwealth obligations, or if it or any of its subcontractors are suspended or debarred by the Commonwealth, the federal government, or any other state governmental entity. Such notification shall be made within 15 days of suspension or debarment.

4. The failure of the Contractor to notify the contracting agency of its suspension or debarment by the Commonwealth, any other state, or the federal government shall constitute an event of default of the Contract with the Commonwealth.

5. The Contractor agrees to reimburse the Commonwealth for reasonable costs of investigation incurred by the Office of the Inspector General for investigations of the Contractor’s compliance with the terms of this or any other agreement between the Contractor and the Commonwealth, which results in the suspension or debarment of the Contractor. Such costs shall include, but shall not be limited to, salaries of investigators, including overtime; travel and lodging expenses; and expert witness and documentary fees. The Contractor shall not be responsible for investigative costs for investigations which do not result in the Contractor’s suspension or debarment.

6. The Contractor may obtain the current list of suspended and debarred Commonwealth Contractors by either searching the Internet at http://www.dgs.state.pa.us/debarment.htm or contacting the:

   Department of General Services
   Office of Chief Counsel
   603 North Office Building
   Harrisburg, PA 17125
SR–5  Retainage

A. APPLICABILITY

This article applies to all construction purchase orders and contracts.

B. SEPTA may withhold an amount not to exceed ten (10%) percent of SEPTA’s portion of net Project cost of this Agreement to ensure substantial completion by the contractor of the Project. SEPTA may at any time release any portion of any such retainage if, in the opinion of SEPTA, the contractor has substantially completed sufficient portions of the Project to justify such payments.

SR–6  Steel Products

A. APPLICABILITY

This article applies to all purchase orders and contracts.

B. All steel products used or supplied in the performance of the Contract shall be products produced from steel made in the United States in conformity with the Steel Products Procurement Act of 1978 (Act No. 3 of 1978, March 3, P.L. 6 (73 P.S. §1881 et seq.), as amended and, if the federal Buy America requirements are applicable to the Contract, in full conformity with the Buy America provisions of 49 U.S.C. §5323 (j) [formerly the Federal Surface Transportation Assistance Act of 1982, as amended] and the applicable regulations in 49 CFR part 661.

Contractor shall insert this requirement as a special condition for any subcontract awarded in the performance of the Project.

SR–7  Diverse Business Participation for Non-Federally-Funded Projects

A. APPLICABILITY

This article applies to all purchase orders and contracts.

B. For non-federally funded projects, the Contractor shall comply with provisions of Section 303 of Title 74 of Purdon's Statutes. 74 Pa.C.S. §303 (Diverse business participation)."

SR–8  Right To Know

A. APPLICABILITY

This article applies to all purchase orders and contracts.

B. Subgrantee or Contractor understands that this Agreement and records related to or arising out of the Agreement are subject to requests made pursuant to the Pennsylvania Right-to-Know Law, 65 P.S. §§ 67.101-3104, (“RTKL”).
If SEPTA needs the Subgrantee’s or Contractor’s assistance in any matter arising out of the RTKL related to this Agreement, it shall notify the Subgrantee or Contractor using the legal contact information provided in the Agreement. The Subgrantee or Contractor, at any time, may designate a different contact for such purpose upon reasonable prior written notice to SEPTA.

Upon written notification from SEPTA that it requires Subgrantee’s or Contractor’s assistance in responding to a request under the RTKL for information related to this Agreement that may be in Subgrantee’s or Contractor’s possession, constituting, or alleged to constitute, a public record in accordance with the RTKL (“Requested Information”), Subgrantee or Contractor shall:

(1) Provide SEPTA, within ten (10) calendar days after receipt of written notification, access to, and copies of, any document or information in Subgrantee’s or Contractor’s possession arising out of this Agreement that SEPTA reasonably believes is Requested Information and may be a public record under the RTKL; and

(2) Provide such other assistance as SEPTA may reasonably request, in order to comply with the RTKL with respect to this Agreement.

If Subgrantee or Contractor considers the Requested Information to include a request for a Trade Secret or Confidential Proprietary Information, as those terms are defined by the RTKL, or other information that Subgrantee or Contractor considers exempt from production under the RTKL, Subgrantee or Contractor must notify SEPTA and provide, within seven (7) calendar days of receiving the written notification, a written statement signed by a representative of Subgrantee or Contractor explaining why the requested material is exempt from public disclosure under the RTKL.

SEPTA will rely upon the written statement from Subgrantee or Contractor in denying a RTKL request for the Requested Information unless SEPTA determines that the Requested Information is clearly not protected from disclosure under the RTKL. Should SEPTA determine that the Requested Information is clearly not exempt from disclosure, Subgrantee or Contractor shall provide the Requested Information within five (5) business days of receipt of written notification of SEPTA’s determination.

If Subgrantee or Contractor fails to provide the Requested Information within the time period required by these provisions, Subgrantee or Contractor shall indemnify and hold SEPTA harmless for any damages, penalties, costs, detriment or harm that SEPTA may incur as a result of Subgrantee’s or Contractor’s failure, including any statutory damages assessed against SEPTA.

SEPTA will reimburse Subgrantee or Contractor for any costs associated with complying with these provisions only to the extent allowed under the fee schedule established by the office of Open Records or as otherwise provided by the RTKL if the fee schedule is inapplicable.

Subgrantee or Contractor may file a legal challenge to any SEPTA decision to release a record to the public with the Office of Open Records, or in the Pennsylvania Courts, however, Subgrantee or Contractor shall indemnify SEPTA for any legal expenses incurred by SEPTA as a result of such a challenge and shall hold SEPTA harmless for
any damages, penalties, costs, detriment or harm that SEPTA may incur as a result of Subgrantee’s or Contractor’s failure, including any statutory damages assessed against SEPTA, regardless of the outcome of such legal challenge. As between the parties, Subgrantee or Contractor agrees to waive all rights or remedies that may be available to it as a result of SEPTA’s disclosure of Requested Information pursuant to the RTKL.

The Subgrantee’s or Contractor’s duties relating to the RTKL are continuing duties that survive the expiration of this Agreement and shall continue as long as the Subgrantee or Contractor has Requested Information in its possession.

[END OF SECTION]
Attachment 11

SEPTA EEO/AA Contractual Requirements
SEPTA EEO/AA Contractual Requirements

Nondiscrimination:

During the performance of the Agreement, the Consultant agrees as follows:

1. The Consultant will not discriminate against any employee or applicant for employment because of race, color, creed, religion, sex, age, or national origin. The Consultant will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, creed, religion, sex, age, 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 compensation; and selection for training, including apprenticeship. The Consultant agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The Consultant will, in all solicitations or advertisements for employees placed by or on behalf of the Consultant, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age, or national origin.

3. The Consultant will send to each Labor Union or Representative of workers with which he/she has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said Labor Union or Worker's Representative of the Consultant's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

4. The Consultant will comply with all Affirmative Action provisions of the Agreement.

5. The Consultant will furnish all information and reports required by SEPTA and will permit access to its books, records, and accounts by the EEO Compliance Officer for purposes of investigation to ascertain compliance with such rules, regulations and orders.

6. In the event of the Consultant's noncompliance with the nondiscrimination clause of the Agreement, the Agreement may be cancelled, terminated, or suspended in whole or in part and the Consultant may be declared ineligible for further SEPTA contracts.

7. The Consultant will include the portion of the sentence immediately preceding paragraph 1 and the provisions of paragraphs 1 through 8 in every subcontract or purchase order so that such provisions shall be binding upon each subconsultant or vendor. The Consultant will take such action with respect to any subcontract or purchase order as SEPTA may direct as a means of enforcing such provisions, including sanctions for noncompliance.

8. The Consultant shall have an Affirmative Action Plan declaring that it does not discriminate on the basis of race, color, religion, creed, national origin or sex and specifying minority and female goals to assure implementation of the Plan. SEPTA shall
assure compliance with this requirement and promptly investigate suspected or reported violations.

9. SEPTA reserves the right to monitor and periodically audit its Consultants’ compliance with the specifications discussed in this section. In the event the Consultant fails to comply with the nondiscrimination provisions of the Agreement, the Consultant may also be subject to termination of the contract or other remedies as provided in 49 CFR Part 26.13(b). SEPTA shall make a report of any such compliance issues to the Office of Federal Contract Compliance Programs (OFCCP).

[END OF SECTION]