MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

MATERIALS MANAGEMENT

RFP NO. CAP 27-10

NEW ORANGE AND RED LINE VEHICLES

OCTOBER 22, 2013
# TABLE OF CONTENTS

## Part I - SOLICITATION, OFFER, AND AWARD / CONTRACTUAL PROVISIONS

### SECTION A INSTRUCTIONS TO OFFERORS

<table>
<thead>
<tr>
<th>A1.01 Invitation</th>
<th>A-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1.02 INTENTIONALLY OMITTED</td>
<td>A-4</td>
</tr>
<tr>
<td>A1.03 Requests for Clarification / Explanation of Solicitation Documents</td>
<td>A-4</td>
</tr>
<tr>
<td>A1.04 Pre-Proposal Conference</td>
<td>A-5</td>
</tr>
<tr>
<td>A1.05 Amendments to Proposal Procedures / Cancellation of Solicitation</td>
<td>A-5</td>
</tr>
<tr>
<td>A1.06 INTENTIONALLY OMITTED</td>
<td>A-6</td>
</tr>
<tr>
<td>A1.07 Submittal of Proposals</td>
<td>A-6</td>
</tr>
<tr>
<td>A1.08 Due Date and Acceptance Period</td>
<td>A-7</td>
</tr>
<tr>
<td>A1.09 Rejection of Proposals</td>
<td>A-7</td>
</tr>
<tr>
<td>A1.10 INTENTIONALLY OMITTED</td>
<td>A-8</td>
</tr>
<tr>
<td>A1.11 INTENTIONALLY OMITTED</td>
<td>A-8</td>
</tr>
<tr>
<td>A1.12 INTENTIONALLY OMITTED</td>
<td>A-8</td>
</tr>
<tr>
<td>A1.13 Selection Process</td>
<td>A-8</td>
</tr>
<tr>
<td>A1.14 Evaluation Criteria</td>
<td>A-12</td>
</tr>
</tbody>
</table>

### SECTION B PROPOSAL

- Part A Price Proposal B-1
- Part B Technical Proposal and Statements and Certifications Regarding Eligibility B-56

### SECTION C GENERAL REQUIREMENTS AND COVENANTS FOR EQUIPMENT PROCUREMENT AND STANDARD EQUIPMENT PROCUREMENT SPECIFICATIONS

#### C1.00 ABBREVIATIONS AND DEFINITIONS OF TERMS

<table>
<thead>
<tr>
<th>C1.01 Abbreviations</th>
<th>C1-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1.02 Definitions</td>
<td>C1-3</td>
</tr>
</tbody>
</table>
C2.00 OPTIONS

C2.01 Options
C2.02 Escalation of Option I (Additional Vehicles and Capital Spare Parts) and Option IV (Additional Capital Spare Parts) Pricing
C2.03 Currency Exchange
C2.04 Option Price

C3.00 AWARD AND EXECUTION OF THE CONTRACT

C3.01 Consideration of the Proposals
C3.02 Award of Contract
C3.03 Performance Guarantee
C3.04 Execution of Contract
C3.05 Insurance Requirements

C4.00 SCOPE OF WORK

C4.01 Intent of Contract
C4.02 Guarantee of End Products (Warranty)
C4.03 Scheduling
C4.04 Engineering Support
C4.05 Quality Assurance Program
C4.06 Contractor Furnished Facilities
C4.07 Contractor’s Local Area Office

C5.00 CONTROL OF PROCUREMENT

C5.01 Contract Plans
C5.02 Contractor's Schedule of Completion
C5.03 INTENTIONALLY OMITTED
C5.04 INTENTIONALLY OMITTED
C5.05 INTENTIONALLY OMITTED
C5.06 INTENTIONALLY OMITTED
C5.07 INTENTIONALLY OMITTED
C5.08 INTENTIONALLY OMITTED
C5.09 INTENTIONALLY OMITTED
C5.10 INTENTIONALLY OMITTED
C5.11 Intellectual Property Rights
C5.12 Offeror’s Material Qualification and Conformity with Plans and Specifications
C5.13 Precedence of Documents
C5.14 Access to Work and Records
C5.15 Assigning or Subcontracting
C5.16 Project Meetings
C5.17 Project Photographs
C5.18 Further Obligations
C5.19 First Article Inspections Procedures and Test Specifications
C5.20 Vehicle Inspections and Tests

C6.00 DELIVERY AND ACCEPTANCE OF MATERIALS, VEHICLES, AND SPARE PARTS

C6.01 Quality of Supply
C6.02 Trade Names and Alternatives
C6.03 Storage of Material
C6.04 Vehicle Delivery Conditions
C6.05 Delivery Schedule of Vehicles, Manuals, Diagnostic Test Equipment, Training Aids and Other Components (Base Contract and Options)
C6.06 Receipt of Vehicles, Spare Parts and Other Materials
C6.07 Conditional Acceptance of Vehicles
C6.08 Final Acceptance of Vehicles
C6.09 Warranties, Guarantees, Instruction Sheets and Parts List
C6.10 Training Aids
C6.11 Spare Parts (Base Contract and Options)

C7.00 LEGAL REQUIREMENTS AND RESPONSIBILITY TO PUBLIC

C7.01 Permits and Licenses
C7.02 Payment of Taxes
C7.03 Conflict of Interest
C7.04 Personal Liability of Authority Officials
C7.05 Passing of Title and Risk of Loss
C7.06 Jurisdiction
C7.07 Laws to be Observed
C7.08 Indemnification
C7.09 Inspection
C7.10 Miscellaneous Provisions
C7.11 Security Requirements
C7.12 INTENTIONALLY OMITTED
C7.13 Right-of-Way Safety Training Requirements
C7.14 Access to Records
C7.15 Equal Employment Opportunity / Affirmative Action
C7.16 Minority and Women Owned Business Enterprise Participation (M/WBE)
C7.17 Domestic U.S. Content Requirement
C7.18 Final Assembly of Production (Non-Pilot) Vehicles in Massachusetts Requirement
C7.19 Appropriation Contingency

C8.00 PROSECUTION AND PROGRESS

C8.01 Claim for Delay or Suspension of the Work
C8.02 Determination and Extension of Contract Time for Completion
C8.03 Liquidated Damages
C8.04 Suspension of Work
C8.05 Claims and Disputes
C8.06 Termination for Convenience
C8.07 Abandonment or Default by Contractor

C9.00 INTENTIONALLY OMITTED

C10.00 PAYMENT

C10.01 Terms of Payment
C10.01B Schedule of Partial Payments
C10.01B2 Schedule of Partial Payments for Red Line Option Cars
C10.02 Basis of Payment
C10.03 Payment of Options
C10.04 Payment for Change Orders

C11.00 CHANGE ORDERS

C11.01 Changes in Workscope (Change Orders)
C11.02 Contractor's Written Notice
C11.03 Contractor’s Request for Equitable Adjustment to Contract Price and Delivery Schedule
C11.04 Workscope Authorization
C11.05 Change Status Report
C11.06 Executed Change Orders
C11.07 Non-Waiver
C11.08 Contractor Proposed Changes
RFP NO. CAP 27-10  NEW ORANGE AND RED LINE VEHICLES

SECTION D
FORM OF CONTRACT

SECTION E
PERFORMANCE GUARANTEE
LETTER OF CREDIT FORMS

SECTION F
REQUEST FOR CLARIFICATION FORM
GOVERNMENT AGENCIES
GENERAL INFORMATION: CHAPTER 521 OF THE GENERAL LAWS OF THE COMMONWEALTH OF MASSACHUSETTS – 102 CMR: OFFICE FOR CHILDREN

Part II - TECHNICAL PROVISIONS

Specification No. VE-01-036
Technical Provisions for Orange and Red Line Vehicles
SECTION A – PART A1.00
INSTRUCTIONS TO OFFERORS

A1.01 INVITATION

A. The Massachusetts Bay Transportation Authority (hereinafter also called the Authority, MBTA, Party, or Owner) invites proposals as set forth herein on a competitive negotiated basis for the furnishing and delivery of Orange Line Cars, Red Line Cars, Capital Spares, Manuals, Diagnostic Test Equipment and Training Aids, including all materials, services and costs for freight and insurance to MBTA Facilities in the greater Boston area, as provided in the contract provisions (Contract Provisions) of this Request for Proposals No. CAP 27-10 (RFP) and accompanying Specification No. VE-10-036 (Contract Specification). ¹ The RFP is entirely funded by the Commonwealth of Massachusetts and does not involve Federal Transit Administration grant or other federal funds.

The Authority seeks offers for a base contract and options as provided below:

BASE CONTRACT - 152 Orange Line Cars configured in married pairs, 74 Red Line Cars configured in married pairs, Capital Spares (identified by item and quantity in Section B Part A Capital Spare Parts – Base Contract), Manuals, Diagnostic Test Equipment and Training Aids, all in accordance with the Contract Provisions and the Contract Specification.

OPTION I – The Authority reserves the right within five (5) years of the Notice to Proceed to exercise an option for the furnishing and delivery of 58 Red Line Cars with Capital Spares (identified by item and quantity in Section B Part A Capital Spare Parts – Option I). Prices offered shall remain fixed for Vehicles and Capital Spare Parts purchased through the end of thirty-six (36) months following the Notice to Proceed, and shall be subject to escalation pursuant to Section C2.02 for Vehicles and Capital Spare Parts purchased thereafter.

OPTION II – INTENTIONALLY OMITTED

OPTION III – INTENTIONALLY OMITTED

OPTION IV - The Authority reserves the right within five (5) years of the Notice to Proceed to purchase additional Capital Spare Parts in an amount up to fifty percent (50%) of the quantities of any items listed in Section B Part A Capital Spare Parts – Base Contract. For additional Capital Spare Parts purchased through the end of thirty-six (36) months following the Notice to Proceed, they shall be offered at the same unit prices offered for Capital Spare Parts for the Base Contract. For additional Capital Spare Parts purchased thereafter, prices shall be subject to escalation pursuant to Section C2.02.

¹ All citations to Specification No. VE-10-036 (Contract Specification) are abbreviated by the letter “T” followed by the numerical cite reference to the applicable section of the Contract Specification.
**OPTION V** - The Authority reserves the right within three (3) months of the Notice to Proceed to exercise an option for the supply and installation of 113 CCTV Operator Display Screens as described in T 5.03.11, as well as manuals, training, special tools, diagnostic equipment and other items as applicable. The unit and total price shall include an allowance for associated Capital Spare Parts in the form of an additional ten percent (10%) of the base unit price. In order to avoid any ambiguity, Offerors shall add to the base unit price for this option a sum representing ten percent (10%) of the base unit price.

OPTION V(a) - If Option I is exercised, the Authority reserves the right to increase the quantity of all of the items in Option V above by 29 units at the same unit price. The unit and total price for Option V(a) shall not include a ten percent (10%) allowance for associated Capital Spare Parts.

**OPTION VI** - The Authority reserves the right within three (3) months of the Notice to Proceed to exercise an option for the supply and installation of 226 Gap Mitigation Devices as described in T 6.02.10, as well as manuals, training, special tools, diagnostic equipment and other items as applicable. The unit and total price shall include an allowance for associated Capital Spare Parts in the form of an additional ten percent (10%) of the base unit price. In order to avoid any ambiguity, Offerors shall add to the base unit price for this option a sum representing ten percent (10%) of the base unit price.

OPTION VI(a) - If Option I is exercised, the Authority reserves the right to increase the quantity of all of the items in Option VI above by 58 units at the same unit price. The unit and total price for Option VI(a) shall not include a ten percent (10%) allowance for associated Capital Spare Parts.

**OPTION VII** - The Authority reserves the right within three (3) months of the Notice to Proceed to exercise an option for the supply and installation of 1,504 sets of Internal and External Passenger Door Open Pushbuttons as described in T 6.03.03, as well as manuals, training, special tools, and other items as applicable. The unit and total price shall include an allowance for associated Capital Spare Parts in the form of an additional ten percent (10%) of the base unit price. In order to avoid any ambiguity, Offerors shall add to the base unit price for this option a sum representing ten percent (10%) of the base unit price.

OPTION VII(a) - If Option I is exercised, the Authority reserves the right to increase the quantity of all of the items in Option VII above by 464 sets at the same price. The unit and total price for Option VII(a) shall not include a ten percent (10%) allowance for associated Capital Spare Parts.

**OPTION VIII** - The Authority reserves the right within three (3) months of the Notice to Proceed to exercise an option for the supply and installation of 752 LCD Monitors as described in T 13.02.15, as well as manuals, training, special tools, diagnostic equipment and other items as applicable. The unit and total price shall include an allowance for associated Capital Spare Parts in the form of an additional ten percent (10%) of the base unit price.
In order to avoid any ambiguity, Offerors shall add to the base unit price for this option a sum representing ten percent (10%) of the base unit price.

OPTION VIII(a) - If Option I is exercised, the Authority reserves the right to increase the quantity of all of the items in Option VIII above by 232 units at the same unit price. The unit and total price for Option VIII(a) shall not include a ten percent (10%) allowance for associated Capital Spare Parts.

OPTION IX - The Authority reserves the right within three (3) months of the Notice to Proceed to exercise an option for the supply and installation of 752 Active Route Maps as described in T 13.02.16, as well as manuals, training, special tools, diagnostic equipment and other items as applicable. The unit and total price shall include an allowance for associated Capital Spare Parts in the form of an additional ten percent (10%) of the base unit price. In order to avoid any ambiguity, Offerors shall add to the base unit price for this option a sum representing ten percent (10%) of the base unit price.

OPTION IX(a) - If Option I is exercised, the Authority reserves the right to increase the quantity of all of the items in Option IX above by 232 units at the same unit price. The unit and total price for Option IX(a) shall not include a ten percent (10%) allowance for associated Capital Spare Parts.

OPTION X - The Authority reserves the right within three (3) months of the Notice to Proceed to exercise an option for the supply and installation of 1,504 Automatic Passenger Counting Systems as described in T 13.02.22, as well as manuals, training, special tools, diagnostic equipment and other items as applicable. The unit and total price shall include an allowance for associated Capital Spare Parts in the form of an additional ten percent (10%) of the base unit price. In order to avoid any ambiguity, Offerors shall add to the base unit price for this option a sum representing ten percent (10%) of the base unit price.

OPTION X(a) - If Option I is exercised, the Authority reserves the right to increase the quantity of all of the items in Option X above by 464 units at the same unit price. The unit and total price for Option X(a) shall not include a ten percent (10%) allowance for associated Capital Spare Parts.

OPTION XI - The Authority reserves the right within twenty-four (24) months of the Notice to Proceed to exercise an option for the supply of two (2) Training Simulators as described in T 22.02.08, as well as manuals, training, and other items as applicable.

B. Daniel G. Smith, Deputy Director of the Materials Management Department, has been designated as the Contracting Officer charged with responsibility for the competitive negotiation process. Mr. Smith along with Christopher Carven, Project Coordinator, Vehicle & Systems Procurement, shall be the sole point of contact for the prospective Offerors during the proposal process. The Contracting Officer will coordinate and direct all managerial, administrative, and technical processes and decisions. All inquiries with respect to this procurement should be directed to Mr.
Carven c/o the Materials Management Department, MBTA, 10 Park Plaza, Room 2810, Boston, Massachusetts 02116 (ccarven@mbta.com). Offerors are advised that communications regarding this procurement with any other officers of Massachusetts Department of Transportation, the MBTA or other third parties, including outside consultants, are prohibited and may result in disqualification.

C. This RFP and all related materials, including Addenda, may be obtained from the on-line Materials Procurement Advertisement System (MPAS). In order to obtain timely access to all Solicitation Documents, including Addenda arising from requests for clarifications pursuant to Section A1.03, Offerors shall register with the MPAS at the following link:

http://www.mbta.com/BCRegister

D. Offerors are required to obtain copies of the RFP, Contract Provisions, the Contract Specification, Proposal Modification Clarification Guidelines and all applicable Addenda (Solicitation Documents), and to become familiar with the Solicitation Documents, and all conditions therein, before submitting a proposal.

E. Each prospective Offeror shall designate one individual or organization to function as a point of contact with the Authority during the procurement process. The point of contact shall be for the purpose of all communications between the Offeror and the Authority, including distribution of Solicitation Documents, issuance of Addenda, requests for clarification of the Offeror’s proposal by the Authority, and requests for negotiations and best and final offers. The contact person (including name, title, address, telephone number and email address) should be identified in the MPAS registration (Section A.1.01C).

F. Offerors are advised that the Contract for this solicitation shall include the Solicitation Documents, the Offeror’s final proposal (whether in the form of the initial proposal or a best and final offer) and all other submissions made by the Offeror pursuant to Section B, including but not limited to certifications, affidavits and statements.

A.1.02 INTENTIONALLY OMITTED

A1.03 REQUESTS FOR CLARIFICATION / EXPLANATION OF SOLICITATION DOCUMENTS

A. Prospective Offerors may submit questions to the Contracting Officer seeking clarification or further explanation of any and all aspects of the Solicitation Documents. All questions must be submitted no later than March 17, 2014. Questions are to be submitted in writing using the form provided at Section F Attachment I - "Request for Clarification." Prospective Offerors may ask as many questions as desired but are instructed to submit only one (1) question per individual Request for Clarification form.
Prospective Offerors are instructed not to seek any requests for clarification in any other form (whether oral or in writing). (Addendum No. 7)

B. The Authority reserves the right to respond or not respond to questions submitted. To the extent a response is merited, any response, including an interpretation or revision to the Solicitation Documents shall be made by an Addendum to the RFP duly issued and signed by the Contracting Officer.

C. Offerors are advised that no officer, agent, or employee of the Authority is authorized to amend any provisions contained in any of the Solicitation Documents unless such amendment is put into the form of an Addendum.

D. Note that the Authority, in its continuing effort to provide maximum availability of equipment, has standardized numerous items of equipment and components that are interchangeable from Vehicle to Vehicle in its Contract Specification. Equipment and components specified in the Contract Specification without the qualifying phrase “or equal” reflect this standardization policy. If a prospective Offeror wishes to take exception to any specified equipment or components on the grounds that there are other equipment or components which the prospective Offeror believes are equal to or better than the equipment or components identified in the Contract Specification, it may do so by means of request for clarification, as provided in this section. Requests for approved equal qualifications must be fully supported with technical data, test results, or other pertinent information.

A1.04 PRE-PROPOSAL CONFERENCE

A. A pre-proposal conference for all prospective Offerors shall be conducted by the Authority on Tuesday, December 3, 2013 at 9:00 A.M. (EST) at the State Transportation Building, Conference Room Nos. 2/3, 10 Park Plaza, Boston, Massachusetts 02116. Prospective Offerors are advised that they will need proper identification to attend the conference. Prospective Offerors are encouraged to advise Mr. Carven by email no later than Friday, November 30, 2013 of their attendance.

B. No oral statements by the Authority during the pre-proposal conference shall be binding on the Authority nor act as a clarification or revision to the Solicitation Documents. If following the pre-proposal conference, a prospective Offeror seeks an explanation or clarification of the Solicitation Documents, such requests must be made pursuant to Section A1.03.

A1.05 AMENDMENTS TO PROPOSAL PROCEDURES / CANCELATION OF SOLICITATION

A. The Authority reserves the right to revise or amend the Solicitation Documents and to extend the Proposal submission date if determined to be in the best interest of the
Authority. If a decision to postpone is made following the submission of offers, the Authority shall afford those Offerors the opportunity to revise or withdraw their proposals.

B. The Authority may issue Addenda to its Solicitation Documents. Any Addenda issued prior to the date of proposal submittal shall, if necessary, contain a provision postponing the date of proposal submittal to a date that shall provide Offerors adequate time to respond to the Addenda. Addenda shall be numbered sequentially and shall be published on MPAS. Offerors must acknowledge all Addenda in the Addenda Acknowledgement Form (see Section B Part B, Page B-95) and are responsible for verifying the number of Addenda issued (as indicated on MPAS). All terms and conditions of the Solicitation Documents not modified by Addenda remain the same.

C. The Authority reserves the right to cancel this RFP at any time prior to the execution of the Contract by all parties and without any liability against the Authority.

A1.06 INTENTIONALLY OMITTED

A1.07 SUBMITTAL OF PROPOSALS

A. Proposals will be submitted in two separate parts as follows: PART A, Price Proposal; and PART B, Technical Proposal and Statements and Certifications Regarding Eligibility. Both parts are to be clearly labeled with the Offeror’s official name and address, and clearly marked Price Proposal or Technical Proposal and Statements and Certifications Regarding Eligibility, RFP for New Orange and Red Line Vehicles, RFP No. CAP 27-10.

1. PART A, Price Proposal, shall be submitted using the forms prescribed in Section B of this RFP in original and six (6) copies together with one (1) electronic copy in the form of a CD (in Word format), all of which shall be enclosed and sealed. (Addendum No. 2)

2. PART B, Technical Proposal and Statements and Certifications Regarding Eligibility, shall be submitted using the forms prescribed in Section B (including those relating to M/WBE Participation) of this RFP in original with fifteen (15) copies together with one (1) electronic copy in the form of a CD (in Word format) and shall be enclosed in appropriate container(s) (envelope/package/carton), sealed and endorsed as provided above. (Addendum No. 2)

3. Offerors must fill in all blank spaces in the PART A and PART B forms. No changes shall be made in the wording of the forms.

4. The proposal documents (PART A and PART B) must be submitted as an entire package which shall be endorsed “RFP No. CAP 27-10 - Proposal for New
Orange and Red Line Vehicles.”

B. Signatures and Cover Letters

1. The proposal documents (PART A and PART B) shall be accompanied by a Cover Letter showing the Offeror’s name, post office address, telephone number, fax number and name, title, telephone number, email address and signature of the person submitting the proposal. In addition, the Price Proposal and Technical Proposal shall each be signed in all designated areas with black ink.

2. The Cover Letter should attach a sealed or notarized letter/vote attesting to the signer’s authorization to sign the PART A and PART B proposal documents on behalf of the Offeror if the Offeror is an entity (firm, corporation, partnership or other legal entity) as opposed to an individual. If a Proposal is made by two or more individuals, partnerships, or corporations, or any combination of these operating for the purpose of submitting a proposal as a Joint Venture, each party joining to make the proposal shall be included in the Cover Letter and attach to the Cover Letter information and signatures in compliance with the foregoing provisions applicable to an individual, firm, partnership or corporation.

A1.08 DUE DATE AND ACCEPTANCE PERIOD

A. Sealed proposals are due on Thursday, May 15, 2014, no later than 1:00 P.M. (EST), at the Materials Management Department Room 2810, 10 Park Plaza, Boston, Massachusetts 02116. OFFERORS MUST SUBMIT A PROPOSAL USING ALL PROPOSAL FORMS USED IN THE SOLICITATION DOCUMENTS. DO NOT REMOVE PAGES. (Addendum No. 10)

B. There is no public opening of the proposals submitted in response to this RFP. PART B Proposals are opened by the Contracting Officer in the presence of MBTA witnesses and then distributed to the Evaluation Committee in accordance with Section A1.13. After the PART B Proposal review, the Contracting Officer, in the presence of the MBTA’s General Counsel or his designee and other witnesses as determined by the Contracting Officer, opens and reviews the PART A Price Proposals.

C. Proposals shall be valid for one hundred and eighty (180) days from date of proposal submittal. If the Authority requires additional time for its review, the Authority reserves the right to extend the validity of the proposal in thirty (30) day increments. Prices submitted remain in effect as originally submitted.

A1.09 REJECTION OF PROPOSALS

A. The MBTA reserves the right to reject any and all proposals if such action is determined to be in the best interests of the Authority.
B. Proposals which fail to meet the requirements of the Solicitation Documents, or which are incomplete, conditional, obscure, take exception to certain requirements, contain additions not called for, erasures, alterations and irregularities of any kind, or include unreasonably high or unrealistically low prices for any item, may be rejected as invalid.

C. More than one proposal from the same Offeror, whether the same or different names appear on the signature page, shall not be considered.

D. Any or all proposals shall be rejected if there is reason for believing that collusion exists among the Offerors.

E. The MBTA reserves the right to waive any informalities, deviations, mistakes, and matters of form rather than substance of the proposals, which can be waived or corrected without prejudice to the other Offerors.

A1.10 INTENTIONALLY OMITTED

A1.11 INTENTIONALLY OMITTED

A1.12 INTENTIONALLY OMITTED

A1.13 SELECTION PROCESS

A. Basis of Award: Best Value

1. This is a competitively negotiated procurement. The Authority shall award a contract to an Offeror which is deemed responsible, possesses the management, financial and technical capabilities necessary to fulfill the requirements of the contract, whose proposal conforms to the requirements in the Solicitation Documents, and who is judged by an integrated assessment of the general considerations and specific criteria defined in Section A1.14 (Evaluation Criteria) to be most advantageous to the Authority, with price and other factors considered.

2. For purposes of this procurement, all technical evaluation factors other than price, when combined are more important than lowest price. Therefore, the Authority may select other than the lowest price offer if it is determined that additional technical merit offered is worth the additional cost in relation to other proposals received. For evaluation purposes, if proposals received are determined to be technically comparable, then price becomes more important. The Authority is more concerned with obtaining excellent technical features than in making awards at the lowest overall price to the authority. The Authority, however, will not make any award at a significantly higher overall cost to the Authority to achieve only slightly superior technical features.
B. Negotiations, Competitive Range Determination, Best and Final Offers

1. Offerors are advised that the Authority reserves the right to award a contract based on the initial proposals submitted by the Offerors and without any discussions or any contact with the Offerors concerning the proposals except for requests for clarification issued by the Authority. An Offeror’s proposal should be based on the most favorable terms the Offeror can submit to the Authority.

2. If after the evaluation of the initial proposals, the Authority elects to enter into discussions with Offerors and seek best and final offers, it will first make a competitive range determination. The competitive range includes all proposals which in the Contracting Officer’s judgment have a reasonable chance of being selected for award. All Offerors determined to be in the competitive range will be formally notified in writing. The Contracting Officer will then determine whether negotiations will be conducted by written correspondence or by oral discussion or both. All meetings will be held individually under the direction of the Contracting Officer. Following negotiations, Offerors within the competitive range may modify their initial proposals and submit a “best and final offer” by a common due date. Prior to the due date for the submission of best and final offers, the Authority may issue Proposal Modifications and Clarification Guidelines (PMCGs) setting forth additional amendments to the RFP and specifying the form of the best and final offer. All best and final offers will be evaluated in the same manner in which the initial proposals were evaluated. The Authority reserves the right to enter into final negotiations with the selected Offeror prior to award.

C. Objectives and Methodology

The principal objectives of the evaluation process are to: (1) determine which proposals are compliant with the Solicitation Documents and acceptable; (2) determine from among the compliant and acceptable proposals received which are most advantageous to the Authority, considering technical, price and other factors outlined in the RFP; and (3) provide a sound basis for the Authority to make an informed and objective selection. For internal reference only, a confidential memorandum to the file is prepared which establishes and documents the evaluation criteria formula based on the stated evaluation criteria in the RFP. In addition, a sealed confidential copy of the same is filed with the General Counsel and remains unopened until a final recommendation is made.

D. The Contracting Officer and the Evaluation Committee

The Deputy Director of the Materials Management Department is the Contracting Officer responsible for leading the competitive negotiation. The Contracting Officer determines the composition of the Evaluation Committee which will conduct the review and evaluation of the Technical Proposal. The Evaluation Committee is chaired by the
Contracting Officer and may consist of representatives from the Materials Management Department, members of various other departments as required, and consultants working for the Authority in the preparation of the Contract Specification. Subcommittee Chairperson(s) will be appointed by the Contracting Officer as deemed necessary.
E. Evaluation of Proposals

1. The Contracting Officer opens the Technical Proposal and Statements and Certifications Regarding Eligibility (PART B Proposals) of all Offerors first. The Price Proposals (PART A Proposals) shall remain sealed until the PART B Proposals have gone through the entire review process described in steps 1 through 6 herein.

2. In reviewing the PART B Proposals, the Contracting Officer and his team (which may consist of representatives from the Materials Management Department, members of various other departments as required, and consultants working for the Authority in the preparation of the Contract Specification), must first make a determination if the Offeror is eligible for consideration. Eligibility is determined based on consideration of (a) the Offeror’s compliance with the Solicitation Documents; and (b) whether the Offeror and its suppliers of major subsystems are responsible, i.e., have adequate financial resources to perform the contract, have a satisfactory performance record, have a satisfactory record of integrity and business ethics, and are otherwise qualified and eligible to receive an award under applicable laws and regulations.

3. In making the determination under step 2(a), the Contracting Officer and his team will determine whether the Offeror has submitted all completed and required forms, documents, statements, certifications, Performance Guarantee commitments, and an M/WBE Plan. If the Contracting Officer determines that any of the PART B Proposals are not compliant, the Offeror will be deemed ineligible and removed from the process and the Offeror notified. Minor omissions in content may be addressed through requests for clarification and additional information, but significant incompleteness or non-responsiveness may result in a determination of noncompliance. (Addendum No. 7)

4. In making the determination under step 2(b), the Contracting Officer and his team will review the responses to the questions and requests concerning eligibility in the PART B Proposals and substantive responses in the completed forms necessary for eligibility in Section B Part B.

5. PART B Proposals determined to be eligible pursuant to steps 1 through 4, are then referred to the Evaluation Committee for purposes of conducting the Technical Evaluation based on the Evaluation Criteria in Section A1.14 and using the evaluation criteria formula predetermined by the Contracting Officer.

6. Following its evaluation, the Evaluation Committee makes its recommendation to the Contracting Officer. The Evaluation Committee will prepare a Technical Evaluation Report describing the results of the proposal evaluation indicating the rationale for the ranking and evaluation of each of the PART B Proposals. (Addendum No. 7)
7. After receipt of the Evaluation Committee’s recommendations and Evaluation Report, the Contracting Officer will open PART A Proposals in the presence of the General Counsel or his designee and other witnesses as determined by the Contracting Officer.

8. Each PART A Proposal will first be evaluated by the Contracting Officer and his team (which may consist of representatives from the Materials Management Department, members of various other departments as required, and consultants working for the Authority in the preparation of the Contract Specification) for completeness, reasonableness and realism. If the Contracting Officer determines that any of the PART A Proposals are not compliant and acceptable, the Offeror will be deemed ineligible and removed from the process and the Offeror notified. Minor omissions in content or obvious typographical or mathematical errors may be addressed through requests for clarification and additional information, but significant incompleteness or non-responsiveness may result in a determination of noncompliance. In determining price reasonableness and realism, the Contracting Officer may rely on an independent cost estimate and/or the adequacy of price competition. If either is insufficient, the Contractor Officer may request that the Offeror provide certified cost or pricing data in the form of a request for clarification.

9. Following step 8, the Contracting Officer and his team, shall engage in an evaluation of the PART A Proposals of all eligible Offerors based on the Evaluation Criteria in Section A1.14 and using the evaluation criteria formula predetermined by the Contracting Officer.

10. Results of the technical and price reviews will result in a total evaluation of each proposal based on the evaluation criteria formula. The Contracting Officer will tabulate technical, price and total evaluations and review the Evaluation Report from the Evaluation Committee. The Contracting Officer and his team will then conduct a final evaluation, taking into consideration the total evaluation, and may (1) recommend that contract award be made; (2) establish a competitive range and enter into negotiations with all Offerors determined to be in the competitive range, issue PMCGs, as appropriate, and seek best and final offers from such Offerors as provided in Section A1.13B; or (3) reject all proposals if determined to be in the best interests of the Authority. (Addendum No. 7)

F. Contract Award

When the Contracting Officer determines that an award can be made that is judged by the MBTA to be in its best interest, a recommendation is then made to the General Manager and the MassDOT Board of Directors for their approval. Contract award and the conditions precedent to execution of the Contract with the awardee are described in Section C3.00.
A1.14 EVALUATION CRITERIA

As provided in Section A1.13, for purposes of this procurement, all technical evaluation factors other than price, when combined are more important than lowest price. Therefore, the Authority may select other than the lowest price offer if it is determined that additional technical merit offered is worth the additional cost in relation to other proposals received. For evaluation purposes, if proposals received are determined to be technically comparable, then price becomes more important. The Authority is more concerned with obtaining excellent technical features than in making awards at the lowest overall price to the authority. The Authority, however, will not make any award at a significantly higher overall cost to the Authority to achieve only slightly superior technical features.

A. Technical Evaluation

The Contracting Officer and the Evaluation Committee shall consider several factors in evaluating the Offeror’s PART B Proposals and deliverables in accordance with the following:

- Technical Approach
- Manufacturing Plan
- Past Performance

2. Quality Assurance Plan

3. Participation of Minority and Women Owned Business Enterprises

The Technical Evaluation Criteria and the Offeror’s overall Part B Proposal will be rated by a qualitative/descriptive method. The following qualitative/descriptive ratings will be used in the evaluation of each rated evaluation factor and in the overall rating for the Part B Proposal:

1) A rating of Exceptional is appropriate when the Offeror has demonstrated an approach that is considered to significantly exceed stated criteria in a way that is beneficial to the MBTA. This rating indicates a consistently outstanding level of quality, with very little or no risk that this Offeror would fail to meet the requirements of the solicitation. Any perceivable weaknesses are far outweighed by strengths.

2) A rating of Good is appropriate when the Offeror has demonstrated an approach that is considered to exceed stated the requirements of the solicitation. Weaknesses, if any, are very minor. Correction of the weaknesses would not be necessary before the Proposal would be considered further.

3) A rating of Acceptable is appropriate if the Offeror has demonstrated an approach that is considered to meet the stated criteria. This rating indicates an acceptable level of quality.
The Proposal demonstrates a reasonable probability of success. Weaknesses exist but can be readily corrected through requests for Clarification or Communications.

4) A rating of Potential to Become Acceptable is appropriate if the Offeror has demonstrated an approach that fails to meet stated criteria as there are weaknesses, but they are susceptible to correction through Discussions. The response is considered marginal in terms of the basic content and/or amount of information provided for evaluation, but overall the Offeror is capable of providing an acceptable or better Proposal.

5) A rating of Unacceptable is appropriate if the Offeror has demonstrated an approach that indicates significant weaknesses and/or unacceptable quality. The Proposal fails to meet the stated criteria and/or lacks essential information and is conflicting and/or unproductive. There is no reasonable likelihood of success; weaknesses are so major and/or extensive that a major revision to the Proposal would be necessary. (Addenda Nos. 7/10)

**Technical Approach**

This criterion considers the Offeror’s approach toward the design of the two different Vehicles under this contract, including, but not limited to organization, staffing, sequence, design review process, interface among the various design disciplines and subcontractors, analytic techniques and testing. This criterion also considers the Offeror’s approach to ensuring that the vehicle will meet the Reliability Requirements of T2.03, which is of great importance in this evaluation. In addition, it considers the Offeror’s approach with regard to system integration, industrial design and weight control, as well as the Offeror’s familiarity with an understanding of applicable North American Transit Vehicle design and manufacturing standards. This criterion also considers the potential major subcontractors and types of equipment being proposed, as well as where and in what quantities similar equipment is in use. This criterion assesses the capabilities of the designated management and technical team to perform the necessary duties associated with their respective roles within a project of similar scope. The MBTA will also consider the Offeror’s experience in performing vehicle and truck dynamic modeling and analysis as required by T 2.02.16 and T 11.10. (Addendum No. 7)

**Manufacturing Plan**

The Manufacturing plan addresses the manufacturing capacity and logistics for the production of the two different proposed Vehicles. Considerations include but are not limited to the overall approach to manufacturing and assembly of car body components, testing and commissioning, the available plant capacity at the various locations, qualified, and where applicable, certified personnel and other resources to perform the work, including the local on-site staff, the methods of transportation between the various work locations as well as to the Authority, and the Offeror’s plans or local coordination with, and support to, the Authority. The Manufacturing Plan must address all efforts the Offeror will undertake to comply with the obligation in Section C7.18 that Final Assembly of all Production (Non-Pilot) Vehicles delivered under the Contract take place in Massachusetts. More specifically, the Manufacturing Plan should disclose whether the Offeror will utilize an existing or new assembly facility in Massachusetts, the Offeror’s schedule for the conversion or creation of a new assembly facility in Massachusetts in
order to meet the delivery deadlines in the Contract, and measures the Offeror will take in accordance with this schedule. The Manufacturing Plan should address specifically the expected number of new jobs that will be created as a result of the Massachusetts Final Assembly obligation in Section C7.18, and the Offeror’s plans for the hiring, training and retention of qualified workers, including the actions the Offeror plans to take to promote the development of a qualified and diverse workforce. Note that the MBTA will consider in the evaluation of this criterion the effect the Manufacturing Plan will have on job creation and retention in Massachusetts and how it will foster economic development in Massachusetts. The Authority may elect to perform site inspections as part of the evaluation process to confirm some of this information.

The Manufacturing Plan shall also present the interplay between design, production, inspection and testing, commissioning and warranty support, including staffing and their level of responsibility and authority.

NOTE CONCERNING MASSACHUSETTS FINAL ASSEMBLY OBLIGATIONS IN SECTION C7.18: If the Offeror’s anticipated final assembly operations, processes and measures that it will use in connection with the Production Vehicles delivered under the Contract differ from or do not include at a minimum all operations, processes and measures listed in the definition of Final Assembly in Section C7.18, the Offeror will be permitted to describe how the Offeror’s final assembly will differ from the final assembly requirements in Section C7.18, explain why the Offeror believes that its final assembly satisfies the general requirement of final assembly of all Production Vehicles in Massachusetts, and seek a compliance determination (in completing the Certificate of Final Assembly of Production (Non-Pilot) Vehicles in Massachusetts). OFFERORS ARE ADVISED THAT A PROPOSAL WHICH DESCRIBES A MASSACHUSETTS FINAL ASSEMBLY PROCESS WHICH DOES NOT INCLUDE AT A MINIMUM ALL OF THE OPERATIONS, PROCESSES AND MEASURES LISTED IN THE DEFINITION OF FINAL ASSEMBLY IN SECTION C7.18 MAY BE REJECTED BY THE AUTHORITY AS NON-COMPLIANT. THE MBTA RESERVES THE RIGHT, ON A CASE-BY-CASE BASIS, TO DETERMINE WHETHER THE OFFEROR’S FINAL ASSEMBLY SATISFIES THE GENERAL REQUIREMENT OF SECTION C7.18 THAT FINAL ASSEMBLY OF ALL PRODUCTION VEHICLES TAKE PLACE IN MASSACHUSETTS.

Past Performance

Past performance considers the Offeror’s and major subcontractors’ performance in previous vehicle procurement contracts, with a main focus on vehicle reliability. (For these purposes, a major subcontractor shall be any supplier proposed for greater than either $1,000,000 total or $5,000 per vehicle.) Past performance shall focus on vehicle reliability of similar designs in similar operating environments, preferably with the same subcontractors and subsystem design as proposed. Past Performance shall also address the Offeror’s and major subcontractors’ performance in previous vehicle procurement contracts with respect to commercial issues and responsiveness, technical capability and
responsiveness, quality of work, on-time delivery, vehicle performance, documentation development and delivery and follow-up support services.

Past performance on projects of similar size and scope, particularly in the North American Market, will weigh heavily in the evaluation. Although experience on projects in North America is most directly relevant, the MBTA recognizes that past performance on projects of similar size and scope outside of North America is also relevant. The Authority may contact the previous customers of the Offeror and proposed major subcontractors to confirm and supplement the provided information. (Addendum No. 7)

**Quality Assurance Plan**

This criterion addresses the Offeror’s commitment to, and execution of, a thorough, effective quality assurance program for this Contract. It considers the existence and role of quality assurance in the overall organization, procedures established to monitor and remedy the quality of materials and workmanship in-house and by subcontractors, and provisions for appropriate documentation with the foregoing.

**M/WBE Participation**

The Authority strongly encourages the use of Minority and Women Owned Business Enterprises (M/WBEs) as consultants, contractors, subconsultants, subcontractors, and suppliers. This criterion addresses the Offeror’s approach, creativity, demonstrated commitment to seek opportunities for M/WBE participation, and the good faith efforts it will make to achieve this goal. It requires examination of the Offeror’s anticipated utilization of M/WBEs, including the percentage of total Proposal Price to be supplied by qualified M/WBEs and the identity of and work to be performed by qualified M/WBEs. It considers the strategies and good faith efforts each Offeror will use to obtain qualified M/WBE subcontractors and suppliers, how the Offeror will interface with the Authority and the Office of Diversity and Civil Rights (ODCR) for outreach, pre-solicitation review of subcontracting, and compliance monitoring and reporting. It will also consider how the Offeror will address resolving disputes with M/WBE subcontractors, including proposed termination, and alternative plans for the substitution and replacement of M/WBE firms that have been terminated. Finally, it will consider what technical assistance initiatives and supportive service strategies the Offeror will employ to promote full participation by M/WBEs and to support efforts by such firms to build capacity.

**B. Price Evaluation**

The basis for the Authority’s price evaluation includes the total of the Base Award Price plus the total of all Option Prices as tabulated by the Offeror in its PART A Price Proposal. Pricing information submitted will be evaluated to determine whether it is reasonable and responsible. The MBTA reserves the right to reject any proposal in which any of the prices are significantly unbalanced to the potential detriment of the MBTA. (Addendum No. 7)
SECTION B

PART A PRICE PROPOSAL

[INTENTIONALLY OMMITTED]
SECTION B

PART B TECHNICAL PROPOSAL AND STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY

REQUEST FOR PROPOSAL NO.: RFP NO. CAP 27-10

NOTE: The Offeror shall seal this portion of its Proposal in a separate envelope
This constitutes the undersigned Offeror’s Technical Proposal and Statements and Certifications Regarding Eligibility, including all requirements relating to Minority and Women Owned Business Enterprises (M/WBE) participation, for the base contract and options for furnishing and delivery of Orange Line Cars, Red Line Cars, Capital Spares, Manuals, Diagnostic Test Equipment and Training Aids, including all materials, services and costs for freight and insurance to MBTA Facilities in the greater Boston area, as provided in the contract provisions (Contract Provisions) of Request for Proposals No. CAP 27-10 (RFP), Specification No. VE-10-036 (Contract Specification), and all applicable Addenda (Solicitation Documents).

Proposal No. :

Name of Offeror:

Business Address:

Address where Notification: should be sent

Telephone No.:               Facsimile Number:

E-mail No.:

The undersigned acknowledges that this Technical Proposal and Statements and Certifications Regarding Eligibility is prepared as if it is a best and final offer, and that the Authority has reserved the right to make award to offers submitted in response to the RFP without conducting negotiations and seeking best and final offers.

The undersigned acknowledges that the Technical Proposal and Statements and Certifications Regarding Eligibility shall be valid for one hundred and eighty (180) days from date of proposal submittal. If the Authority requires additional time for its review, the Authority reserves the right to extend the validity of the proposal in thirty (30) day increments. Prices submitted remain in effect as originally submitted.

This Proposal is made this __________ day of ____________, 201__, and executed by the undersigned:

_____________________________
(IF AN INDIVIDUAL)

Signature of Offeror ____________________________________________

Business Address ____________________________________________

Federal Identification/Social Security No. __________________________

(IF A PARTNERSHIP)

Firm Name ____________________________________________________

BY* __________________________________________________________

Title: __________________________________________________________

Business Address ____________________________________________

Federal Identification/Social Security No. __________________________

Name(s) and Address(es) of all Partners of the Firm: __________________________

______________________________________________________________

(IF A CORPORATION)

Corporation Name ______________________________________________

BY* __________________________________________________________

Title: __________________________________________________________

Business Address ____________________________________________

Federal Identification/Social Security No. __________________________

*IMPORTANT: As provided in Section A1.07B, attach to Cover Letter proof of authority of Officer or Agent to sign Proposal.
SECTION B
PART B TECHNICAL PROPOSAL AND
STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY

FORM OF TECHNICAL PROPOSAL

For Part B Technical Proposal and Statements and Certifications Regarding Eligibility, each Offeror must provide a separate document responding to the Questions of Eligibility, provide a Technical Proposal in the format prescribed on Pages B-63 to B-68, and submit completed signed certifications on the forms provided.
SECTION B
PART B TECHNICAL PROPOSAL AND STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY QUALIFICATIONS AND CERTIFICATIONS

NOTE: The Authority reserves the right to audit compliance with respect to each of the required statements and certifications in the forms submitted by Offerors, including but not limited to the Domestic U.S. Content Certification, Domestic U.S. Content Worksheet, and Final Assembly of Production (Non-Pilot) Vehicles in Massachusetts.

Questions Concerning Eligibility

Provide short answers (and attach relevant documents) to the following questions and requests:

1. Attach relevant Certificate of Good Standing from the Secretary of State of the Commonwealth of Massachusetts.

2. Provide the names and telephone numbers of all business owners, shareholders if not a publicly held corporation, and/or members if a limited liability company.

3. Provide the names, title and telephone numbers of all officers.

4. Has the business or an owner or shareholder of the business ever had a prior contractual relationship with the MBTA? If yes, please describe relationship.

5. Has the business or an owner or shareholder of the business ever been in default of any obligations under a contract with the MBTA, any other Massachusetts state agency or any federal agency? If yes, please describe the circumstances. Please indicate whether it resulted in a termination for cause.

6. Have any of the business owners, shareholders, or officers every been convicted of felony violations of Federal, state or local laws? If yes, please describe the circumstances.

7. Are there any pending recent law suits against the business or any of its owners or shareholders? If yes, please describe the circumstances.

8. Provide the name, address, account number, contact person and telephone number of the insurance agent responsible for procuring insurance required by the Solicitation Documents.

9. Provide the name, address, contact person and telephone of three business credit references, including but not limited to your primary banking institution.

10. Has the business or any of the business’s owners or shareholders ever filed for bankruptcy or invoked insolvency proceedings under state law?
11. Provide the last three (3) years of audited financial statements, or reasonable equivalent of the Offeror. If the Offeror is a joint venture or other combination of business entities, provide the last three (3) years audited financial statements for each entity.

12. Provide the business’s current code of business ethics or equivalent.

13. Provide the responses to Questions Nos. 1 through 12 for all proposed suppliers of major subsystems identified in response to Tab I.1 – Technical Approach.

**Required Forms for Determining Eligibility**

<table>
<thead>
<tr>
<th>Form</th>
<th>Submitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Collusion Affidavit</td>
<td>_______</td>
</tr>
<tr>
<td>Conflict of Interest Certification</td>
<td>_______</td>
</tr>
<tr>
<td>Assurance of Adherence</td>
<td>_______</td>
</tr>
<tr>
<td>Performance Guarantee</td>
<td>_______</td>
</tr>
<tr>
<td>Insurance Requirements</td>
<td>_______</td>
</tr>
<tr>
<td>Domestic U.S. Content Certification</td>
<td>_______</td>
</tr>
<tr>
<td>Domestic U.S. Content Worksheet</td>
<td>_______</td>
</tr>
<tr>
<td>Final Assembly of Production (Non-Pilot) Vehicles in Massachusetts</td>
<td>_______</td>
</tr>
<tr>
<td>Security Requirements Certification</td>
<td>_______</td>
</tr>
<tr>
<td>Right-of-Way Safety Training Requirements Certification</td>
<td>_______</td>
</tr>
<tr>
<td>Certificate Regarding Debarment, Suspension and Other Responsibility Matters</td>
<td>_______</td>
</tr>
<tr>
<td>Certificate Regarding Debarment, Suspension and Other Responsibility Matters for Lower Tier Participant</td>
<td>_______</td>
</tr>
<tr>
<td>Intellectual Property License Agreement Certification</td>
<td>_______</td>
</tr>
<tr>
<td>M/WBE Utilization Form</td>
<td>_______</td>
</tr>
<tr>
<td>M/WBE Participation Schedule</td>
<td>_______</td>
</tr>
<tr>
<td>Submitted</td>
<td>Yes</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----</td>
</tr>
<tr>
<td>M/WBE Letter of Intent</td>
<td></td>
</tr>
<tr>
<td>M/WBE Affidavit, with most recent certification letter or other documentation establishing M/WBE certification</td>
<td></td>
</tr>
<tr>
<td>Certification of Compliance with Regulation 102 CMR 12.00 Dependent Care Assistance Program Including Child Care</td>
<td></td>
</tr>
<tr>
<td>Prohibited Use of Undocumented Workers Certification</td>
<td></td>
</tr>
<tr>
<td>Certification Regarding Companies Doing Business with or in Northern Ireland</td>
<td></td>
</tr>
<tr>
<td>MBTA Retiree Certification</td>
<td></td>
</tr>
<tr>
<td>List of Manufacturer Subcontractors / Suppliers</td>
<td></td>
</tr>
<tr>
<td>Acknowledgment of Addenda</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Offerors shall utilize pages of Section B, Part B Technical Proposal and Statements and Certifications Regarding Eligibility and Qualifications in submitting their proposal.

Offerors are advised that this checklist is provided as a convenience only for proposal preparation and does not warrant to list all data required for submittal.

For any “NO” submission, explanation must be provided for the Authority’s review and determination.
SECTION B
PART B TECHNICAL PROPOSAL AND
STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY

The Contract, including the Contract Provisions, the Specifications, and any Addenda thereto, set forth the minimum requirements of the vehicles, parts, services, and other deliverables the Authority requires through this procurement.

As part of their Proposal, each Offeror must furnish all of the information requested in Part B.

ORGANIZATION OF PROPOSAL

The Proposal shall be no more than one hundred twenty-five (125) double-sided pages of text, charts, attachments, etc., and shall not exceed the page limit for each Tab as specified. It shall be inserted into a 3-ring binder(s). In addition, the Proposal shall also include the six (6) drawings for each car configuration as shown in Part (m) of Tab I.1. The drawings shall not be included as part of the one hundred twenty-five (125) page limit. The details of each criterion of the Proposal are described below. (Addendum No. 8)

The Proposal shall be organized as follows:

I. NEW ORANGE AND RED LINE VEHICLES

Tab I.1 – Technical Approach
Tab I.2 – Manufacturing Plan
Tab I.3 – Past Performance
Tab I.4 – Quality Assurance Plan
Tab I.5 – M/WBE Participation

Tab I.1 – Technical Approach – Forty (40) double-sided pages, maximum (Addendum No. 8)

a. Provide a detailed organization chart (with names) of the project staff including, but not limited to Program Manager, Production Manager, Lead Electrical Engineer, Lead Mechanical Engineer, System Engineer (System Integration) Quality Engineer, Warranty and Reliability Engineers, Field Support Manager, Training and Manuals Manager. Include a detailed one-paragraph resume of each individual’s experience, which directly applies to this project. A matrix of the responsibilities, location, and decision making authority, of the key staff shall be included.

The proposed staff must be the staff which will actually fill each identified role and deliver the services defined in the contract and the proposal. Changes of key individuals require the prior approval of the Authority.

The Authority has reviewed and approved the key staff as outlined in Part (a) of Tab I.1 and set forth on the organizational chart attached hereto as Schedule B-63 and made a part of this
Attached as Schedule B-63A is the identification and timeline for the engagement of certain key staff in Massachusetts. The Contractor shall provide the Authority with monthly written updates commencing one month from execution of the Contract as to the progress of identification and filling of the positions identified on Schedule B-63A until such positions are filled.

Contractor shall submit a detailed resume of each person proposed to fill a position identified on Schedule B-63A for approval by the Authority prior to any such person being engaged. In any event all key staff identified on Schedule B-63A shall be engaged no later than March 1, 2015.

The prior written approval of the Authority shall be required with respect to any modification, addition or substitution of key staff as outlined on Schedule B-63 and B-63A.

The Authority reserves the right to approve, in its sole discretion, any current or former employee of the Authority identified to fill any position with the Contractor.

b. Provide a statement that confirms that the Offeror fully understands and will adhere to the requirements of the technical specification and all design and manufacturing standards referenced or otherwise applicable.

c. Indicate the Offeror’s experience with the design and manufacture of stainless steel carbodies for heavy rail transit vehicles, with emphasis on North American projects. To do this, provide a matrix that includes: the transit property; number of cars; date of contract; and carbody manufacturer (in-house or sub-contractor).

Identify the potential subcontractor(s) for the Propulsion, Trucks and Major Truck Components, Auxiliary Power, Low Voltage DC Power, HVAC, Carbody, Couplers / Draft Gear, Wheel Sets, Air Brake Equipment and Controls, Cab Signal Equipment, Door Systems, Seats, Vehicle Monitoring System, Network Equipment and Integrator, Communications Equipment including LED and LCD Signage, Lighting, and technical options V through XI as listed under Section A1.01. Identify the type of equipment being considered and where and in what quantities similar equipment is in use. Indicate where this equipment will be manufactured and assembled. The Authority places special emphasis on the use of equipment that is service proven in a similar application in the North American market. (Addendum No. 8)

d. Describe the proposed trucks for this contract. Include such information as, but not limited to, structural material description, suspension (primary or secondary) description, allowable static and dynamic movement, and fully assembled weight. Provide a listing of the past experience of the basic design of the proposed trucks. Indicate where the major truck structural components will be manufactured (cast or fabricated) and where the trucks will be assembled.

e. Describe how the absolute weight requirements are met and how the weight is managed during the design phase and during manufacturing. Describe how the Weight Management Plan is coordinated with the various subcontractors.

f. Describe how Safety of the vehicles is ensured, and what methods are applied to verify and
certify the safety of all subsystems and the vehicle as a whole.

g. Using the provided track charts, provide a performance simulation and summary duty cycle analysis.

h. Describe how the design of the two different vehicles is approached while ensuring the use of same subsystems and components to the maximum extent possible.

i. Describe how EMC will be achieved and interferences with the train control system avoided.

j. Submit a detailed schedule for the design, manufacture, testing and delivery of each car in the form of a milestone type bar chart. Each chart shall indicate anticipated dates for starting and completing all major aspects of the program including, but not limited to, First Article Inspection and completion of major hardware components; the delivery to the MBTA of the Pilot Cars and subsequent delivery of the balance of the Cars on order. Quantity to be delivered shall be clearly noted.

k. Present the Design Review Process, including the presentation of the contents of Preliminary and Final design reviews. The Offeror shall present the proposed process for progressing through these as well as the approach to addressing questions and concerns of the MBTA. (Addendum No. 6)

l. Identify the engineer proposed as the System Integrator, as required by T 21.03, and present the Offeror’s process for ensuring all levels of integration between systems and subsystems throughout the vehicle design and manufacture. The plan shall include the processes and procedures of the Systems Integration Plan referenced in T 21.03.

m. Provide one (1) print each of the following conceptual designs for each car type (Orange, Red,

- General Arrangement Drawings ¼” = 1” or 1:50 (Exterior and Interior)

- Floor Plans ¼” = 1’ or 1:50

- Equipment Arrangement ¼” = 1’ or 1:50

- Carbody Structural Diagram ¼” = 1’ or 1:50

- Truck General Arrangement Drawing ¼” = 1’ or 1:50

- Cab and Console Layout ¼” = 1’ or 1:50

n. Describe the mobilization plan and approach for conducting the dynamic vehicle – level qualification testing required in Section T20 of the Technical Provisions. Provide a preliminary indication of test sequencing for the two fleets. Describe the methods by which on-going test results will be cycled through the design process to ensure that design modifications are implemented prior to the delivery of Pilot Cars. Describe how such design modifications are implemented into the ongoing manufacturing and assembly process of the production cars.
o. Describe how the Reliability requirements of T2.03 will be met and what methods the Offeror will undertake to ensure all major subsystem suppliers achieve this requirement. (Addendum No. 7)

**Tab 1.2 - Manufacturing Plan** – Twenty (20) double-sided pages maximum

a. The Plan should address the manufacturing capacity and logistics for the production of the Red Line and Orange Line Vehicles. It should include the overall approach to manufacturing and assembly of car body components, testing and commissioning, the availability plant capacity at the various locations, qualified and, where applicable, certified personnel and other resources to perform the work, including the local on-site staff, the methods of transportation between the various work locations as well as to the Authority, and the Offeror’s plans or local coordination with, and support to, the Authority, and all efforts will undertake to comply with the obligation in Section C7.18 that Final Assembly of All Production (Non-Pilot) Vehicles delivered under the Contract take place in Massachusetts.

b. If the Offeror’s anticipated final assembly operations, processes and measures it will use in connection with the Production Vehicles delivered under the Contract differ from or do not include at a minimum all operations, processes and measures listed in the definition of Final Assembly in Section C7.18, describe how the Offeror’s final assembly will differ from the final assembly requirements in Section C7.18 and explain why the Offeror believes that its final assembly satisfies the general requirement of final assembly of all Production Vehicles in Massachusetts. OFFERORS ARE ADVISED THAT A PROPOSAL WHICH INCLUDES A MANUFACTURING PLAN WHICH DESCRIBES A MASSACHUSETTS FINAL ASSEMBLY PROCESS WHICH DOES NOT INCLUDE AT A MINIMUM ALL OF THE OPERATIONS, PROCESSES AND MEASURES LISTED IN THE DEFINITION OF FINAL ASSEMBLY IN SECTION C7.18 MAY BE REJECTED BY THE AUTHORITY AS NON-COMPLIANT. THE MBTA RESERVES THE RIGHT, ON A CASE BY CASE BASIS, TO DETERMINE WHETHER THE OFFEROR’S FINAL ASSEMBLY SATISFIES THE GENERAL REQUIREMENT OF SECTION C7.18 THAT FINAL ASSEMBLY OF ALL PRODUCTION VEHICLES TAKE PLACE IN MASSACHUSETTS.

c. List the work to be performed by the prime contractor and the location(s) at which this work will be performed. If major carbody manufacture is to be performed by subcontractors, identify by name and work locations.

d. List the Massachusetts final assembly contractor and location. Include sample assembly procedures and controls and sample material control program. Describe the group responsible for preparation of workflow plans, schedules, procedures, quality control, material control, etc., at the final assembly location. Describe how and where retrofit work might be performed if Authority facilities are not available. If more than one contractor is being considered, provide information for each.

e. Identify whether the Offeror will utilize an existing or new assembly facility in Massachusetts, the Offeror’s schedule for the conversion or creation of a new assembly facility in Massachusetts in order to meet the delivery deadlines in the Contract, and measures the Offeror will take in accordance with this schedule, including but not limited to the hiring and training of skilled labor
and the transfer or acquisition of equipment and technology in order to satisfy the manufacturing and assembly requirements. List all efforts Offeror has undertaken in order to satisfy the requirements of this section, such as posting job opportunities in local papers, using employment recruitment firms or job placement organizations to fill newly created positions, forming partnerships to support the development of a skilled workforce capable of performing technically demanding tasks at the assembly facility, contacting unions and educational institutions in order to utilize local labor pools, advertising for or hiring designers and contractors for the assembly facility, beginning the permitting process for the assembly facility, and contacting suppliers for the purchase of tools and machinery for the assembly facility. The MBTA encourages Offerors to learn from the Workforce Initiative Now (WIN) model employed by Denver RTD, which aims to foster workforce development in targeted communities identified by key socio-economic factors, such as unemployment rate, low income job growth, and educational attainment, and to ensure that communities and groups historically underutilized in the vehicle manufacturing and transportation sectors have full and fair access to job opportunities generated by publicly funded projects, such as this MBTA Red and Orange Line Vehicle Procurement. (Addendum No. 10)

f. In tabular format, identify by job classification (e.g. electricians, mechanics, welders, engineers, testers, quality assurance staff, administrators, building maintenance, etc.) each position Offeror expects to directly employ in Massachusetts, when each position will be created and filled in reference to the production schedule, the duration of each position in reference to the production schedule, and the hours of work required for the position in full-time equivalents calculated as
the total number of hours of work required by the position per week divided by forty (40).
(Addendum No. 10)

g. List all other work for entities other than the MBTA at the separate locations indicated in (c) and (d) during the period of the Contract detailing the customer, the quantity and type of vehicle, and delivery dates for same. Describe plant capacity and indicate the capacity available for work under this contract while satisfying other commitments. This includes the final assembly contractor. Provide a statement, supported by further details, that the contractor has the capacity, personnel and other resources to build the Vehicles required to be delivered under the Contract within the time proposed.

h. List locations and capacities of proposed suppliers for major subsystems listed in Tab I.1

i. Describe the expected conveyance and route by which the cars will be shipped from the manufacturing site to the Massachusetts final assembly site and to the MBTA Facilities in the greater Boston area. Indicate methods to be used to protect the cars while in transit and during interim storage, if applicable.

j. Indicate the local area office in accordance with Section C4.07. Indicate expected staffing at this location for manufacturer and subcontractor representatives during period from 60 days after Notice-to-Proceed to end of warranty period. Describe decision making authority of such local staff.

Tab I.3 – Past Performance – Forty-five (45) double-sided pages maximum

a. List (in a matrix format) reliability information for all heavy rail transit car contracts, of similar size, scope, and operating environment as described in Technical Specification Section 2 for the past ten (10) years and describe how these projects (e.g. duty cycles, climate, other) are similar to this procurement. Past ten (10) years shall include all contracts that were active at any time during the past ten (10) years, inclusive of warranty stage as well as any executed contracts during this period. For each entry, the Offeror shall:
   • Include customer, type, quantity, major vendors, and a brief description of the vehicle (dimension, weight, capacities, features, etc.)
   • Describe whether the vehicles delivered were of an existing design or an entirely new design; and indicate the extent of the Offeror’s design responsibility (i.e., total vehicle including carbody and all systems, carbody only, systems only etc.)
   • Include the contractual reliability requirements (MDBF, MTBF, definition of failures, warranty period(s), etc.)
   • Provide a description of the data collection process, the method of reliability calculation and sample of the raw defect history data
   • Include actual reliability achieved at the end of the warranty period
   • Include actual reliability currently being realized, if data is available
   • Identify each project for which the actual vehicle level reliability has met or exceeded the requirements of T2.03.03.
   • Submit a formal letter of concurrence from the listed customers for each listed project
   • Provide current customer contact information for verification

   ME1 16604817v.2
A/76493032.3 DRAFT 02/07/15 1:52PM
State the total length of every contract (closed and current) since 1995. Provide the date of Notice to Proceed and if closed, date of closeout.

b. List (in matrix format) the service proven reliability of each proposed major subcontractor for all comparable programs and service environments as described in Technical Specification Section 2 over the past ten (10) years. Past ten (10) years shall include all contracts that were active at any time during the past ten (10) years, inclusive of warranty stage as well as any executed contracts during this period. Major systems and/or subsystems shall, at a minimum, include those identified in T2.03.03. Cited reliability data shall be for major system and/or subsystems which are fundamentally identical to that being proposed for this contract. Should the proposed system and/or subsystem be newly developed for this program, the Offeror shall provide reliability data for the most recent, technological predecessor to that which is being proposed. The proposed major systems and/or subsystems and their suppliers shall be those that the Offeror shall use, should they be successful. For each entry, the Offeror shall include:

- Reliability data provided shall be limited to those previous programs where a fundamentally identical system and/or subsystem has met or exceeded the reliability goals requirements of T2.03.03.
- Include the contractual reliability requirements (MDBF, MTBF, definition of failures, warranty period(s), etc.)
- A description of the data collection process, the method of reliability calculation and sample of the raw defect history data
- Actual reliability achieved at the end of the warranty period
- Actual reliability currently being realized, if data is available
- A formal letter of concurrence from the listed customers for each listed project
- A current customer contact information for verification

c. List (in a matrix format) project information for all passenger transportation rail car (including light rail, streetcar/tram, commuter/suburban, metro/heavy rail, intercity and high speed) contracts issued to the Offeror for the past (10) years. Past ten (10) years shall include all contracts that were active at any time during the past ten (10) years, inclusive of warranty stage as well as any executed contracts during this period. For each entry the Offeror shall include:

- The contractual delivery schedule (including pilot car, first production car, last production car, manuals, spare parts, special tools)
- The actual delivery schedule (including for pilot car, first production car, last production car, manuals, spare parts, special tools)
- Reasons for delays (technical, commercial, force majeure, other)
- Penalties and/or liquidated damages
- A current customer contact information for verification (Addendum No. 7)

Tab I.4 – Quality Assurance Plan – Ten (10) double-sided pages maximum

a. The Offeror is to provide an outline of the Quality System Manual and Project Quality Plan requirements stipulated in T 19.02 and T 19.03 of the Technical Provisions within Part B of its proposal. The outline should include details of approach, organization, sample procedures, sample documentation, and feedback mechanisms for all phases of the program (design, manufacture, final assembly, test/commissioning, warranty). (Addendum No. 6)
b. The Offeror shall describe their approach to subcontractor quality compliance, first article inspections and quality control/quality assurance role at the final assembly site.

**Tab 1.5 – M/WBE Participation – Ten (10) double-sided pages maximum**

a. The Offeror shall provide a completed M/WBE Utilization Form indicating the percentage of the Base Award Price and Total Proposal Price to be supplied by qualified M/WBEs under the Contract. For purposes of this requirement, the MBTA will only accept M/WBEs that are certified, at the time of proposal opening by the Massachusetts Supplier Diversity Office formerly known as the State Office of Minority and Women Business Assistance. The Offeror shall provide an M/WBE Participation Schedule identifying those qualified M/WBEs with whom the Offeror intends to contract for the performance of the portions of the work under the Contract, the work to be performed by each qualified M/WBE, a proposed timetable for the performance or delivery of the Contract item, and other information as required by the M/WBE Participation Schedule form annexed to this Section. No work shall be included in the Schedule that the Offeror has reason to believe the listed M/WBE will subcontract, at any tier, to other than another M/WBE.

c. The Offeror shall provide a completed M/WBE Letter of Intent from each M/WBE listed in the M/WBE Participation Schedule using the form annexed to this Section, and a copy of the most recent certification letter or other documentation establishing the M/WBE certification of each M/WBE listed on the M/WBE Participation Schedule, and an M/WBE Affidavit executed by each M/WBE listed in the M/WBE Participation Schedule stating that there has not been any change in its status since the date of its last certification.

d. The Offeror shall provide a narrative explaining how the Offeror intends to ensure overall compliance with the MBTA’s policy of promoting equity and opportunity for M/WBEs and the good faith efforts it has made to obtain M/WBE participation. The Offeror shall include in the narrative the strategies it has and will use to obtain subcontractors and suppliers, including but not limited to documented communication with the Authority’s Office of Diversity and Civil Rights, use of information concerning M/WBE subcontracting opportunities provided by the MBTA during the pre-proposal conference and/or through other means, the Offeror’s solicitations to obtain M/WBE involvement in general circulation media, trade association publications, minority-focused media and other reasonable and available means within sufficient time to allow M/WBEs to respond to the solicitation, written notification to M/WBEs encouraging participation in the proposed Contract, and efforts made to identify specific portions of the work that might be performed by M/WBEs. At a minimum, the Offerors should provide the names, addresses, telephone numbers of M/WBEs that were contacted, a description of the information provided to targeted M/WBEs regarding RFP’s work requirements, and efforts made to assist M/WBEs contacted in obtaining bonding or insurance required by the Offeror or by the Authority. Offerors are referred to 49 CFR Part 26 and OSD Construction Reform Program, Attachment C (Municipal Contracts State-Assisted Building Projects), Section A, 4-10 for additional guidance concerning actions that are commonly considered good faith efforts to obtain M/WBE participation. (Addendum No. 7)

e. The Offeror shall provide a narrative explaining how during performance of the Contract it will
maintain continued efforts to preserve and enhance M/WBE participation. Included within this narrative should be a description as to how the Offeror will interface with MBTA for outreach and assistance generally and with respect to the specific issues below. The narrative should describe how the Offeror will abide by the monitoring and reporting requirements in Section C7.16 of the Contract. Moreover, the narrative should describe dispute resolution procedures the Offeror will institute under its subcontracts with M/WBEs to encourage amicable resolution of disputes and continued performance by the M/WBEs. Finally, the narrative should describe procedures and guidelines for the termination of M/WBEs as well as for the identification and selection of substitutes.
SECTION B
PART B TECHNICAL PROPOSAL AND
STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY

NON-COLLUSION AFFIDAVIT

It shall be understood that any offer submitted to the MBTA is made without collusion with any other Offeror submitting an offer on the same commodity/service, and is in all respects fair and without fraud.

STATE OF ___________________________ Date: __________

COUNTY OF __________________________ S.S.

The undersigned being duly sworn, deposes and says that he/she is the

(Sole Owner; Partner, President, Treasurer, or Other Duty Authorized Official of a Corporation)

of __________________________
(Name of Firm as Appearing in Submitted Proposal)

and works in __________________________
(City/Town)

and certifies under penalties of perjury that this proposal is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this paragraph the word “person” shall mean any natural person, joint venture, partnership, corporation or other business or legal entity.

(Signature and Title of Person Making Affidavit)

Sworn to before me this ____ day of _______ , 20 __

Notary Public: __________________________

My commission expires: __________________________
SECTION B
PART B TECHNICAL PROPOSAL AND STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY

CONFLICT OF INTEREST CERTIFICATION

The undersigned hereby certifies that the Offeror shall comply with the Massachusetts Conflict of Interest Laws, M.G.L. c. 268A, and with the Conflict of Interest terms stated in Section C7.03.

OFFEROR: ____________________________________________

AUTHORIZED SIGNATURE: ____________________________________________

NAME (PRINTED): ____________________________________________

TITLE: ____________________________________________

DATE: ____________________________________________
SECTION B
PART B TECHNICAL PROPOSAL AND
STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY

ASSURANCE OF ADHERENCE

By execution below, the Offeror hereby offers to furnish equipment and services in accordance with the Contract as indicated herein:

OFFEROR: ________________________________

AUTHORIZED SIGNATURE: ________________________________

NAME (PRINTED): ________________________________

TITLE: ________________________________

DATE: ________________________________
SECTION B
PART B TECHNICAL PROPOSAL AND
STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY

PERFORMANCE GUARANTEE

The undersigned hereby certifies that the Offeror shall provide a Performance Guarantee in the form of an Irrevocable Stand-By Letter of Credit in the amount of Thirty Percent (30%) of the Total Base Contract Price in accordance with Section C3.03B. Statement from Banking Institute to be attached herein. The form of the letter provided by the Banking Institute shall be in substantial form as set forth in Section E.

OFFEROR: __________________________________________________________

AUTHORIZED SIGNATURE: ____________________________________________

NAME (PRINTED): ____________________________________________________

TITLE: _______________________________________________________________

DATE: _______________________________________________________________
SECTION B
PART B TECHNICAL PROPOSAL AND
STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY

INSURANCE REQUIREMENTS

The undersigned hereby certify that the Offeror shall provide full compliance with the Insurance Requirements provision in accordance with Section C3.05.

OFFEROR: ____________________________________________

AUTHORIZED SIGNATURE: ____________________________________________

NAME (PRINTED): ____________________________________________

TITLE: ____________________________________________

DATE: ____________________________________________
SECTION B
PART B TECHNICAL PROPOSAL AND STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY

DOMESTIC U.S. CONTENT REQUIREMENT

The Offeror hereby certifies that it will comply with the Domestic U.S. Content Requirements set forth in Section C7.17.

NOTE: If the Offeror fails to demonstrate that it is in compliance with the Domestic U.S. Content Requirements set forth in Section C7.17, it will be required to take the necessary steps in order to achieve compliance. If the Offeror takes these necessary steps, it will not be allowed to change its original offered price or the price of its final offer. If an Offeror does not take the necessary steps, it will not be awarded the contract. Once the Contract has been awarded, the Contractor’s failure to take the necessary steps will be considered a breach of the Contract.

OFFEROR: ____________________________________________

AUTHORIZED SIGNATURE: ____________________________________________

NAME (PRINTED): ____________________________________________

TITLE: ____________________________________________

DATE: ____________________________________________
At least 60% of the total cost of rolling stock components must be Domestic U.S. Content or covered by a current FTA waiver as provided in Section C7.17.

### Components

<table>
<thead>
<tr>
<th>Component (Name / Description)</th>
<th>Manufacturer (Name / Address)</th>
<th>Domestic / Foreign</th>
<th>Covered by Current FTA Waiver?</th>
<th>% of Domestic Content</th>
<th>% of Total Content</th>
<th>% of Total Content</th>
<th>% of Total Content</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Subcomponents

For each Component identified as Domestic U.S. Content above, provide the information in the table below.

<table>
<thead>
<tr>
<th>Subcomponent (Name / Description)</th>
<th>Manufacturer (Name / Address)</th>
<th>Domestic / Foreign</th>
<th>Covered by Current FTA Waiver?</th>
<th>% of Domestic Content</th>
<th>% of Total Content</th>
<th>% of Total Content</th>
<th>% of Total Content</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Attach additional sheets as necessary.)

TOTAL ________% Domestic Content of Total Cost of Rolling Stock Components

(Addendum No. 7)
SECTION B
PART B TECHNICAL PROPOSAL AND STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY

FINAL ASSEMBLY OF PRODUCTION (NON-PILOT) VEHICLES IN MASSACHUSETTS

The undersigned hereby certifies that it will comply with the requirement of Section C7.18 with regard to Final Assembly of Production (Non-Pilot) Vehicles in Massachusetts.

If the undersigned’s anticipated final assembly operations, processes and measures it will use in connection with the Production Vehicles delivered under the Contract differ from or do not include at a minimum all operations, processes and measures listed in the definition of Final Assembly in Section C7.18, the undersigned certifies that it has included in its proposal an explanation as to why the undersigned believes that its final assembly satisfies the general requirement of final assembly of all Production Vehicles in Massachusetts, and seeks a determination from the Authority that its proposal satisfies the general requirement in Section C7.18 that final assembly of all production vehicles take place in Massachusetts. The undersigned understands that its proposal may be rejected by the Authority as non-compliant.

OFFEROR: ____________________________________________

AUTHORIZED SIGNATURE: ____________________________________________

NAME (PRINTED): ____________________________________________

TITLE: ____________________________________________

DATE: ____________________________________________
SECTION B
PART B TECHNICAL PROPOSAL AND
STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY

SECURITY REQUIREMENTS CERTIFICATION

The undersigned hereby certifies that the Offeror, if awarded this Contract, shall comply with the MBTA’s Security Requirements as stated in Section C7.11 of the Agreement.

OFFEROR: ________________________________________________

AUTHORIZED SIGNATURE: __________________________________

NAME (PRINTED): __________________________________________

TITLE: ___________________________________________________

DATE: ___________________________________________________

SECTION B
PART B TECHNICAL PROPOSAL AND STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY

RIGHT-OF-WAY SAFETY TRAINING REQUIREMENTS CERTIFICATION

The undersigned hereby certifies that the Offeror, if awarded this Contract, shall be in full compliance with the MBTA Right-of-Way Safety Awareness Training Requirements as stated in the Agreement.

OFFEROR: ________________________________________________

AUTHORIZED SIGNATURE: __________________________________

NAME (PRINTED): _________________________________________

TITLE: ___________________________________________________

DATE: ___________________________________________________
The Offeror certifies to the best of its knowledge and belief, that it, and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal, State or local department or agency.

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

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

4. Have not within a three-year period preceding this offer had one or more public transactions (Federal, State or local) terminated for cause of default.

If the Offeror is unable to certify to any of the statements in this certification with respect to it or its principals, the Offeror shall attach an explanation to this certification.

THE OFFEROR CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION.

Offeror: ____________________________________________________________

Signature and Title of Authorized Official

The undersigned chief legal counsel for the __________________________________________ hereby certifies

(Offeror)

that the __________________________________________ has authority under State and local law to comply with

(Authorized Official)

the subject assurances and that the certification above has been legally made.

___________________________________________________

Signature of Applicant's Attorney

___________________________________________________

Date
"INSTRUCTIONS FOR CERTIFICATION"

Primary Covered Transactions

1. By signing and submitting this Proposal the Offeror is providing the certification on the preceding page.

2. The inability of a person to provide the certification will not necessarily result in denial of participation in this covered transaction. The Offeror shall submit an explanation of why it cannot provide the certification. The certification or explanation will be considered in connection with the Authority’s determination whether to enter into this transaction. However, failure of the Offeror to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

3. The certification is a material representation of fact upon which reliance was placed when the Authority determined to enter into this transaction. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Authority, the Authority may terminate this transaction for cause of default.

4. The Offeror shall provide immediate written notice to the Authority if at any time the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

5. The Offeror agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the Authority.

6. The Offeror further agrees by submitting this proposal that it will include the clause titled "Certification regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction", without modification, in all lower tier covered transactions and in all solicitations for lowered tier covered transactions.

7. Except for transactions authorized under paragraph (5) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Authority, the Authority may terminate this transaction for cause or default.
SECTION B
PART B TECHNICAL PROPOSAL AND
STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY

CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND
OTHER RESPONSIBILITY MATTERS FOR LOWER TIER PARTICIPANT

The Offeror, as the Primary Participant, hereby certifies that the attached Lower Tier Participant Certification Regarding Debarment, Suspension and Other Responsibility Matters, as noted on the two following pages, shall be duly executed, and shall remain on file with the Offeror in accordance with the Contract Provisions as if stated herein.

OFFEROR: ____________________________________________

AUTHORIZED SIGNATURE: __________________________________

NAME (PRINTED): _______________________________________

TITLE: ________________________________________________

DATE: ________________________________________________
SECTION B
PART B TECHNICAL PROPOSAL AND
STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY

CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND
OTHER RESPONSIBILITY MATTERS FOR LOWER TIER PARTICIPANT

The Lower Tier Participant certifies by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal, State or local department or agency.

When the Lower Tier Participant is unable to certify to any of the statements in this certification, such Participant shall attach an explanation to this proposal.

THE LOWER TIER PARTICIPANT CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION.

LOWER TIER PARTICIPANT: __________________________________________________________

AUTHORIZED SIGNATURE: __________________________________________________________

NAME (PRINTED): ________________________________________________________________

TITLE: _____________________________________________________________________________

DATE: ____________________________________________________________
SECTION B
PART B TECHNICAL PROPOSAL AND
STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY

CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND
OTHER RESPONSIBILITY MATTERS FOR LOWER TIER PARTICIPANT
CONTINUED

"INSTRUCTIONS FOR CERTIFICATION"

Lower Tier Covered Transactions

1. By signing and submitting this proposal the prospective lower tier participant is providing the certification on the preceding page.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Authority, the Authority may pursue available remedies, including suspension and/or debarment.

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

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

5. The prospective lower tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions", without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

6. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may check the Nonprocurement List.

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

8. Except for transactions authorized under paragraph (4) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is
suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Authority, the Authority may pursue available remedies, including suspension and/or debarment.
SECTION B
PART B TECHNICAL PROPOSAL AND
STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY

INTELLECTUAL PROPERTY LICENSE AGREEMENT CERTIFICATION

The undersigned hereby certifies that the Contractor and its related subsuppliers/subcontractors/agents will execute and adhere to a software escrow agreement and comply with the provisions of Section C5.11 as noted and defined therein and shall comply with the Contract Specification No. VE-10-036 and all other general terms and conditions.

OFFEROR: ________________________________

AUTHORIZED SIGNATURE: ________________________________

NAME (PRINTED): ________________________________

TITLE: ________________________________

DATE: ________________________________
SECTION B
PART B TECHNICAL PROPOSAL AND STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY

M/WBE UTILIZATION FORM

In connection with the performance of this Contract, the Offeror will cooperate with the MBTA in meeting its commitments and requirements with regard ensuring opportunities for creating a level playing field on which M/WBEs can compete fairly for opportunities. The Offeror shall complete and submit this M/WBE Utilization Form with its proposal and as part of the Contract.

What percentage of the Base Award Price will be performed or supplied by certified M/WBEs?
TOTAL BASE AWARD M/WBE UTILIZATION: ________% (Addendum No. 8)

What percentage of the Total Proposal Price will be performed or supplied by certified M/WBEs?
TOTAL PROPOSAL PRICE M/WBE UTILIZATION: ________% (Addendum No. 8)

NOTE: For each M/WBE supplying or performing a percentage of the Contract amount, you must complete the attached M/WBE Participation Schedule.

To the extent that the Offeror has not been able to secure M/WBE participation, the Offeror shall attach documentation demonstrating its good faith efforts to secure M/WBE participation.

I hereby certify that the above information is true and accurate to the best of my knowledge:

OFFEROR: ____________________________________________

AUTHORIZED SIGNATURE: ____________________________________________

NAME (PRINTED): ____________________________________________

TITLE: ____________________________________________

DATE: ____________________________________________
SECTION B
PART B TECHNICAL PROPOSAL AND STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY

M/WBE PARTICIPATION SCHEDULE

The Offeror shall complete the following information for any M/WBE for which a percentage is given in the M/WBE Utilization Form. The Offeror shall furnish the name and telephone number of the appropriate contact person should the Authority have any questions in relation to the information furnished herein.

<table>
<thead>
<tr>
<th>Name of Supplier or Subcontractor and Category (Indicate MBE or WBE)</th>
<th>Address and Contact Information</th>
<th>Description and Type of Service to be Performed or Material to be Supplied</th>
<th>Beginning / Duration</th>
<th>Percent of M/WBE Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Use additional sheet of paper, if necessary.)

OFFEROR: __________________________________________________________

AUTHORIZED SIGNATURE: ____________________________________________

NAME (PRINTED): ________________________________________________

TITLE: __________________________________________________________

DATE: __________________________________________________________
SECTION B
PART B TECHNICAL PROPOSAL AND STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY

M/WBE LETTER OF INTENT
(TO BE COMPLETED BY M/WBE FIRM)

Name of Offeror Firm: _____________________________
Address: __________________________________________
City: ___________ State: ________ Zip: __________

Name of M/WBE Firm: _____________________________
Address: __________________________________________
City: ___________ State: ________ Zip: __________
Telephone: ______________

Description of work to be performed by M/WBE firm:
________________________________________________________________________
________________________________________________________________________
The Offeror is committed to utilizing the above-named M/WBE firm for the work described above.

The above work will not be sublet to a non-disadvantaged business enterprise at any tier. The undersigned will enter into a formal contract for the above work with the Offeror conditioned upon the Offeror’s award and execution of a Contract with the MBTA.

Affirmation

The above-named M/WBE firm affirms that it will perform the portion of the Agreement as stated above.

By: _____________________________
    (Signature and Title of Authorized Official)

Date: _____________________________

If the Offeror does not receive award of the prime Agreement, any and all representations in this Letter of Intent and Affirmations shall be null and void.

(Offeror shall submit this page for each M/WBE subcontractor.)
SECTION B
PART B TECHNICAL PROPOSAL AND
STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY

M/WBE AFFIDAVIT

STATE OF ___________________________ Date: ____________

COUNTY OF ___________________________ S.S.

The undersigned being duly sworn, deposes and says that he/she is the
(Sole Owner; Partner, President, Treasurer, or Other Duty Authorized Official of a Corporation)
of ________________________________
(name of M/WBE)

and certifies that since the date of its certification by
___________________________________________
(SDO)

the certification has not been revoked nor has it expired nor has there been any change in the minority
status of _____________________________________
(Name of M/WBE)

___________________________________________
(Signature and Title of Person Making Affidavit)

Sworn to before me this _____ day of ________, 20__

Notary Public: _________________________________

My commission expires: _______________________

NOTE: The Offeror must attach the M/WBE’s most recent certification letter or other documentation
establishing M/WBE certification to this affidavit.
SECTION B
PART B TECHNICAL PROPOSAL AND
STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY

CERTIFICATION OF COMPLIANCE WITH REGULATION 102 CMR 12.00
DEPENDENT CARE ASSISTANCE PROGRAM INCLUDING CHILD CARE

The undersigned hereby certifies that the Offeror is in compliance with Section 7 of Chapter 521 of the Acts of 1990, as amended by Chapter 329 of the Acts of 1991, and the regulations issued pursuant thereto, 102 CMR 12.00, and that the Offeror is either a qualified employer having fifty (50) or more full time employees and has established a dependent care assistance program, or offers its employees child care tuition assistance or on-site or near site subsidized child care placements, or is an exempt employer.

OFFEROR: __________________________________________________________

AUTHORIZED SIGNATURE: ____________________________________________

NAME (PRINTED): __________________________________________________

TITLE: ____________________________________________________________

DATE: ____________________________________________________________
SECTION B
PART B TECHNICAL PROPOSAL AND STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY

PROHIBITED USE OF UNDOCUMENTED WORKERS CERTIFICATION

The Offeror agrees to comply with Massachusetts Executive Order 481, which applies to all state agencies in the Executive Branch, including all executive offices, boards, commissions, agencies, departments, divisions, councils, bureaus, and offices, now existing and hereafter established. As it is the policy of the Executive Branch to prohibit the use of undocumented workers in connection with the performance of state contracts, all contracts entered into after February 23, 2007 require that contractors, as a condition of receiving Commonwealth funds under any Executive Branch contract, make the following certification:

CERTIFICATION:

As evidenced by the signature of the Offeror’s Authorized Signatory below, the Offeror certifies under the pains and penalties of perjury that the Offeror shall not knowingly use undocumented workers in connection with the performance of all Executive Branch contracts; that pursuant to federal requirements, the Offeror shall verify the immigration status of all workers assigned to such contracts without engaging in unlawful discrimination; and that the Offeror shall not knowingly or recklessly alter, falsify, or accept altered or falsified documents from any such worker(s). The Offeror understands and agrees that breach of any of these terms during the period of each contract may be regarded as a material breach, subjecting the Offeror to sanctions, including but not limited to monetary penalties, withholding of payments, contract suspension or termination.

OFFEROR: _______________________________________________________

AUTHORIZED SIGNATURE: _________________________________________

NAME (PRINTED): ________________________________________________

TITLE: __________________________________________________________

DATE: __________________________________________________________

The Offeror is required to sign this Certification only once and may provide a copy of the signed Certification for any contract executed with an Executive Branch Department. A copy of this signed Certification must be attached to the “record copy” of all contracts with this Offeror that are filed with the contracting Department.
Pursuant to M.G.L. c.7 §§ 22C-F, the undersigned, being an authorized representative of the Offeror, hereby certifies under the pains and penalties of perjury that (check applicable item):

1.____ The Offeror does not employ ten (10) or more employees in an office or other facility located in Northern Ireland.

2.____ The Offeror does employ ten (10) or more employees in an office or other facility located in Northern Ireland and certifies that:
   
   (a)  ____ The Offeror does not discriminate in employment, compensation, or the terms, conditions and privileges of employment on account of religious or political belief; and
   
   (b)  ____ The Offeror promotes religious tolerance within the workplace, and the eradication of any manifestations of religious and other illegal discrimination; and
   
   (c)  ____ The Offeror is not engaged in the manufacture, distribution or sale of firearms, munitions, including rubber or plastic bullets, tear gas, armored vehicles or military aircraft for use or deployment in Northern Ireland.

3. ____ The Offeror does not certify to either 1 or 2(a-c) above.

Signed under the pains and penalties of perjury:

OFFEROR: ____________________________________________

AUTHORIZED SIGNATURE: ____________________________________________

NAME (PRINTED): ____________________________________________

TITLE: ____________________________________________

DATE: ____________________________________________
MBTA RETIREE CERTIFICATION

In accordance with Section 3.3 of the MBTA Hiring of MBTA Retirees Policy dated June 5, 2009, THE CONTRACTOR IS REQUIRED TO NOTIFY THE MBTA THAT AN MBTA RETIREE HAS BEEN INCLUDED AS A MEMBER OF ITS TEAM.

Every contractor is required to notify the MBTA as part of the bidding process that an MBTA retiree will be included as a member of its team. The contractor shall be required to provide the name and date of retirement for each MBTA retiree on the team. Every MBTA retiree working for the MBTA under this condition shall do so in accordance with M.G.L., c 268A, Section 5.

Project Name: _________________________________________________________________

Is a MBTA Retiree(s) presently included as a member of the team?

Yes______  No________

If you responded “yes” to the above question, the Contractor certifies that the following MBTA Retirees are assigned to the team for this contract.

<table>
<thead>
<tr>
<th>Firm Name</th>
<th>Retiree Name</th>
<th>MBTA Retirement Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OFFEROR: _________________________________________________________________

AUTHORIZED SIGNATURE: ____________________________________________________

NAME (PRINTED): ____________________________________________________________

TITLE: _________________________________________________________________

DATE: ________________________________________________________________

If additional space is required, please enclose attachments to be included with your proposal.
### SECTION B
**PART B TECHNICAL PROPOSAL AND STATEMENTS AND CERTIFICATIONS REGARDING ELIGIBILITY**

<table>
<thead>
<tr>
<th>Manufacturer Subcontractors/Suppliers Status</th>
<th>Domestic (D)</th>
<th>Assignments</th>
<th>M/WBE</th>
</tr>
</thead>
<tbody>
<tr>
<td>(re: Section C5.15F notes the minimum “Major Equipment” suppliers to be listed. Additional suppliers, if known, should be provided)</td>
<td>Foreign (F)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NAME: _____________________________________</td>
<td>______________</td>
<td>__________</td>
<td>__________</td>
</tr>
<tr>
<td>ADDRESS: ___________________________________</td>
<td>______________</td>
<td>__________</td>
<td>__________</td>
</tr>
<tr>
<td>NAME: _____________________________________</td>
<td>______________</td>
<td>__________</td>
<td>__________</td>
</tr>
<tr>
<td>ADDRESS: ___________________________________</td>
<td>______________</td>
<td>__________</td>
<td>__________</td>
</tr>
<tr>
<td>NAME: _____________________________________</td>
<td>______________</td>
<td>__________</td>
<td>__________</td>
</tr>
<tr>
<td>ADDRESS: ___________________________________</td>
<td>______________</td>
<td>__________</td>
<td>__________</td>
</tr>
<tr>
<td>NAME: _____________________________________</td>
<td>______________</td>
<td>__________</td>
<td>__________</td>
</tr>
<tr>
<td>ADDRESS: ___________________________________</td>
<td>______________</td>
<td>__________</td>
<td>__________</td>
</tr>
<tr>
<td>NAME: _____________________________________</td>
<td>______________</td>
<td>__________</td>
<td>__________</td>
</tr>
<tr>
<td>ADDRESS: ___________________________________</td>
<td>______________</td>
<td>__________</td>
<td>__________</td>
</tr>
<tr>
<td>NAME: _____________________________________</td>
<td>______________</td>
<td>__________</td>
<td>__________</td>
</tr>
<tr>
<td>ADDRESS: ___________________________________</td>
<td>______________</td>
<td>__________</td>
<td>__________</td>
</tr>
</tbody>
</table>

If additional space is required, please enclose attachments to be submitted with your proposal.
Acknowledgment of Addenda is hereby established below:

**ACKNOWLEDGMENT OF ADDENDA**

<table>
<thead>
<tr>
<th>Addenda No.</th>
<th>Dated</th>
<th>Received</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Failure to acknowledge receipt of all Addenda may cause the proposal to be considered non-responsive to the solicitation.

Acknowledgment of receipt of each Addendum must be duly established and included with this Offer (See the above table).

OFFEROR: __________________________________________________________

AUTHORIZED SIGNATURE: _____________________________________________

NAME (PRINTED): _________________________________________________

TITLE: ___________________________________________________________

DATE: ___________________________________________________________
SECTION C

GENERAL REQUIREMENTS AND COVENANTS FOR EQUIPMENT PROCUREMENT AND STANDARD EQUIPMENT PROCUREMENT SPECIFICATIONS

SECTION C - PART C1.00
ABBREVIATIONS AND DEFINITIONS OF TERMS

C1.01 ABBREVIATIONS

Wherever the following abbreviations are used in the Contract or on the Plans, they are to be construed the same as the respective expressions represented:

AA    Aluminum Association
AAR   Association of American Railroads
ADA   American with Disabilities Act
AFI   Air Filter Institute
AISC  American Institute of Steel Construction
AISI  American Iron and Steel Institute
ANSI  American National Standards Institute (formerly ASA and USASI)
APA   American Plywood Association (formerly Douglas Fir Plywood Association)
APTA  American Public Transportation Association
AREA  American Railway Engineering Association (formerly ARA)
ASA   American Standards Association
ASHRAE American Society of Heating, Refrigeration and Air Conditioning Engineers
ASNT  American Society for Non-Destructive Testing
ASME  American Society of Mechanical Engineers
ASTM  American Society of Testing and Materials
ATA   Air Transportation Association of America
ATP   Automatic Train Protection. Refers to automatic train protection which includes cab signal and overspeed protection
AWG   American Wire Gauge
AWPA  American Wood Preserving Association
AWS   American Welding Society
BLS   Bureau of Labor Statistics
CFR   Code of Federal Regulations
DOT   U.S. Department of Transportation
DTE   Department of Telecommunications and Energy (formerly DPU), Commonwealth of Massachusetts
EIA   Electronic Industries Association
FAA   Federal Aviation Administration
FAR   Federal Acquisition Regulations
FCC   Federal Communications Commission
FDA   Federal Drug Administration of the United States Department of Health and Human Services
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMVSS</td>
<td>Federal Motor Vehicle Safety Standards</td>
</tr>
<tr>
<td>FPR</td>
<td>Federal Procurement Regulations</td>
</tr>
<tr>
<td>FRA</td>
<td>Federal Railroad Administration</td>
</tr>
<tr>
<td>FTA</td>
<td>Federal Transit Administration (formerly UMTA)</td>
</tr>
<tr>
<td>HSLA</td>
<td>High Strength Low Alloy</td>
</tr>
<tr>
<td>ICC</td>
<td>Interstate Commerce Commission</td>
</tr>
<tr>
<td>ICEA</td>
<td>Insulated Cable Engineers Association</td>
</tr>
<tr>
<td>IEC</td>
<td>International Electrotechnical Commission</td>
</tr>
<tr>
<td>IEEE</td>
<td>Institute of Electrical and Electronic Engineers</td>
</tr>
<tr>
<td>IES</td>
<td>Illuminating Engineering Society</td>
</tr>
<tr>
<td>IPCEA</td>
<td>Insulated Power Cable Engineers Association</td>
</tr>
<tr>
<td>IPS</td>
<td>Iron Pipe Size</td>
</tr>
<tr>
<td>ISO</td>
<td>International Standards Organization</td>
</tr>
<tr>
<td>JIC</td>
<td>Joint Industrial Council</td>
</tr>
<tr>
<td>LAHT</td>
<td>Low Alloy High Tensile Strength (Steel)</td>
</tr>
<tr>
<td>MassDOT</td>
<td>Massachusetts Department of Transportation</td>
</tr>
<tr>
<td>MBTA</td>
<td>Massachusetts Bay Transportation Authority</td>
</tr>
<tr>
<td>MIL</td>
<td>Military Specification</td>
</tr>
<tr>
<td>NBS</td>
<td>National Bureau of Standards</td>
</tr>
<tr>
<td>NCA</td>
<td>Noise Criterion, Alternate</td>
</tr>
<tr>
<td>NEC</td>
<td>National Electrical Code</td>
</tr>
<tr>
<td>NEMA</td>
<td>National Electrical Manufacturer's Association</td>
</tr>
<tr>
<td>NFPA</td>
<td>National Fire Protection Association</td>
</tr>
<tr>
<td>NIST</td>
<td>National Institute for Standards and Technology</td>
</tr>
<tr>
<td>OEM</td>
<td>Original Equipment Manufacturer</td>
</tr>
<tr>
<td>PMCG</td>
<td>Proposal Modification and Clarification Guidelines</td>
</tr>
<tr>
<td>SAE</td>
<td>Society of Automotive Engineering</td>
</tr>
<tr>
<td>SIC</td>
<td>Standard Industrial Code, U.S. Department of Labor</td>
</tr>
<tr>
<td>SOMWBA</td>
<td>State Office of Minority and Women Business Assistance/Commonwealth of Massachusetts</td>
</tr>
<tr>
<td>STURAA</td>
<td>Surface Transportation and Uniform Relocation Assistance Act</td>
</tr>
<tr>
<td>TSC</td>
<td>Transportation Systems Center, DOT</td>
</tr>
<tr>
<td>VIC</td>
<td>International Union of Railways</td>
</tr>
<tr>
<td>UL</td>
<td>Underwriter's Laboratories, Inc.</td>
</tr>
<tr>
<td>UMTA</td>
<td>Urban Mass Transportation Administration, United States Department of Transportation (now FTA)</td>
</tr>
<tr>
<td>USPHS</td>
<td>United States Public Health Service of the United States Department of Health and Human Services</td>
</tr>
</tbody>
</table>
C1.02 DEFINITIONS

The definitions included herein are intended to act in harmony with all of the remaining sections of the Contract (as defined below). To the extent any of the specific provisions of the Contract conflict with the definitions included Section C1.02, the specific provisions of the Contract shall take precedence.

Wherever the following terms are used in the Contract or on the Plans, the intent and meaning shall be interpreted as follows:

1. Whenever in the Contract or on the Plans the words "acceptable", "accepted", "approval", "approved", "authorized", "condemned", "considered-necessary", "deemed necessary", "designated", "determined", "directed", "disapproved", "established", "given", "indicated", "insufficient", "ordered", "permitted", "rejected", "required", "reserved", "satisfactory", "unacceptable", "unsatisfactory", or words of like import are used, it shall be understood as if such words were followed by the words in writing, "by the Contracting Officer or his designee" or "to the Contracting Officer or his designee", unless otherwise specifically stated.

2. Wherever the word "indicated" is used, it shall be understood to mean "as described in the Contract Specification", "as shown on the contract Plans", or "as required by the Contract."

3. Wherever the words "provided", "supplied", or "installed" are used in the Contract Specification in reference to work to be performed by the Contractor, it shall be understood to mean "furnished and delivered completed".

ACCEPTANCE. Reviewed for conformity to Specification and accepted, in writing, by the Authority. Acceptance of items furnished under the Contract is further defined and governed by Sections C6.07, C6.08 and C6.11 of the Contract Provisions.

ACCEPTED EQUAL or EQUAL. Whenever the words "accepted equal" or "equal" are used in connection with material or equipment in the Contract including the Contract Specification, the proposed alternative shall be functionally compatible with and of equal or better quality than the item it proposed to replace. The Contracting Officer's decision as to whether any material or equipment proposed is equal to that specified shall be binding on both the Authority and Contractor.

ADDENDUM/(ADDENDA). Written interpretation(s) or revision(s) of any of the provisions of the Contract sent to Offerors prior to submittal of proposals.

ADVERTISEMENT. The invitation to offer a proposal for work to be performed or materials to be furnished.

ALTERATION. A change or substitution in the form, character, or detail of the work done or to be done within the original scope of the Contract.
AUTHORITY, or MBTA. Massachusetts Bay Transportation Authority, created by Chapter 563, Section 18 of the Acts of 1964 of the Commonwealth of Massachusetts, the party of the First Part to the Contract.

AUTHORIZED SIGNEE. The person who is executing the Contract on behalf on the Offeror/Contractor and who is authorized to bind the Offeror/Contractor.

BASE LINE DESIGN. The design of each type vehicle or any of its components, apparatus, systems, subsystems, or materials which have received drawing acceptance and First Article acceptance by the Authority.

BASIC or MANUFACTURER'S STANDARD. Shall mean the component or part standard to be acceptable as part of the line-produced vehicle of the Contractor.

BENCHMARKING. The recalculation of compensation adjustments on account of changes in labor and/or material cost utilizing indices as set forth under the provisions of Section C2.02 subsequent to the establishment of final published indices during the performance of this Contract or subsequent to the month(s) for which the option for additional vehicles is executed shall not be allowed.

BIDDER(S). (See OFFEROR(S)).

BID FORM. See Proposal Form.

BUYER(S). The Massachusetts Bay Transportation Authority.

CAR. Individual motorized rail cars (also known as Vehicles). A Cab and Non-Cab car are paired together to form operational married pairs.

CHANGE ORDER. (See Section C11.00).

a. A document executed by the Authority and issued to the Contractor amending the Contract Provisions and/or Contract Specification. The change order establishes the basis for payment and time adjustments, if any, of the work affected by the changes.

b. The Change Order document becomes a part of the Contract when issued by the MBTA. All terms and conditions of the Contract including the Specification remain as previously stated unless so noted in the text of the Change Order.

COMMONWEALTH. The Commonwealth of Massachusetts.

CONDITIONAL ACCEPTANCE. The acceptance of the vehicles by the Authority at the designated delivery point after discrepancies listed on the Receiving Report have been sufficiently corrected to enable the vehicles to be certified for revenue service prior to final acceptance, per Section C6.07. Conditional Acceptance will occur when each coach has operated
for ten (10) consecutive days of revenue service without failure. The vehicle(s) remains conditionally accepted until it is totally responsive to the Specification requirements and corrective action(s) implemented to the Authority's satisfaction.

**CONSULTANT OR CONSULTING ENGINEER.** The engineering design consultant (firm) retained by the Authority to assist the Authority's Engineer in the preparation of Plans and Specifications, proposal evaluation, review of Contractor-furnished drawings and documents, to furnish advice and assistance during the course of the procurement, and to furnish in-plant inspection services.

**CONTRACT.** The written agreement executed between the Authority, Party of the First Part, and the Contractor, Party of the Second Part, setting forth the obligations of the Parties thereunder, the performance of the procurement as indicated in the Contract and all authorized changes to this Contract issued subsequent to the execution of the Contract. The Contract includes the following: applicable sections of the RFP, Contract Provisions, Contract Specification and Contract Drawings; Addenda and PMCG’s, Contractor’s Proposal, including any technical information submitted thereunder; all statements and certifications and all other pertinent document(s) as required – all of which constitute one instrument. Any Change Order that is subsequently executed shall make reference to and become part of the Contract.

**CONTRACTING OFFICER.** An official designated by the Authority to administer Contracts and make related determinations and findings such as executing Contracts and Change Orders.

**CONTRACT PROVISIONS.** The contract provisions included in the RFP.

**CONTRACT SKETCHES.** An initial set of sketches showing the general car layout and arrangement provided by the Authority with the Contract Specifications.

**CONTRACT TIME.** The number of days allowed for completion of the Contract.

**CONTRACT SPECIFICATION.** Specification No. VE-10-036 (also referred to as Technical Specification).

**CONTRACTOR.** The Prime Contractor solely responsible to the Authority for the quality and proper functioning of the car(s) and all components; the person or persons, firm, partnership, corporation, or combination thereof which has entered into this Contract with the Authority to supply the car(s).

**CONTRACTOR'S DRAWINGS.** Items such as general drawings, detail drawings, graphs, diagrams, sketches, calculations, and catalog cuts which are prepared by the Contractor to detail its work.

**DAYS.** Unless otherwise designated, days as used in the Contract will be understood to mean calendar days.
DAY(S) WORKED. Those calendar days during which regular business is conducted, excluding Saturdays and Sundays, and all locally observed Federal, State, and Municipal holidays.

DEFECT. Patent or latent malfunction or failure in manufacture or design of any component or subsystem that causes a car to cease operating or causes it to operate in a degraded mode.

RELATED DEFECT. Damage inflicted on any component or subsystem as a direct result of a defect.

DELIVERY. Receipt at the Authority of the cars in a sound, whole, ready to run, ready to Acceptance Testing condition. The Contractor shall complete and deliver all equipment and materials defined in the Contract, to the Massachusetts Bay Transportation Authority, designated delivery point. The conditions for Delivery are specified in Sections C6.04 (vehicles) and C6.11 (spare parts).

DELIVERY POINT. The location on the Authority's property to which the end products are expected to be delivered. For purposes of this Contract, the delivery point(s) will be to MBTA Facilities in the greater Boston area.

DELIVERY SCHEDULE. The delivery dates in the Contract and in required Contractor schedules approved by the Authority for the design, manufacture, testing and delivery of each Vehicle and associated Manuals, Diagnostic Test Equipment, Training Aids, Capital Spare Parts, and other components included in Options IV-XI (if exercised), including but not limited to First Article Inspection and completion of major hardware components, the delivery to the MBTA of the Pilot Cars; and subsequent delivery of the balance of the Vehicles on order.

END PRODUCT.

a. The Contract item(s) to be purchased by the Authority in accordance with the Contract.

b. End Product(s) includes, but it not limited to, drawings, specifications, instructions, books, education programs, spare parts and/or services.

ENGINEER. For this procurement the "Engineer" shall be embodied in the Authority's Technical Project Manager or by his designee.

EQUAL. Whenever the words "equal" or "accepted" are used in connection with make or quality of material or equipment in these Contract Specification, the Contracting Officer’s decision as to whether any material or equipment proposed is equal to that specified shall be binding on both the Contractor and the Authority. To be considered “equal”, materials or equipment must also be interchangeable with the specified material or equipment to the degree specified in the Contract. Section C6.02.
FAIL SAFE. A characteristic of a system which insures that any and all failure modes result in
the system remaining safe in regard to passengers, personnel, track, wayside, and cars.

FAILURE. Component or system failures shall be defined as any failure that requires
replacement or adjustment of any component in the system to return the system to normal
operation whether the failures occur in service or not.

a. Failures discovered during inspection shall be counted as component or system failures.

b. Software failures that require the Authority’s operating personnel to “re-boot” the system
or take other actions to return the system to normal operation shall be counted as
component failures even if no action is required by maintenance personnel.

c. System failures for which no trouble can be found (NTF) shall be counted as failures after
the third NTF failure of the same system on the same car until the cause can be
determined and corrected.

d. The replacement of consumable items such as filters, lamps, brake shoes, etc, shall not be
considered as a component failure, unless the consumables fail to meet their specified
life.

e. Failures caused by accidents, vandalism, operator or maintenance error shall not be
counted.

f. Failures caused by improper operation, testing or maintenance due to faulty Contractor
supplied documentation shall be counted as component or system failures.

g. Service failures are any failures that cause more than a 4 minute delay in service or
unscheduled removal of a car from service.

h. Accidents, operator errors, failures caused by failure to perform approved maintenance
procedures, and failures caused by environmental conditions exceeding those defined in
the technical specification shall not be included.

FINAL ACCEPTANCE OF CARS. When all corrective actions and retrofit (if any) have been
fully completed, and the car is considered by the Authority to be fully compliant with the
Contract.

FINAL ASSEMBLY. See Section C7.18.

FIRST ARTICLE ACCEPTANCE (FAI). The examination and approval by the Authority of
an initial part, major assembly, subassembly, system, subsystem, apparatus, or material,
manufactured or assembled by either the Contractor or Subcontractors. The First Article
Approval establishes the baseline design and the minimum level of quality. Although the
exercise of First Article Approval shall be at the Authority’s option, the contractor shall assume
that the Authority will subject all of the above to first article examination and approval.
FLEET DEFECT(S). As used in these Specifications, is defined as the failure of identical items by specific location and function on the car, covered by the warranty, and occurring in the warranty period, in a proportion of the cars delivered under this Contract.

PROPOSAL MODIFICATION AND CLARIFICATION GUIDELINE (PMCG). Written interpretation(s) or revision(s) of the Contract sent to Offerors after the submittal of proposal, as well as instructions for preparing and submitting a revised proposal.

INDICATED. As used in these Contract Specification, "Indicated" shall be understood to mean, "as shown on the Contract Drawings, as described in the Specifications, or as required by the Contract."

IN-PROCESS INSPECTION (IPI). Scheduled or unscheduled inspection on parts or components at any time during the production process. May be utilized to verify efficacy of processes and quality of parts prior to reaching completion. Commonly performed in conjunction with pre-shipment inspection.

INSPECTOR. The person or firm designated by the Authority as its quality control representative. The Inspector’s authority is derived through the Technical Project Manager.

INTELLECTUAL PROPERTY RIGHTS. Means copyrights, patent rights, trade secret rights, and any other rights to exclude, existing from time to time in a jurisdiction under patent law, copyright law, trademark law, unfair competition law, moral rights law, trade-secret law, or other similar law.

INTERFACE. The points where two or more physical subsystems or systems meet to transfer energy or information.

LICENSED SOFTWARE. Means (i) all software called for in the Standard for Software Project Management Plans as set out in Section T 17.04, and (ii) all other software and firmware that Contractor delivers or is obligated to deliver pursuant to the Contract, or that is contemplated under the Contract. For purposes of clarification, and not limitation, the term "Licensed Software" includes all software and firmware related to: (a) on-board diagnostics, (b) system diagnostic systems, (c) portable test equipment; and (d) the central diagnostics system.

MANUFACTURER. Shall mean the original manufacturer supplying materials, equipment, or apparatus for installation on the cars.

MATERIAL (SUPPLIES). Any substances specified for use in the construction and/or manufacture of the Procurement End Products(s), or to be furnished to the Authority as loose items as part of the Procurement.

MATERIAL REVIEW BOARD (MRB). A Material Review Board is a group of appropriately qualified individuals gathered to review and disposition material or workmanship found to be non-conforming during the incoming inspection or any part of the fabrication and inspection and
testing process. The MRB may vary in its make-up from time-to-time dependent upon the condition and component under review. Generally, participants include representatives from Contractor Engineering, Quality and Project Management departments, and, representatives from customer Quality and Engineering departments. The MRB documentation must include a signature form the customer representative indicating agreement with the MRB disposition. Additional members may be included in the MRB as their expertise is required for a particular material and condition being reviewed. Material Review Boards may be regularly scheduled meetings or may be scheduled on an as-needed basis. Material Review Board dispositions shall include corrective action, effectivity, recurrence prevention and a schedule for those activities.

NOTICE. Shall mean a written notice.

NOTICE TO PROCEED. A notice issued by the Contracting Officer after the execution of the Contract to commence work.

OFFEROR. Any individual, firm, partnership, corporation or joint venture submitting a Proposal on the Form for Proposal provided, for the work contemplated, acting directly or through a duly authorized representative.

ORIGINAL EQUIPMENT MANUFACTURER(S). The original manufacturer of the cars and all principal subcomponents.

OWNER OR PURCHASER. The Authority, as defined herein.

PARTY, PARTIES. Entity(ies) entering into the agreement.

PILOT CAR. First Cars manufactured by the Contractor to the baseline design configuration. These cars shall proceed all others in all stages of work and shall be used as the prototype for all remaining cars.

PLANS. The Authority's drawings (if included) as prepared by the Engineer, which supplement the Specifications and are a part of the Contract; also called Contract Drawings.

PRE-SHIPMENT INSPECTION (PSI). Source Inspection of product, parts, components subsystems and/or systems conducted immediately prior to releasing items for shipment to Contractor or other destination.

PROCUREMENT (WORK). The furnishing of all equipment, items, materials, parts, systems, data, design, services, incidentals, labor and management and performance of the contractual requirements defined in the Contract, including changes thereto, in order to produce and deliver the specified cars, Spare Parts, software goods, and services.

PRODUCTION VEHICLES. All vehicles delivered during the contract with the exception of Pilot Cars.
PROGRAM. The total effort undertaken by the Authority of which the End Products may constitute a whole or a part.

PROJECT MANAGER FOR ADMINISTRATION. The person designated by the Authority as its representative in matters pertaining to administrative aspects of the Contract such as pricing, payments, liquidated damages, change orders etc. Said person or persons shall be designated in writing on official Massachusetts Bay Transportation Authority letterhead, signed by the Contracting Officer or a designee.

PROJECT MANAGER FOR ENGINEERING. See Technical Project Manager.

PROOF (used as a suffix). Apparatus is designated as splash proof, dust proof, etc., when so constructed, protected, or treated that its successful operation is not interfered with when subject to the specified material or condition.

PROPOSAL. The Offer in response to the Authority's Request for Proposal, including the Contract Provisions with Contract Specification, to be submitted in the prescribed manner, properly signed and certified using the forms provided by the Authority as required and all data to be supplied by the Offeror to be in conformance with said Documents.

PROPOSAL FORM.

a. The approved form on which the Authority requires proposals to be prepared and submitted for the work, and which is part of the Proposal heretofore defined.

b. When executed by the Offeror, the proposal becomes the Contractor's written offer to perform the work and furnish and deliver the equipment/materials at the prices quoted.

QUALIFY. As used in these Contract Specification shall be the determination that an assembly, sub-assembly, or any part thereof is satisfactory for continued service under the Contractor's warranty, or that the time is suitable for repair or overhaul to restore it to warrantable service, or that the item must be replaced with a new (or warrantable rebuilt) part.

RAILROAD. Shall mean the Massachusetts Bay Transportation Authority.

REFERENCE. Where reference is made in the Contract to publications or standards issued by associations or societies, the intent shall be to specify the current edition of such publications or standards in effect on the date of the Contract Advertisement, notwithstanding any reference to a particular date.

RELIABILITY. The probability of performing a specified function, without failure and within design parameters, for the period of time intended under actual operating conditions.

REPRESENTATIVE. Shall mean any duly authorized agent of the Authority or the Contractor.
RETROFIT. A fleet wide modification (performed after Conditional Acceptance).

RFP. This Request for Proposals No. CAP 27-10.

SECTION. Section refers to the indicated Section of the Contract and Specifications plus all subsections thereof (unless the context indicates otherwise).

SERVICE, as in SERVICE USE, SERVICE BRAKING. The operation of the cars under normal conditions with passengers.

SERVICE PROVEN (Also “service proven” or “proven”). Car components and/or systems that have documented history of reliability in rail car service at least equal to the performance requirements of this specification. The historic data shall be from similar environmental conditions to those encountered by MBTA for a period of 2 years and a distance of ten times the claimed MTBF or MMBCF.

SHOP DRAWINGS. Items, such as drawings, calculations, and catalog cuts, which are prepared by the Contractor to supplement or detail Contract Drawings or Contract Specification, or are prepared at Contractor's option to detail his work; or which the Contractor is required to submit to the Engineer for review, information, or record, including electrical schematics and wiring diagrams, fabrication, erection, layout, assembly, installation, tests, maintenance, and repair drawings.

SLIDE, WHEEL. During braking, the condition existing when the rotational speed of the wheel is slower than that of pure rolling contact between tread and surface.

SPIN, WHEEL. During acceleration, the condition existing when the rotational speed of the wheel is faster than that of pure rolling contact between tread and surface.


SOURCE INSPECTION. Inspection conducted at the source of the product (generally Subcontractor/Supplier). May include First Article Inspection, In Process Inspection, Pre-Shipment Inspection, or may be performed as part of an investigation to gather data used to locate the source of the problems revealed later in the vehicle production process, testing or in service.

STANDARD EQUIPMENT PROCUREMENT SPECIFICATIONS. This document of General Requirements and Covenants for Equipment Procurement.

STATE. The Commonwealth of Massachusetts.

 STOCKPILE. A gradual accumulation of a reserve. For purposes of this Contract, no stockpiling of unaccepted cars on the Authority's property will be allowed.
SUBCONTRACTOR. An individual, firm, partnership, corporation or joint venture to whom
the Contractor subcontracts any part of the Contract.

SUPPLIER (VENDOR). The persons, firm, or corporations who furnish materials/services to
the Contractor. Supplier furnished materials/services shall comply with all the contract
requirements.

Note: In the course of this Contract, the Authority may interchangeably use the words
subcontractor, supplier, subsupplier, vendor, as synonyms, all the aforementioned being
under contract to the Contractor.

TECHNICAL PROJECT MANAGER (ENGINEER). The person designated by the
Authority to be its liaison with the Contractor on all technical matters pertaining to work. The
Technical Project Manager for Engineering shall be empowered to act on behalf of the Authority
in such matters as acceptance of Contractor's drawings, test procedures, First Article Acceptance,
and valid acceptance. Said person shall be designated in writing on official Massachusetts Bay
Transportation Authority letterhead.

TECHNICAL SPECIFICATION (CONTRACT SPECIFICATION).

a. Specifications pertaining generally to the method and manner of performing the work
and/or the qualities and quantities of equipment and materials and End Product(s) to be
furnished under the Contract.

b. The Technical specifications may include provisions adopted and issued by the Authority
or may include other standards incorporated in the Contract by reference.

TIGHT (used as a suffix). Apparatus is designated as water tight, dust tight, etc., when so
constructed that the enclosing case will exclude the specified material.

TRADEMARK ASSETS. Any brand name, trademark, or service mark of either party, which a
party identifies to the other party as subject to branding requirements under the Contract.

TRAM. A condition of truck geometry in which the centers of the journal bearings represent the
corners of a rectangle.

U.S. DEPARTMENT OF TRANSPORTATION. U.S. Department of Transportation (DOT)
means the Secretary of the (DOT) and other persons who may at the time be acting in the
capacity of the Secretary, or authorized representative or any person otherwise authorized to
perform the functions to be performed hereunder, including representatives of the Federal Transit
Administration (FTA).

VALUE ENGINEERING. Proposals or submittals for evaluation that clearly describe or define
new methodology, materials, or engineering techniques that significantly improve the car/sub-
system performance, life, or significantly reduces existing and future cost.
a. Value engineering submittals are the direct result of Contractor or Subcontractor suggested improvements to car standard, system, subsystem, methodology, materials or processing techniques that will result in significant cost savings, without any sacrifice in quality, reliability, or maintainability.

b. Value engineering applicable to those areas of contract responsibilities (i.e., best method of work performance, sequence and methodology of job performance, contracted engineering items, design restoration, etc.), as well as submittals that address alternatives to current method or means without significant improvement to design, function, performance or justifiable cost effective investments will not be considered.

c. Submittals that originate from the Contractors or Subcontractors must clearly establish a cost savings. Submittals relative to the contractual work, but not defined in the Contract Scope of Work, shall be applicable to fleet wide characteristics savings, and shall become the property of the MBTA upon acceptance.

d. Submittals shall contain, as a minimum, the following:
   (1) Background of suggested/affected change.
   (2) Nature and measurement of value.
   (3) Sufficient/adequate supportive documentation for evaluation.

VEHICLE. For technical purposes: Married Pair of Cab Car and Non-Cab Car (See CAR.)

VENDOR. (SEE SUPPLIER.)

WEIGHT, ASSIGNED. The loaded car categories assigned by the Authority as the basis for structural design, traction system design, and for subsystem and car testing as indicated. Three weight categories are assigned:

a. AWO - Actual weight of empty car ready for revenue service, but with neither crew nor passengers aboard.

b. AW1 - Actual weight of car ready for revenue service with crew aboard and all passenger seats occupied.

c. AW2 - Actual weight of car ready for revenue service with crew aboard and all passenger seats occupied and standee load assuming one passenger per 3.0 square feet at an average of 155 lbs./passenger.

d. AW3 - Actual weight of car ready for revenue service with crush passenger loading which includes all fixed seats occupied, all flip seats folded up and maximum standee load in the car assuming one (1) passenger per 1.5 square feet of floor space for an uniform standee load. Passenger weight to be 155 lbs. per person.
**WORK (Procurement).** Where the context will allow, the term "work" shall mean the production of goods and services furnished in accordance with the Contractor.
SECTION C - PART C2.00
OPTIONS

C2.01 OPTIONS

The following options shall become part of this requirement:

**OPTION I** – The Authority reserves the right within five (5) years of the Notice to Proceed to exercise an option for the furnishing and delivery of 58 Red Line Cars with Capital Spares (identified by item and quantity in Section B Part A Capital Spare Parts – Option I). Prices offered shall remain fixed for Vehicles and Capital Spare Parts purchased through the end of thirty-six (36) months following the Notice to Proceed, and shall be subject to escalation pursuant to Section C2.02 for Vehicles and Capital Spare Parts purchased thereafter.

**OPTION II** – INTENTIONALLY OMITTED

**OPTION III** – INTENTIONALLY OMITTED

**OPTION IV** - The Authority reserves the right within five (5) years of the Notice to Proceed to purchase additional Capital Spare Parts in an amount up to fifty percent (50%) of the quantities of any items listed in Section B Part A Capital Spare Parts – Base Contract. For additional Capital Spare Parts purchased through the end of thirty-six (36) months following the Notice to Proceed, they shall be offered at the same unit prices offered for Capital Spare Parts for the Base Contract. For additional Capital Spare Parts purchased thereafter, prices shall be subject to escalation pursuant to Section C2.02.

**OPTION V** - The Authority reserves the right within three (3) months of the Notice to Proceed to exercise an option for the supply and installation of 113 CCTV Operator Display Screens as described in T 5.03.11, as well as manuals, training, special tools, diagnostic equipment and other items as applicable. The unit and total price shall include an allowance for associated Capital Spare Parts in the form of an additional ten percent (10%) of the base unit price. In order to avoid any ambiguity, Offerors shall add to the base unit price for this option a sum representing ten percent (10%) of the base unit price.

OPTION V (a) - If Option I is exercised, the Authority reserves the right to increase the quantity of all of the items in Option V above by 29 units at the same unit price. The unit and total price for Option V(a) shall not include a ten percent (10%) allowance for associated Capital Spare Parts.

**OPTION VI** - The Authority reserves the right within three (3) months of the Notice to Proceed to exercise an option for the supply and installation of 226 Gap Mitigation Devices as described in T 6.02.10, as well as manuals, training, special tools, diagnostic equipment and other items as applicable. The unit and total price shall include an allowance for associated Capital Spare Parts in the form of an additional ten percent (10%) of the base unit price. In order to avoid any ambiguity, Offerors shall add to the
base unit price for this option a sum representing ten percent (10%) of the base unit price.

OPTION VI (a) - If Option I is exercised, the Authority reserves the right to increase the quantity of all of the items in Option IV above by 58 units at the same unit price. The unit and total price for Option VI(a) shall not include a ten percent (10%) allowance for associated Capital Spare Parts.

OPTION VII - The Authority reserves the right within three (3) months of the Notice to Proceed to exercise an option for the supply and installation of 1,504 sets of Internal and External Passenger Door Open Pushbuttons as described in T 6.03.03, as well as manuals, training, special tools, and other items as applicable. The unit and total price shall include an allowance for associated Capital Spare Parts in the form of an additional ten percent (10%) of the base unit price. In order to avoid any ambiguity, Offerors shall add to the base unit price for this option a sum representing ten percent (10%) of the base unit price.

OPTION VII (a) - If Option I is exercised, the Authority reserves the right to increase the quantity of all of the items in Option VII above by 464 sets at the same price. The unit and total price for Option VII(a) shall not include a ten percent (10%) allowance for associated Capital Spare Parts.

OPTION VIII - The Authority reserves the right within three (3) months of the Notice to Proceed to exercise an option for the supply and installation of 752 LCD Monitors as described in T 13.02.15, as well as manuals, training, special tools, diagnostic equipment and other items as applicable. The unit and total price shall include an allowance for associated Capital Spare Parts in the form of an additional ten percent (10%) of the base unit price. In order to avoid any ambiguity, Offerors shall add to the base unit price for this option a sum representing ten percent (10%) of the base unit price.

OPTION VIII (a) - If Option I is exercised, the Authority reserves the right to increase the quantity of all of the items in Option VIII(a) above by 232 units at the same unit price. The unit and total price for Option VIII(a) shall not include a ten percent (10%) allowance for associated Capital Spare Parts.

OPTION IX - The Authority reserves the right within three (3) months of the Notice to Proceed to exercise an option for the supply and installation of 752 Active Route Maps as described in T 13.02.16, as well as manuals, training, special tools, diagnostic equipment and other items as applicable. The unit and total price shall include an allowance for associated Capital Spare Parts in the form of an additional ten percent (10%) of the base unit price. In order to avoid any ambiguity, Offerors shall add to the base unit price for this option a sum representing ten percent (10%) of the base unit price.

OPTION IX (a) - If Option I is exercised, the Authority reserves the right to increase the quantity of all of the items in Option IX above by 232 units at the same unit price. The unit and total price for Option IX(a) shall not include a ten percent (10%) allowance for associated Capital Spare Parts.
OPTION X - The Authority reserves the right within three (3) months of the Notice to Proceed to exercise an option for the supply and installation of 1,504 Automatic Passenger Counting Systems as described in T 13.02.22, as well as manuals, training, special tools, diagnostic equipment and other items as applicable. The unit and total price shall include an allowance for associated Capital Spare Parts in the form of an additional ten percent (10%) of the base unit price. In order to avoid any ambiguity, Offerors shall add to the base unit price for this option a sum representing ten percent (10%) of the base unit price.

OPTION X (a) - If Option I is exercised, the Authority reserves the right to increase the quantity of all of the items in Option X above by 464 units at the same unit price. The unit and total price for Option X(a) shall not include a ten percent (10%) allowance for associated Capital Spare Parts.

OPTION XI - The Authority reserves the right within twenty-four (24) months of the Notice to Proceed to exercise an option for the supply of two (2) Training Simulators as described in T 22.02.08, as well as manuals, training, and other items as applicable.

A. With regard to Option I, the Authority reserves the right within five (5) years of the Notice to Proceed to exercise an option for the furnishing and delivery of 58 additional Red Line Cars, with Capital Spares.

1. Delivery rate of Option Cars shall be not less than the delivery rate stated for Base Proposal Cars. The provisions of C8.03, Liquidated Damages, shall apply to the proposed Option Car delivery schedule if the Option Car purchase is exercised by the Authority.

2. The right is further reserved to assign this option(s) to another transit agency, subject to the acceptance of the terms and conditions of the Contract.

C2.02 ESCALATION OF OPTION I (ADDITIONAL VEHICLES AND CAPITAL SPARE PARTS) AND OPTION IV (ADDITIONAL CAPITAL SPARE PARTS) PRICING

Escalation is not applicable to any additional Option I Vehicles and Capital Spare Parts and Option IV Capital Spare Parts purchased within the first thirty-six (36) months from the Notice to Proceed.

Escalation for Option I Vehicles and Capital Spare Parts and Option IV Capital Spare Parts, if purchased after thirty-six (36) months from Notice to Proceed will be determined as follows:

A. The Unit Price quoted by the Offeror in its Proposal and as contained in any Contract issued pursuant to this RFP will be the “Base Price” for purposes of this Escalation Clause.
B. With respect to Option I, 45% of the Base Price will be subject to Labor Escalation and 45% of the Base Price will be subject to Material Escalation. With respect to Option IV, 90% of the Base Price will be subject to Material Escalation. Price adjustments shall be based solely on the indices cited below.

C. The “Base Labor Index” and the “Base Material Index” will be established in the following manner:

1. **Base Labor Index**

   Utilizing the “Average Hourly Earnings” of the Railroad rolling stock (NAICS Code 336) Other general purpose machinery (NAICS Code 333) and Management of companies and enterprises (NAICS Code 55) herein called the “Labor Index” as determined and reported by the Bureau of Labor Statistics of the U.S. Department of Labor in “Employment and Earnings”, the “Base Labor Index” shall be determined by taking the first preliminary published index for the month prior to Proposal submittal. (Addendum No. 5)

   - **336:** Railroad rolling stock weighted, at 88.9%
   - **333:** Other general purpose machinery, weighted at 8.7%
   - **55:** Management of companies and enterprises, weighted at 2.2%

2. **Base Material Index**

   Utilizing the Index, quotes from the Producer Price Indexes, Bureau of Labor Statistics Department of Labor: Metals and Metal Products (Code 10), herein called the Base Material Index, the Base Material Index shall be determined in like manner as established for the Base Labor Index in Section C2.02C1.

   **NOTE:** No benchmarking will be allowed to the final published Indices.

D. **Price Adjustments**

   Adjustment in compensation due to changes in the labor/material costs shall be computed utilizing the indices established in Section C2.02C as follows:

   1. The Base Labor/Material Index, where applicable, shall be subtracted from the first published preliminary Labor/Material Index for the month prior to the purchase of the Option I Vehicles and Option IV Capital Spare Parts.

   **NOTE:** No benchmarking will be allowed to the final published Labor/Material Indices.
2. The remainder from subpart (1) above shall be divided by the Base Labor/Material Index, where applicable, as applicable and the resulting quotient carried to four decimal places.

3. The quotient form subpart (2) above shall be multiplied by the dollar amount of the Base Price apportioned to Labor/Material, as applicable, shall constitute the adjustment in compensation for that period as it pertains to Labor Material.

4. Utilizing the following formula, the adjusting elements will be determined as listed below for Option I:

   a. Base Index
   b. Adjusted Index
   c. Adjustment for Labor Costs
   d. Adjustment for Material Costs

   \[
   \text{45\% of Base Price} \times \frac{\text{b} - \text{a}}{\text{a}} \text{ for Labor} = \text{c}
   \]

   \[
   \text{45\% of Base Price} \times \frac{\text{b} - \text{a}}{\text{a}} \text{ for Materials} = \text{d}
   \]

   \[
   \text{Base Price} + \text{c} + \text{d} = \text{Option Price}
   \]

5. Utilizing the following formula, the adjusting elements will be determined as listed below for Option IV:

   a. Base Index
   b. Adjusted Index
   c. Adjustment for Material Costs

   \[
   \text{90\% of Base Price} \times \frac{\text{b} - \text{a}}{\text{a}} \text{ for Materials} = \text{c}
   \]

   \[
   \text{Base Price} + \text{c} = \text{Option Price}
   \]

E. Escalation - General

The provisions of Section C2.02 shall be for the sole exclusive measure of adjustments in compensation for inflation or deflation, without regard to actual changes in the cost of labor or material, or use thereof, during the performance of this Contract.
C2.03 CURRENCY EXCHANGE

The price for the Option I Vehicles and Capital Spare Parts and Option IV Additional Capital Spare Parts and will be subject to a Currency Exchange Rate Provision. Currency exchange will only apply to that portion of the work that is non-U.S. labor and material.

The changes in the rate of exchange (expressed in U.S. dollars) from the date of execution for the base contract award to the date of the execution for the option will be based on the Banker Trust Co. as published in the Wall Street Journal under the heading "Currency Trading" for the respective dates. Any adjustment will be apportioned to only the non-U.S. portion of the Option I Vehicles and Capital Spare Parts and Option IV Additional Capital Spare Parts price.

Any adjustment (plus or minus) to the Option I Vehicles and Capital Spare Parts and Option IV Additional Capital Spare Parts price resulting from this Currency Exchange Rate Provision will not exceed 10% of the non-U.S. portion. The exchange rate to be used will be for the Contractor's country.

The actual adjustment for the currency exchange provision will, like that for price escalation, be a fixed price established at the time the option(s) is executed.

Currency Exchange is not applicable for any additional Option I Vehicles and Capital Spare Parts and Option IV Capital Spare Parts purchased within the first thirty-six (36) months of the Notice to Proceed.

C2.04 OPTION PRICE

Prices paid for items under any and all Options exercised under this Contract shall be at the prices included in Contractor’s Proposal and accepted by the Authority subject to the Escalation Clause in Section C2.02. Notwithstanding anything else to the contrary, the Option prices to be paid shall not exceed the prices quoted to any other customer of the Contractor for comparable Vehicles or similar Capital Spare Parts as specified herein. Prior to the execution of any Option for Vehicles or Capital Spare Parts, Contractor shall certify to the Authority in writing that it has adhered to Section C2.04.
C3.01 CONSIDERATION OF THE PROPOSALS

The Authority reserves the right to reject any or all Proposals, to waive technicalities, to advertise for new Proposals, or proceed to do the work otherwise, as may be deemed to be in the best interests of the Authority.

C3.02 AWARD OF CONTRACT

A. The Contract shall be awarded in accordance with this RFP unless all proposals are rejected. An award will be made to that Offeror whose proposal, conforming to the Solicitation Documents, will be most advantageous to the Authority, price/cost and other factors considered as provided in Sections A and B.

B. Within ninety (90) days after the evaluation and/or negotiation procedures have been completed, the Contracting Officer will prepare a Contract, using the cover form attached in Section D, and will forward said Contract in triplicate to the successful Offeror who will sign all copies and return them to the Contracting Officer for final execution. Upon execution, one fully signed copy of the Contract will be mailed to the successful Offeror for its records. All of the Solicitation Documents shall become part of this Contract as if stated herein.

1. Should the Authority require additional time in which to complete the evaluation and/or negotiation process, the Contracting Officer shall have the right to extend the proposals’ one hundred and eighty (180) day validity period by increments of thirty (30) days. The Authority may conduct pre-award meetings with the apparent successful Offeror subsequent to completion of the evaluation and/or negotiation process.

2. Only after recommendation of award is made to the General Manager of the MBTA and the Board of Directors of the Massachusetts Department of Transportation for approval, will documentation be available to the public. All submissions will be governed by the Massachusetts Public Records Law, M.G.L. c. 66, Section 10.

C. Notification of Award will be issued following the approval of the Massachusetts Board of Directors.
C3.03 PERFORMANCE GUARANTEE

A Performance Guarantee in the amount of thirty percent (30%) of the Total Base Contract Price for an Irrevocable Stand-By Letter of Credit shall be required by the Authority prior to execution of the Contract, unless otherwise agreed to by the Authority, to ensure the faithful performance of the Contract. Each Offeror must certify in writing with its proposal submittal that an Irrevocable Stand-By Letter of Credit will be furnished should the Offeror become the successful Contractor in a form substantially similar to the form set forth in Section E. The Performance Guarantee shall be in the form of an Irrevocable Stand-By Letter of Credit in accordance the requirements set forth in this Section.

Upon receipt of the final milestone payment, as provided for in Section C10.01B, the Contractor may reduce the amount of the Performance Guarantee to five percent (5%) of the Total Base Contract Price plus Option Prices (if exercised). The Performance Guarantee shall continue and remain in place and in full force and effect for the entire term of the Contract (including all warranty periods) (“Guarantee Period”).

In addition to the Performance Guaranty described above, an additional performance guaranty in the form of an Irrevocable Stand-By Letter of Credit in the amount of $100,000,000 (the “Additional Performance Guaranty”) shall be required by the Authority prior to the execution of the Contract. The Contractor may reduce the amount of the Additional Performance Guaranty to $80,000,000 upon delivery to the Authority of the Six (6) Orange Line No. 14 Pilot Cars pursuant to C6.05C. of the Contract. The Contractor may further reduce the amount of the Additional Performance Guaranty to $50,000,000 upon Orange Line Pilot Train Conditional Acceptance and Contractor may permanently reduce the amount of the Additional Performance Guaranty to $0.00 upon Conditional Acceptance of first Orange Line Production Car married pair. The Authority will enter into such amendments to the Additional Performance Guaranty as may be reasonably required to effect the reductions.

The cost of the Additional Performance Guaranty shall be borne by the Contractor, provided that, the Authority shall, upon delivery of supporting cost documentation reasonably acceptable to the Authority, reimburse the Contractor in an aggregate amount equal to $1,000,000, payable to the Contractor in equal annual installments of $250,000 per annum.

The amount of the Additional Performance Guaranty may be included by the Contractor in the Letter of Credit delivered pursuant to the terms hereof. Except as otherwise explicitly stated above with respect to the reduction in amount, the Additional Performance Guaranty shall be subject to all terms and conditions as stated in this Section and in the Contract and as are applicable to the Performance Guaranty, or to Irrevocable Stand-By Letter of Credit or to Letter of Credit.

A. Irrevocable Stand-By Letter of Credit

The Irrevocable Stand-By Letter of Credit shall be executed in a form acceptable to the Authority (to be drawn upon by the use of documents at Section E).
The Letter of Credit shall be unconditional, and must be issued by an Eligible Bank in good standing in Massachusetts. “Eligible Bank” shall mean a commercial bank or financial institution organized under the laws of the United States or a political subdivision thereof or a U.S. branch of a foreign bank with an office located in Massachusetts or New York (provided that such bank is not an affiliate of either Party) with a credit rating of: (i) at least “A” by S&P and “A2” by Moody’s if such entity is rated by both S&P and Moody’s or “A” by S&P or “A2” by Moody’s if such entity is rated by either S&P or Moody’s but not both, and (ii) having a capital surplus of at least ten billion dollars ($10,000,000,000) and that is otherwise acceptable to the Authority in its sole discretion. (Addendum No. 7)

If following the issuance of the Letter of Credit, the issuing bank or financial institution is subject to a ratings downgrade such that it is no longer an Eligible Bank, Contractor shall provide the Authority immediate notice thereof, and arrange within ten (10) business days for the issuance of substitute Letter of Credit in the same form as prescribed herein.

If the Authority has been notified by the Contractor, or by the issuing bank or financial institution that such issuing bank or financial institution has elected not to extend the Letter of Credit beyond then current expiry date, Contractor shall provide the Authority with a replacement letter of credit in the same form as prescribed herein and subject to all other terms and conditions as stated in this Section at least 30 days prior to the then applicable expiry date.

The Letter of Credit must be in writing and must be signed by the issuing bank or financial institution.

The Letter of Credit must conspicuously state that it is an irrevocable, non-transferable, “stand-by” Letter of Credit.

The Massachusetts Bay Transportation Authority (“MBTA”) must be identified as the Beneficiary of the Letter of Credit.

The Letter of Credit must be provided in U.S. dollars.

The effective date of the Letter of Credit must be the same as the effective date of the Contract.

The expiration date of the Letter of Credit must cover the Guarantee Period as provided herein.

The Letter of Credit must indicate that it is being issued in order to support the obligation of the Contractor to perform under the Contract. It must specifically reference the Contract between the MBTA and the Contractor for the purchase of Orange and Red Line Vehicles.
Vehicles.

The letter of Credit must state that any actions arising under the Letter of Credit will be subject to jurisdiction and venue in the Commonwealth of Massachusetts and governed by Massachusetts law; provided that if the issuing bank has no office in Massachusetts, the Letter of Credit will be subject to jurisdiction and venue in the State of New York, and governed by New York law. The issuing bank’s obligation to pay will arise upon the presentation by the MBTA of the original Letter of Credit, and a certificate and draft in form similar to the attached forms (see Section E). This documentation will indicate that the Contractor is in default under the Contract. The above documents will be presented to the issuing bank’s representative at a location prescribed by the issuing bank.

(Addenda Nos. 7/8)

Note: The Offeror is to provide with its proposal a Letter of Commitment for the Letter of Credit in form set forth in Section E. The Offeror is to further provide with any revised proposal a Letter of Commitment for the Letter of Credit in form set forth in Section E and meeting the requirements of this Section C3.03. (Addendum No. 7)

B. All Change Orders may be executed without obtaining the consent of the banking institute (or institutes) on the Performance Guarantee unless otherwise directed by the Authority. See Section C3.05 for Insurance Requirements.

C. To the extent the Authority exercises any Options under the Contract, the Authority will require a Performance Guarantee in the amount of thirty percent (30%) of the Total Option Prices for an Irrevocable Stand-By Letter of Credit at the time of Option exercise.

All other terms/conditions as stated in this Section apply herein.

C3.04 EXECUTION OF CONTRACT

A. Following the issuance of a Notification of Award (see Section C3.02), the successful Offeror shall execute and deliver the Contract and furnish Stand-By Letter of Credit to the Authority prior to the date of the Notice to Proceed.

The required Performance Guarantee in the form of an Irrevocable Stand-By Letter of Credit must be provided to the Authority for its review and approval prior to release of Contractor for any work to be performed on the Contract.

NOTE: The Authority reserves the right to issue a Notice to Proceed prior to the execution of the Contract. Under this condition the required Irrevocable Stand-By Letter of Credit shall be furnished prior to the execution of the formal Contract Documents.

B. The Contract shall be in writing and shall be executed in the number of copies required
C3.05 INSURANCE REQUIREMENTS

The Contractor will carry and maintain, throughout the term of the Contract, including any extension and warranty period, all insurance in form and amounts reasonably satisfactory to the Authority required under this section.

A. Commercial General Liability Insurance - for personal injury, bodily injury and property damage with limits not less than $1,000,000 per occurrence and $1,000,000 aggregate covering all work and services performed under the Contract by contractor, its subcontractors and agents. It shall cover bodily injury and property damage arising out of premises, operations, independent contractors, product-completed operations, personal injury and advertising injury, and liability assumed under an insured contract. This insurance shall include the following:

1. All operations.
2. Coverage for “X,C, and U” hazards (explosion, collapse and underground).
3. Contractual liability.

B. Automobile Liability Insurance - including the use of all vehicles; owned, leased, hired and non-owned, with limits not less than $1,000,000 per accident, with combined single limit, covering all work and services performed under the Contract. It shall cover bodily injury and property damage arising out of the loading, unloading and use of owned, hired, and non-owned autos.

C. Umbrella Liability Insurance - with limits of not less than $10,000,000 per occurrence, $10,000,000 annual aggregate, covering all work and services performed by the Contractor under this Contract. It shall cover bodily injury and property damage arising out of premises, operations, independent contractors, product-completed operations, personal injury and advertising injury, and liability assumed under an insured contract.

D. Product Liability Insurance - with limits of $5,000,000 per occurrence, $10,000,000 annual aggregate for a period of five (5) years after acceptance of the last Vehicle delivered under the Contract.

E. All liability policies should be written on an occurrence basis. All insurance carriers are to have a A.M. Best rating of A- or equivalent, who are licensed to conduct business in all states or territories where this Contract shall apply. The Contractor shall cause its insurer to waive all rights of subrogation against the Authority. (Addendum No. 3)

F. Workmens Compensation Insurance - the Contractor shall carry Statutory Workers Compensation and Employers Liability Insurance as statutorily required in the state(s) where the work is performed. It shall cover all work and services performed under the
Contract. Such insurance shall include a waiver of any and all subrogation rights against the Authority.

G. The Contractor’s General Liability, Automobile Liability Umbrella Liability and Product Liability Policies are to contain or be endorsed to contain the provisions for the Authority, its subsidiaries, officials, representatives and employees as an additional insured.

H. Contractor further agrees that all insurance required under Section 3.05 shall be primary without right of contribution from any insurance or self-insurance maintained by the Authority.

I. All such required insurance as is required by the Contractor shall be provided by or in behalf of all Contractor’s subcontractors, representatives and agents to cover their services and operations performed. The Contractor shall be held responsible for any modifications, deviations, or omissions in these insurance requirements as they apply to subcontractors, et al.

J. At the time of the Contract execution and throughout the term of the Contract the Authority shall be provided with proof of insurance evidencing that the required insurance policies stated above are in place with the necessary limits and additional insured requirement per Contract as follows:

1. Five (5) business days of Contract execution;
2. Within ten (10) days of each policy renewal; and
3. Upon request of the Authority.

Failure to maintain the insurance coverage and limits required by the Contract shall be considered a material breach of the Contract. Any failure of the Authority to declare the Contractor to be in material breach shall not be deemed a waiver of the right to claim material breach for subsequent failure to maintain the required coverage.

A minimum of thirty (30) days notice shall be given to the Authority by the Contractor and its insurer of a cancellation or major changes in the policies.
SECTION C - PART C4.00
SCOPE OF WORK

C4.01 INTENT OF CONTRACT

A. The intent of the Contract is to provide for the procurement of End Product(s) in accordance with the Contract Specification and all other relevant provisions of the Contract.

B. Where the Contract describes portions of the End Product(s) in general terms, but not in complete detail, only materials and workmanship free from defects shall be used.

C. Unless otherwise specified, the Contractor shall furnish all labor, materials, tools, equipment, and incidentals which are necessary to complete the Contract.

D. By Means of a Change Order (Section C11.00), the Authority reserves the right to waive any contractual and/or technical requirement(s) of the Contract as determined by the Authority to be in its best interest. For any cost or credit involved in the exercise of the above refer to Section C11.00.

C4.02 GUARANTEE OF END PRODUCTS (WARRANTY)

A. The Contractor shall guarantee the following for all Vehicles purchased under this Contract:

1. For all Vehicles:
   a. The structure of the carbody, underframe, and the truck frames for a period of five (5) years from the date each car is conditionally accepted by the Authority. Elastomers shall be warranted for the nominal component service life as defined by the elastomers OEM.
   b. All other parts, with the exception of those identified below, for a period of two (2) years from the date of Conditional Acceptance of each Vehicle.
   c. Spare parts for two (2) years from date of installation. In no case shall the guarantee period exceed three (3) years from date of delivery of spare parts.
   d. All retrofits for the remainder of the guarantee period or for one (1) year from the date of retrofit completion per car, whichever period is greater.

B. The Contractor shall submit three (3) months prior to the delivery of the Pilot Cars a Warranty Plan for Authority review and Approval. This plan shall describe how the Contractor will manage warranty activities including staffing, modifications/design
changes, warranty spare parts, and any other activity necessary to maintain the required availability of the fleet. As such:

1. The Contractor shall establish and maintain procedures for servicing delivered products during the warranty period.

2. Procedures shall define Contractor and subcontractor methods for verifying that warranty service requirements are met.

3. Procedures shall delineate the Contractor’s servicing and warranty responsibilities in accordance with this Contract.

4. The Warranty Plan shall define the amount of warranty spare parts required for the entire warranty period, and where these spare parts will be stored for quick access.

5. The Warranty Plan shall also describe how additional parts can be provided upon short notice in case of unexpected fleet-wide defects. Under no circumstances shall the Contractor use parts intended for ongoing vehicle production and assembly. And under no circumstances shall the Contractor use the Authority’s capital spare parts to satisfy warranty needs.

6. In the Warranty Plan, the Contractor shall include a Field Modification Instruction (FMI) Control Plan in accordance with T 21.08.02.

7. The Warranty Plan shall be submitted for MBTA approval in accordance with T 21.08.02.B [CDRL 21-10].

B. The Contractor warrants and guarantees that the Vehicles shall strictly conform to all technical specifications and other relevant provisions of the Contract and warrants and guarantees against any and all defects due to faulty design, poor workmanship, or poor material during the foregoing respective periods of warranty. If any part or parts thereof prove defective either in design, materials or workmanship during the respective periods of warranty, the Contractor shall repair or replace, as mutually agreed by both parties, such part or parts without expense to the Authority.

C. The Contractor is responsible for all costs of labor and material for defect identification and location, and for the removal, repair, or replacement of defective parts, and for alterations, repairs, tests, and adjustments in connection therewith, made to conform the Contract Specification and all other relevant provisions of the Contract. **All work performed by Authority personnel on behalf of the Contractor in connection with this section and all other applicable sections of the Contract shall be billable to the Contractor at the established flat labor rate of $100.00 per hour.** Replaced and/or repaired items are warranted and guaranteed for the remainder of the warranty period or for one (1) year, whichever period is the greater.
NOTE: In the event the Authority incurs extra costs, including consultant costs, which are directly attributable the Contractor fulfilling its warranty obligations or the Contractor’s breach of its warranty obligations, Contractor shall is responsible for the Authority’s total extra costs it incurs for the related labor, materials, equipment and/or consultant services, including consultant efforts reviewing drawings, conducting inspections and monitoring FMI procedures. The remedies included herein are not exclusive and are in addition to those available to the Authority under the Contract and at law.

D. During the respective periods of the warranty, all car parts or material caused to be damaged as the result of a defect in design, material, or workmanship in other car parts or material, shall be repaired or replaced at the expense of the Contractor. Failure reports must accompany all repaired parts.

a. The Contractor shall, within ten (10) days from discovery of a breach of warranty or notification by the Authority of a warranty claim (whichever occurs first), deliver repaired and replacement parts; prior Authority authorization is required for return period exceeding ten (10) days.

b. The Contractor shall maintain support material necessary to eliminate any extended removal of cars from revenue service.

c. Failure reports must accompany all repaired parts.

F. In no case shall any correction of defects in design, material, or workmanship take the form of an increase in maintenance requirement beyond that specified in the Contract, described in the original edition of the maintenance instructions, approved in the Baseline design, or submitted by the Contractor at the time of proposal for the Contract.

G. Where 5% of the quantity of a warranted item fails or where 5% of cars per a fleet type are effected during the warranty period as noted in the Specification(s), the Authority may classify the total of such items as a failure, or fleet defect, including those items for which the warranty period expired before the Authority recognized the failure. The Contractor is responsible for all costs of labor and material, for defect identification and location, and for removal, repair or replacement of defective parts, and for alterations, repairs, tests and adjustments in connection therewith made to obtain car performance identified in the technical specifications. All such replaced or repaired items is warranted and guaranteed for the remainder of the warranty period or for one (1) year, whichever period is greater.

H. All corrective and warranty work and services will occur on the Authority’s property and be performed by the Authority personnel whenever possible. The Authority shall not, at any time, be charged for required corrective and warranty work performed by the Authority. Where this work is performed by the Authority, the expense shall include the cost of parts, material, including tools and a flat labor rate of $100.00 per hour.
I. The Contractor shall provide an on-site Warranty Coordinator to handle and coordinate with the Authority all warranty issues for a period of two (2) years from the date of Conditional Acceptance of each car. The Warranty Coordinator shall respond to all issues within one (1) business day of notification.

J. Any repair or retrofit work required to fulfill these guarantees shall be accomplished with minimum disruption to the Authority's operation and its maintenance facility. The MBTA shall give prompt notice of the defect when and if it discovers it, and reasonable access to the defective part(s). Contractor warranty obligations may terminate if the defective part(s) has been materially changed or altered without the Contractor's knowledge.

K. If a vehicle is removed from revenue service for one (1) week or more for warranty/repair/retrofit work, the duration of the time the vehicle is removed from service will extend the warranty period accordingly.

L. Due to the regular maintenance demands on Authority facilities and on the Authority's operation personnel, it may be possible to undertake only minimal adjustment, repair, or replacement work on equipment prior to Final Acceptance. The Contractor shall, in such an event, be responsible for securing facilities and personnel to complete all additional work required for the duration of the Contract.

C4.03 SCHEDULING

Within thirty (30) days after issuance of the Notice to Proceed, the Contractor shall submit to the Project Coordinator for Administration and the Technical Project Manager, a detailed Critical Path Method (CPM) Master Project Schedule, displaying all detailed design, production, assembly, test, and warranty activities, as well as project milestones and submittal dates as per C5.02. Subsupplier activities including design, production, shipping, delivery and testing shall be included in the CPM. The CPM shall also include all activities with regard to mobilization of the Massachusetts final assembly facility, including permitting, construction, staffing, outfitting, and transfer of technology. In addition, the CPM shall also take into account the requirements of T19.05J and validation of transfer of technology.

The CPM shall also include with specificity, as may otherwise be required from time to time by the Authority details of other activities necessary for the monitoring of the progress of the program. It is understood and agreed that the CPM shall act as a project management tool and that any information contained in the CPM does not act as an amendment or modification to the contractual delivery schedule. The acceptance by the Authority of any CPM, and/or any modification thereto, does not act as a waiver or modification of any Contract term. The Authority shall have the right to rely on the CPM as a material representation by the Contractor with respect to the Contractor’s intent to perform under the Contract.

Within ninety (90) days after issuance of the Notice to Proceed and subsequently every thirty (30) days thereafter through the delivery and testing of the last car(s), the Contractor shall be
responsible for updating and submitting this CPM Master Project Schedule.

The Contractor shall, at the Authority’s requests, provide a remediation plan to compensate for delays in the schedule. The CPM Master Project Schedule shall be submitted both electronically and in hard copy. The electronic format shall be compatible with the Authority’s operating systems. The repeated, successive failure of the Contractor to deliver or adhere to the CPM as required by this section shall constitute an event of default under C8.07A.2. of the Contract.

C4.04 ENGINEERING SUPPORT

A. The Contractor shall furnish on site the services of one or more, as mutually agreed upon, qualified, factory trained, English-speaking, Field Service Engineer(s) promptly when requested by the Authority for assistance during inspection, operation, testing and adjustment of the Contractor furnished equipment, to insure satisfactory performance, and to advise a reasonable number of the Authority's employees in the proper use and care of the equipment.

B. The cost of the Field Service Engineer(s) shall be included in the Contract Price.

C. The Contractor shall have a Field Service Engineer available, within twenty-four (24) hours of receipt of request for service, during a time period from delivery of the cars to one year after Acceptance for revenue service of the last car, and within seventy-two (72) hours of receipt of request for service during the remaining warranty period. (Addendum No. 6)

The Contractor shall have on-site an appropriate inventory of warranty spare parts to comply with material availability requirements of Section C8.03C.

NOTE: Authority material inventory or spare parts shall not be available to comply with that requirement.

D. The Contractor shall supply on site, upon request by the Authority, the design engineer(s) of equipment failing to comply with the Contract and Contract Specification. Said engineer(s) shall attend and participate in meetings, recommend solutions and, if requested by the Authority, shall assist in implementing these solutions.

E. The Field Service Engineer shall have sufficient support staff and technicians to test, commission, and troubleshoot the delivered fleets. Staff shall be increased if field modifications are required.

F. The Contractor shall appear and participate in public forums conducted by the Authority at the reasonable request of the Authority.
C4.05 QUALITY ASSURANCE PROGRAM

A. The Contractor shall establish and maintain an effective Quality Assurance Program and staff to ensure the cars meet, and are in full compliance with, all Contract Specification requirements.

B. The Contractor shall also require each subcontractor and supplier to maintain an effective Quality Assurance Program for the items it furnishes to the Contractor.

C. Within two months after Notice to Proceed, the Contractor shall submit to the Authority for acceptance, a finalized and detailed written Quality Assurance Plan as specified in T 19.03.

D. The Contractor shall supply, upon request by the Authority, the design engineer(s) from the carbuilder and subsystem suppliers of equipment failing to comply with the Contract and Technical Provisions. Said engineer(s) shall attend and participate in meetings, recommend solutions and, if requested by the Authority, shall assist in implementing these solutions.

E. The Authority shall have the right to audit and verify compliance with the Quality Assurance Plan throughout the Contract at the Contractor, subcontractor, and supplier facilities. The Contractor shall coordinate with subcontractors and suppliers for Authority audits on an individual basis. If not allowed by its subcontractors and suppliers, then the Quality Assurance of material provided will be the sole responsibility of the Contractor.

F. The costs of the Authority's inspections and compensation to Authority inspection personnel and authorized representatives shall be the responsibility of the Authority, and no provision for these costs shall be included in the proposal prices.

G. The Offeror is to provide details of its proposed Quality Assurance Program with its proposal.

H. The Contractor shall provide Safety Certificates in line with the Safety Certification Plan validating all safety critical systems on the cars.

C4.06 CONTRACTOR FURNISHED FACILITIES

A. The Contractor shall furnish and maintain at Contractor's expense the following facilities for the use of the Authority's Engineer and Inspectors for the duration of the Contract at the carshell manufacturing facility, the assembly facility, and the final assembly facility/final staging area if applicable in accordance with the Specifications.
The following is provided as an example:

1. A private office with tumbler lock and sufficient size to accommodate the following furnishings:
   a. Full lighting, heating, and air conditioning
   b. Private telephone
   c. Private, secure High Speed Internet access
   d. Three (3) standard office desks with swivel chairs
   e. Two (2) five (5) drawer filing cabinets (letter or legal size)
   f. One (1) drafting table with stool and light
   g. One (1) meeting table with four (4) chairs
   h. High-volume printer/scanner/copier (11 x 17 inch minimum size)
   i. Water dispenser and microwave, unless office is located near kitchen with such equipment
   j. One (1) drawing vertical plan file
   k. Daily cleaning service

2. Access to facility's paging system, if available.

3. Access to office rest room facilities.

4. Direct 24 hour, 7 day access to office by automobile.

B. Contractor shall provide office space and access for the Authority Project Team, which shall include such person as are appointed by the Authority for such purpose, commencing with Contract execution.

Contractor shall allow members of the Authority Project Team to integrate and work with the personnel located at the CNR MA, China CNR or CNR CRC as applicable, production facilities.

If requested, Contractor shall provide security escorts to such Authority personnel. Contractor shall cooperate with Authority personnel with respect to the integration of Authority staff during design review.
C4.07 CONTRACTOR'S LOCAL AREA OFFICE

A. The Authority requires that the Contractor establish a local Engineering/Business Office, within the MBTA service network, for the duration of the Contract to facilitate clear and timely communications between the Contractor and the Authority relative to design review and project harmony.

B. The local staff shall have decision-making authority to expedite engineering changes, problem resolution, and interaction with sub-suppliers.

C. The Contractor should provide sufficient staff and equipment to be able to present designs, conduct design review meetings and assist in other technical and administrative matters. As a minimum requirement, the following local staff shall be required:

1. Project Manager
2. Deputy Project Manager / Project Administrator
3. Lead Engineer
4. Project Engineer – mechanical
5. Project Engineer – electrical
6. Administrative Assistant(s)
7. Other staff necessary to fulfill the required local activities

D. The Contractor shall establish a project office within the Authority's red line or orange line service area with sufficient space to accommodate both Contractor and the Authority Project Team. Following the Acceptance of the first Red Line Production Vehicle, the Contractor and the Authority shall evaluate the need for the size of the project office and shall mutually agree on the size and nature of ongoing project office space. Such project office shall be equipped with WebX or similar web-based conferencing capability and a CADD design review station.
SECTION C - PART C5.00
CONTROL OF PROCUREMENT

C5.01 CONTRACT PLANS

A. Contract Plans and Sketches showing the general arrangement are included in the Contract Specification. The Contract Plans may be supplemented by the Engineer as may be required to amplify or control the work. The Contractor shall perform the work required by such supplements without additional compensation except as provided by the Contract.

B. The Authority makes no representation or warranty, either express or implied, including any implied warranty of merchantability or fitness for a particular purpose, or any other obligations or liability on the part of the Authority as to the Authority's existing vehicles, sketches, drawings, mock-ups, books, manuals, or prints. The Authority neither assumes nor authorizes any other person to assume for it any other liability in connection with the aforementioned materials. These materials should be used for reference purposes only. To the extent that the Contractor uses these materials, they do so at their own risk.

C5.02 CONTRACTOR'S SCHEDULE OF COMPLETION

A. The Contractor, within one month from Notice to Proceed, shall submit to the Authority for review and approval a CPM Project Master Schedule as per Section C4.03. The CPM shall also include all activities with regard to mobilization of the Massachusetts final assembly facility, including permitting, construction, staffing, outfitting, and transfer of technology. The schedule shall include, but not be limited to, as separate line items the submittal dates for the following items:

1. Conceptual Drawing List
2. Schedule for submission of drawings and other documents
   a. Design and engineering drawings and documents
   b. Drawings and documents for final record
3. Analyses List
4. All Programs and Plans
5. Schedule for delivery of test equipment and special tools
6. Procedures list for in-plant inspections and tests
7. Schedule for submission of analysis

8. Schedule for completion of mock-ups

9. Format for monthly/quarterly submittals of contract deliverables, such as, but not limited to, change order logs, subcontractor’s updates, M/DBE Reports, and other required submittals

10. Schedule for submission of procedures

11. Detailed plan and schedule for Acceptance Testing of Pilot Cars

11A. Testing and validation of first production pair of each fleet in accordance with T19.05J.

12. Detailed schedule for the construction and delivery of the Pilot and Production Cars

13. Contractor’s Specification

14. All other Contract Deliverable Requirement List (CDRL) items included in the Contract Specification

14A. A Workforce Plan as described in C7.10I.

15. Any other items requiring Authority review and approval

B. The Contractor shall give due consideration to the time required for review and acceptance by the Authority in scheduling the submittal of each item.

C. Sufficient time shall be provided in the submissions schedule, to permit Authority review and acceptance, a minimum of four (4) weeks prior to manufacture, construction, installation, or other need for each item.

C5.03 INTENTIONALLY OMITTED

C5.04 INTENTIONALLY OMITTED

C5.05 INTENTIONALLY OMITTED

C5.06 INTENTIONALLY OMITTED

C5.07 INTENTIONALLY OMITTED

C5.08 INTENTIONALLY OMITTED
C5.11 INTELLECTUAL PROPERTY RIGHTS

A. Definitions. For purposes of this Section the following capitalized terms have the meanings set forth below. Other capitalized terms are defined in context or elsewhere in the Contract.

1. Contribution. Input to a Deliverable (whether such input is in written, oral, electronic, or other form) that embodies (i) a protectable Intellectual Property Right of the party making the Contribution, or (ii) a protectable Intellectual Property Right of a licensor to the party making the Contribution.

2. Deliverable. The term "Deliverable" means goods, services, and information Contractor is obligated to deliver to the MBTA under the Contract, including (without limitation) vehicles, parts, design and support services, End Products, Licensed Software, and Documentation.

3. Deposit Materials. The term "Deposit Materials" means the technology and other materials that meet any one or more of the following conditions, the technology and other materials that:

   (i) constitute Source Code for the Licensed Software;

   (ii) is necessary for the maintenance, interoperability and interchangeability of components within and for the Authority's fleet of vehicles and any Deliverables, but that Contractor has not provided to the Authority in order to protect Contractor's designated (a) trade secrets, or (b) confidential information; or

   (iii) the Contract may require Contractor to deposit in escrow including.

4. Documentation. The term "Documentation" means materials that meet the following two criteria: the materials (a) constitute (i) user manuals, maintenance manuals, or training materials, (ii) product descriptions or specifications (including performance standards), (iii) technical manuals or supporting materials, (iv) related materials, or (v) any
other materials contemplated under the Contract; and (b) are called for, or set out in the Contract. By way of clarification, and not limitation, the term "Documentation" includes all drawings, shop drawings, plans, blueprints, and other graphic depictions.

5. **Error.** The term "Error" means a defect in the licensed Software that is reproducible and that causes the Licensed Software not to function substantially in conformance with the Documentation, applicable warranties, or commonly accepted principles as defined by industry standards.

6. **Error Correction.** The term "Error Correction" means either a modification or addition that, when made or added to the applicable code section of the Licensed Software (i) removes the Error, or (ii) otherwise establishes material conformity to applicable functional specifications. The term "Error Correction" expressly excludes Workarounds.

7. **Intellectual Property Rights.** Means copyrights, patent rights, trade secret rights, and any other rights to exclude, existing from time to time in a jurisdiction under patent law, copyright law, trademark law, unfair competition law, moral rights law, trade-secret law, or other similar law.

8. **IP Deliverables.** The term "IP Deliverables" means Deliverables that embody Intellectual Property Rights that meet the following two criteria: the Intellectual Property Rights embodied in the Deliverable (i) are not owned by the MBTA, under the Contract or otherwise, and (ii) are necessary for the MBTA to use, maintain, repair, or otherwise act with respect to the Deliverable as specified in Section C5.11B (Grant of Rights to the MBTA).

9. **Licensed Software.** Means (i) all software called for in the Standard for Software Project Management Plans as set out in Section T 17.04 of the Contract, and (ii) all other software and firmware that Contractor delivers or is obligated to deliver pursuant to the Contract, or that is contemplated under the Contract. For purposes of clarification, and not limitation, the term "Licensed Software" includes all software and firmware related to: (a) on-board diagnostics, (b) system diagnostic systems, (c) portable test equipment; and (d) the central diagnostics system.

10. **Non-Software Deliverables.** The term "Non-Software Deliverables" means IP Deliverables that do not consist of Licensed Software.
11. **Software Deliverables.** The term "Software Deliverables" means IP Deliverables that consist of Licensed Software.

12. **Software Maintenance Term.** The term "Software Maintenance Term" has the meaning set out in Section C5.11D1 (Software Maintenance Term).

13. **Source Code.** The term "Source Code" means computer programming source code (and related source code level system documentation, reasonable programmers' notes, comments and procedural code such as job control language, if any) which may be printed out or displayed in a form readable and understandable by a programmer of ordinary skill in the applicable programming language(s). By way of clarification, and not limitation, the term "Source Code" means the preferred form of the code for making modifications to it, including all modules it contains, plus any associated interface definition files, and scripts used to control compilation and installation of an executable. With such Source Code, at a minimum the Deposit Materials shall include related libraries, other source components, compilers, and linkers so that, when compiled, linked and otherwise manipulated to create the runtime/executable image for the Licensed Software, such materials create a complete and fully operational run-time/executable version of the Licensed Software.

14. **Workaround.** The term "Workaround" means a bypass, procedure or routine meeting each the following three criteria: the bypass, procedure or routine (i) when implemented, eliminates the adverse effect of the Error without material loss of performance, function or feature, (ii) its implementation and utilization does not require unreasonable effort on the part of the MBTA; and (iii) is a temporary solution. The term "Workaround" expressly excludes Error Corrections.

B. **Grant of Rights to the MBTA.**

1. **Grant of Rights to Use IP Deliverables.** In consideration of the MBTA's obligations under the Contract, Contractor hereby grants to the MBTA, under Contractor's Intellectual Property Rights, a non-exclusive, royalty-free, perpetual license to use, run, execute, and operate IP Deliverables for all purposes permitted in the Documentation, and for all purposes contemplated under the Contract.

2. **Grant of Rights to Maintain IP Deliverables.**

   a) **Maintenance Rights Event.** The term "Maintenance Rights Event" means the occurrence of one or more of the following events: (i) Contractor fails to provide warranty or maintenance
services for an IP Deliverable, as required under the Contract, (ii) Contractor is unable to provide warranty, maintenance, manufacturing or other required services with respect to an IP Deliverable; or (iii) Contractor declines to provide such services at a reasonable cost as determined by the MBTA, with the reasonableness of the cost determined by an independent third party assessment.

b) **Maintenance Rights for Non-Software Deliverables.** In consideration of the MBTA's obligations under the Contract, and upon the occurrence of a Maintenance Rights Event, Contractor hereby grants to the MBTA, under Contractor's Intellectual Property Rights, a non-exclusive, royalty-free, perpetual license to repair, maintain, modify, retrofit, manufacture and use Non-Software Deliverables (including, but not limited to, any assembly or component); provided such rights are exercised strictly (a) for the MBTA's internal purposes, and (b) for purposes of maintenance, interoperability or interchangeability of components within and for the MBTA's fleet of vehicles.

c) **Maintenance Rights for Software Deliverables.** In consideration of the MBTA's obligations under the Contract, and upon the occurrence of a Maintenance Rights Event, Contractor hereby grants to the MBTA, under Contractor's Intellectual Property Rights, a non-exclusive, royalty-free, perpetual license to repair, maintain, modify, retrofit and use Software Deliverables; provided such rights are exercised strictly (a) for the MBTA's internal purposes, and (b) for purposes of maintenance, interoperability or interchangeability of components within and for the MBTA's fleet of vehicles.

d) **Delivery of and Rights in APIs.** Upon the MBTA's reasonable request, and irrespective of the occurrence of a Maintenance Rights Event, Contractor shall provide the MBTA with APIs between relevant components of Deliverables, to allow the MBTA to coordinate Deliverables with other components of the MBTA's transit services and systems. In consideration of the MBTA's obligations under the Contract, Contractor hereby grants to the MBTA, under Contractor's Intellectual Property Rights, a non-exclusive, royalty-free, perpetual license to use, copy, modify and distribute the APIs, for the MBTA's internal purposes and use.

3. **Grant of Rights in Documentation.** In consideration of the MBTA's obligations under the Contract, Contractor, under its Intellectual
Property Rights, hereby grants to the MBTA a non-exclusive, worldwide, irrevocable, perpetual license to, copy, modify, perform, display, distribute, use and otherwise exploit the Documentation (in print-based, digital, or other format) in connection with uses permitted under the Contract including, but not limited to, purposes of maintenance, interoperability or interchangeability of components within and for the MBTA's fleet of vehicles.

4. **Limitations; Identification of Third Party Licensors.** The MBTA acknowledges and agrees that (i) Contractor's grant of rights to the MBTA pursuant to Section C5.11B2 (Grant of Rights to Maintain IP Deliverables) and Section C5.11B3 (Grant of Rights in Documentation) is limited to the extent of Contractor's applicable Intellectual Property Rights in the IP Deliverable, and (ii) Contractor's ability to deposit Source Code relating to third party software pursuant to Section C5.11B6 (Software Escrow Agreement) is limited to the extent of Contractor's applicable Intellectual Property Rights in the applicable Source Code. By way of clarification, and not limitation, such rights and obligations do not include a grant to modify Licensed Software or an obligation to deposit Source Code where Contractor does not hold underlying rights (a) to modify (b) to grant the MBTA the right to modify, or (c) obtain a copy of the requisite Source Code. Upon the MBTA's reasonable request, Contractor shall (in good and sufficient detail) (i) identify third party licensors of applicable Intellectual Property Rights, and (ii) provide applicable license terms.

(Addendum No. 8)

5. **MBTA Engagement of Third Parties.** The term "Authorized Contractor" means a third party that meets the following two criteria: the third party (i) has agreed to protect Contractor Confidential Information in a manner at least as protective as Contractor's rights under the Contract, and (ii) the MBTA has engaged the third party to provide services or goods to the MBTA. In consideration of the MBTA's obligations under the Contract, the MBTA shall be entitled to permit Authorized Contractors to exercise the MBTA's rights under this Section C5.11(B) (Grant of Rights to the MBTA).

6. **Software Escrow Agreement.** Within thirty (30) days from the execution of the Contract, the MBTA and Contractor shall execute an escrow agreement that is the same in all material respects as the one set out in Appendix 1 of this Section (C5) (the "Software Escrow Agreement"), and as is otherwise governed by the Contract. Except as otherwise set out in this Section C5.11B6 (Software Escrow Agreement), the Software Escrow Agreement shall control the MBTA's and Contractor's respective rights and obligations with respect to Deposit Materials deposited (or required to be deposited) in escrow. The MBTA and Contractor shall engage a third party to serve as the escrow agent for
the Escrow Agreement, and shall modify the Software Escrow Agreement to accommodate the escrow agent's requirements; provided, however, that in no event shall the Release Conditions (as defined in the Software Escrow Agreement) be excluded or materially modified from the Software Escrow Agreement. (Addendum No. 7 – Included Software Escrow Agreement)

a) **Right to Use Following Release.** Upon release of the Deposit Materials in accordance with the Software Escrow Agreement, the Authority shall have a non-exclusive, royalty-free, perpetual license to reproduce, modify, distribute, display, perform, use and otherwise exploit the Deposit Materials; provided such license is exercised strictly: (i) for the Authority's internal purposes, (ii) for purposes of maintenance, interoperability or interchangeability of components within and for the Authority's fleet of vehicles; or (iii) as otherwise may be necessary for the Authority to exercise any of its rights under the Contract. The Authority shall maintain the confidentiality of the released Deposit Materials pursuant to the Contract Documents.

b) **Payment.** Subject to Section C5.11(B)(6)(c) (Term) below, the Contractor shall be solely responsible for all costs related to the Software Escrow Agreement including, but not limited to, all costs billed by the escrow agent in connection with the Software Escrow Agreement. (Addendum No. 7)

c) **Term.** The initial term of the Software Escrow Agreement shall commence upon the initial deposit of the Deposit Materials and continue for the longer of: (i) the warranty periods under this Contract, or (ii) seven (7) years after the expiration or termination of the Contract (the "Initial Software Escrow Agreement Term"). Upon conclusion of the Initial Software Escrow Agreement Term, the term of the Software Escrow Agreement and the Parties' obligations under this Section C5.11(B)(6) (Software Escrow Agreement), shall automatically renew for additional one (1) year periods (each, a "Software Escrow Agreement Renewal Term") until the MBTA, at least thirty (30) days before the conclusion of the then-current Software Escrow Agreement Renewal Term, notifies the Contractor in writing of its intent to terminate the Software Escrow Agreement. The Parties acknowledge and agree that the MBTA shall be solely responsible for all costs billed by the escrow agent in connection with the Software Escrow Agreement during any applicable Software Escrow Agreement Renewal Terms. (Addendum No. 7)

d) **Subcontractors.** The Contractor acknowledges and agrees that it
is solely responsible for ensuring that all subcontractors it engages to fulfill any of the Contractor's obligations under the Software Escrow Agreement relating to the Deposit Materials agree to be bound by the provisions of the Software Escrow Agreement executed between the MBTA and the Contractor. By way of clarifying example, and not limitation, should the Contractor engage a subcontractor to provide software, and such software constitutes Licensed Software, then the Contractor agrees to include in its subcontract with the subcontractor an obligation to treat the provided software as Deposit Materials and place it in escrow in accordance with the terms and conditions of the Software Escrow Agreement.

C. Rights of Contractor.

1. MBTA Contributions; MBTA Ownership. Contractor acknowledges and agrees that, as between Contractor and the MBTA, the MBTA owns all right, title and interest in and to MBTA Contributions (and all associated Intellectual Property Rights). The MBTA hereby grants to Contractor, under the MBTA's Intellectual Property Rights, a limited, non-exclusive, non-transferable, non-sublicensable license to use MBTA Contributions solely for the purpose of fulfilling Contractor's obligations under the Contract, and for no other purpose.

2. Grant of Limited Trademark Rights to Contractor. In consideration of Contractor's obligations under the Contract, the MBTA, under its Intellectual Property Rights, hereby grants to Contractor (i) for as long as Contractor is manufacturing Deliverables on which MBTA Trademark Assets are to be affixed pursuant to (a) the Contract, or (b) the MBTA's request, or (ii) earlier if requested by the MBTA; a limited, non-exclusive, non-transferable, non-sublicensable license to affix MBTA Trademark Assets to applicable Deliverables for the MBTA's use as contemplated under the Contract. Contractor acknowledges the value of the goodwill associated with MBTA Trademark Assets and further acknowledges that any and all use of MBTA Trademark Assets pursuant to the Contract shall inure to the benefit of the MBTA.

D. Licensed Software Maintenance and Support. During the Software Maintenance Term (as defined in Section C5.11D1 (Software Maintenance Term)), and in consideration of the MBTA's obligations set out in the Contract, Contractor shall provide the maintenance and support services described in this Section C5.11D (Licensed Software Maintenance and Support) (collectively, the "Support Services").

1. Software Maintenance Term. The term "Software Maintenance Term" means collectively (a) the Bundled-Software Maintenance Term,
and (b) the Stand-Alone Software Maintenance Term, both as defined below.

a) **Bundled Software.** With respect to Licensed Software that is used in conjunction with Non-Software Deliverables (including, but not limited to, End Products), Contractor shall provide Support Services for such Licensed Software for the duration of the warranty period applicable to the associated Non-Software Deliverable (the "**Bundled-Software Maintenance Term**"). By way of example, and not limitation, Contractor shall provide Support Services for Licensed Software used in conjunction with the operation of a vehicle during the warranty period for that particular vehicle, as specified in Section C4.02 (Guarantee Of End Products (Warranty)) of the Contract.

b) **Stand-Alone Software.** Contractor shall provide Support Services for Licensed Software that is used independently of Non-Software Deliverables for a period of five (5) years from acceptance of the applicable Licensed Software as set out in the Contract (the "**Stand-Alone Software Maintenance Term**").

c) **Resolving Doubt.** For the avoidance of doubt, uncertainties as to whether a Licensed Software module is entitled to Support Services under Section C5.11D1a (Bundled Software) or Section C5.11D1b (Stand-Alone Software), shall be resolved in favor of the reading that provides a longer period of Support Services for the particular module.

2. **Helpdesk Support.**

a) **MBTA Representatives.** All requests for Support Services shall be submitted to Contractor by one (1) of four (4) MBTA representatives, which shall be identified to Contractor by the MBTA in writing within a reasonable time after the Effective Date (each, an "**MBTA Representative**"). The MBTA shall have the right to revise the list of MBTA Representatives from time to time. Contractor shall have no obligation to respond to service requests from any MBTA employee that is not an MBTA Representative.

b) **Helpdesk Support Hours.** Contractor shall provide helpdesk support via telephone and facsimile from the hours of 8:00 a.m. to 6:00 p.m. EST, Monday through Friday (excluding Federal holidays) (the "**Business Hours**"). Contractor shall provide off-hours pager and cell phone support off-hours for Priority 1
Errors.

3. **Confirmation; Tracking.** Contractor shall confirm receipt of a problem report or other inquiry, and shall cause Error-related calls and incidents to be tracked through the use of an incident tracking system. Error-related calls and incidents shall be reported and logged into such system: (i) via e-mail, (ii) by accessing a website maintained by Contractor for such purpose; or (iii) by telephone.

4. **Problem Inquiries; Responses.** An MBTA Representative shall: (i) report an Error to Contractor in a form as may be reasonably prescribed by Contractor, (ii) submit such form via telephone line, fax, e-mail, or in any other format reasonably required by Contractor; and (iii) provide other documentation, information or assistance reasonably requested by Contractor. Upon receipt of a problem inquiry, Contractor shall: (a) evaluate the inquiry, (b) provide advice to resolve the problem described in the inquiry; and (c) call in appropriate staff as necessary to respond to the situation in accordance with the Acknowledgement and Resolution Standards (as defined below). Contractor shall track such inquiries and responses as set out in Section C5.11D3 (Confirmation; Tracking).

5. **Workarounds.** Contractor shall use commercially reasonable efforts to provide Workarounds for Errors that are reported by an MBTA Representative within the target time frame for the priority level of such problem, as listed below. In the event Contractor foresees an inability to provide a Workaround remedying the reported Error within the applicable target time frame, Contractor shall increase resources appropriately and continue its efforts. Each incident shall remain open until the MBTA determines, in its sole and reasonable discretion, that the incident has been resolved.

   a) **Assigning Priority.** Contractor shall work with the applicable MBTA Representative to assign the appropriate priority to all reported problems. The criteria for assigning a particular priority level are as follows:

<table>
<thead>
<tr>
<th>Problem Priority</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority 1 (High)</td>
<td><strong>Critical business impact.</strong> (i) the MBTA has a complete loss of function, (ii) the MBTA experiences material real or perceived data loss or</td>
</tr>
</tbody>
</table>
corruption; or (iii) an essential part of the Licensed Software is unusable by the MBTA.

<table>
<thead>
<tr>
<th>Priority 2 (Medium)</th>
<th>Some business impact. The problem seriously affects the functionality of the Licensed Software, but can be circumvented so that most of the significant functionality is available to the MBTA.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority 3 (Low)</td>
<td>Minimal business impact. The MBTA can circumvent the problem and use the Licensed Software with only slight inconvenience. This priority level is also used for questions, comments, and requests.</td>
</tr>
</tbody>
</table>

b) Acknowledgment and Resolution Times. For all reported problems, Contractor's acknowledgement and problem resolution times are as follows (the "Acknowledgement and Resolution Standards"):

<table>
<thead>
<tr>
<th>Problem Priority</th>
<th>Acknowledgment Time</th>
<th>Time Frame for Workaround</th>
<th>Contractor's Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority 1 (High)</td>
<td>1 Hour</td>
<td>6 Hours</td>
<td>Full attention to the problem until a Workaround is provided.</td>
</tr>
<tr>
<td>Priority 2 (Medium)</td>
<td>4 Business Hours</td>
<td>12 Business Hours</td>
<td>Full attention to the problem until a Workaround is provided.</td>
</tr>
<tr>
<td>Priority 3 (Low)</td>
<td>1 Business Day</td>
<td>14 Business Days</td>
<td>Provision of Workaround.</td>
</tr>
</tbody>
</table>

6. Error Corrections. Upon Contractor's provision of a Workaround, Contractor shall commence developing an Error Correction to provide a permanent resolution to the applicable Error, and shall provide all proposed Error Corrections to the MBTA within a reasonable time after the original Error was reported by an MBTA Representative. All Errors shall be considered open until the MBTA accepts the Error Correction.

7. Third Party Software. Contractor shall use reasonable commercial efforts attempting to diagnose and resolve problems associated with third party software for no additional fee. If the problem is internal to the third party software, and not the Licensed Software, then Contractor shall be deemed to have satisfied its obligation to address the problem if: (a) Contractor releases the ticket to the third party vendor, (b) such vendor is obligated to provide support; and (c) Contractor continues to track and report the status of the fix to the MBTA.
8. **Updates.** Without limiting its obligations to provide Error Corrections, Contractor may, from time to time, choose to deliver updates, upgrades or new versions of the Licensed Software to the MBTA; provided, however, that no such delivery removes any feature or functionality of the Licensed Software, or otherwise reduces the performance of the Licensed Software.

9. **Support for Prior Versions.** For so long as any of the Contract are in effect, Contractor shall continue to provide Support Services to the MBTA for the version of the Licensed Software provided by Contractor under the Contract, or such other version or release provided by Contractor that the MBTA, in its discretion, chooses to implement.

10. **Cooperation; Limitations.** The MBTA shall make available upon request by Contractor access to the MBTA's existing infrastructure to allow Contractor to provide Support Services, including access by remote means. Contractor shall be solely responsible for all connectivity-related charges. Support Services shall not include services (i) resulting from misuse, or (ii) resulting from modification, customizations, additions or extensions to the Licensed Software in a manner not authorized by Contractor in writing or not otherwise contemplated under the Contract.

E. **Software Assurances and Warranties.** Both the MBTA and Contractor agree that (i) Contractor's assurances and warranties relating to the operation, quality, and compliance with the Documentation that apply to Deliverables under the Contract including, but not limited to, those set out in Section C4.02 Guarantee Of End Products (Warranty)) of the Contract, similarly apply (ii) to the Licensed Software.

F. **Indemnification.**

1. **Contractor Indemnification.** Subject to the provisions of this Section 5.11F (Indemnification), Contractor shall defend, indemnify, and hold the MBTA harmless from and against any liability, claim, suit, action, proceeding, damage, cost or expense (including, but not limited to, reasonable attorney's fees) resulting from or relating to any claim that any of the Deliverables infringes a third party's Intellectual Property Rights or rights existing under trademark law. In the event that a Deliverable is held or reasonably believed to constitute infringement of a third party's Intellectual Property Rights or trademark rights and/or the use of such Deliverable is enjoined, Contractor may, at its own option and expense, and in order to mitigate damages, either (i) procure the same rights for the MBTA in the Deliverable as the MBTA has under the Contract, (ii) replace the Deliverable with a functionally equivalent, non-infringing substitute; or (iii) modify the Deliverable so it becomes non-infringing but
remains functionally equivalent.

2. **Limitations.** Contractor shall not be liable to the MBTA for indemnification obligations under this Section 5.11F (Indemnification) to the extent the claim or damage is caused by: (i) the MBTA's failure to use corrections made available to the MBTA by Contractor, or (ii) the creation of modifications to the Deliverable at issue that were not authorized by Contractor or reasonably contemplated under the Contract. Contractor shall not be obligated to indemnify the MBTA to the extent an MBTA Contribution contributed to the event giving rise to the obligation to indemnify.

G. **No Implied Licenses.** Any licenses granted to either Contractor or the MBTA must be expressly provided herein, and there shall be no licenses or rights implied pursuant to the Contract, based on any course of conduct, or other construction or interpretation thereof. All rights and licenses not expressly granted are reserved.

H. **Acceptance of Licensed Software.** The Contractor acknowledges and agrees that the acceptance for the Licensed Software shall be handled in manner consistent with the MBTA's acceptance procedures for all other Deliverables and as may otherwise be set out in the Contract; provided, however that the MBTA may, in its sole and reasonable discretion, require additional acceptance criteria and procedures for the Licensed Software.

I. **Order of Precedence.** The MBTA and Contractor both acknowledge and agree that if a conflict arises between any term or provision contained in this Section and any other term or provision in the Contract, then the terms or provisions of this Section shall control.

J. **Survival.** Notwithstanding anything to the contrary, the provisions of this Section shall survive the termination or expiration of the Contract.

**C5.12 OFFEROR’S MATERIAL QUALIFICATION AND CONFORMITY WITH PLANS AND SPECIFICATIONS**

A. It is the responsibility of the Contractor to furnish complete End Products, materials and specialties of the type, design, and performance which will result in an integrated, operating End Product units and/or systems in accordance with the Contract Specification.

B. The Contractor shall be fully responsible for the satisfactory delivery and operation of all equipment and materials covered by the Contract whether manufactured by the Contractor, or manufactured by a subcontractor.

C. The Contractor shall furnish evidence, if required by the Engineer, that equipment
of comparable rating (or higher) to that which the Contractor proposed to furnish, has been in satisfactory operation in similar applications. This provision shall not apply to materials supplied by the Authority.

D. No willful deviation from the Contract Document Plans and Specification shall be made unless authorized in writing by the Authority. All open items shall be tracked for compliance/progress and submitted monthly.

E. Any change which can affect the cost of, and/or time or schedule for completion of, the Contract shall be addressed by Change Order to the Contract in accordance with Section C11.00.

F. The Contractor shall not take advantage of any apparent error or omission in the Contract. In the event the Contractor shall discover such an error or omission, the Authority shall immediately be notified. The Authority shall then make such corrections and interpretations as may be deemed necessary for fulfilling the intent of the Contract.

1. The individual documents comprising the Contract are complementary and are intended to describe the work. Anything required in the Contract Specification and not stated in other Contract documents, or required in the Contract and not stated in the Contract Specification, shall be of like effect as if shown or mentioned in both. The intent of the Contract is to include all items necessary for the proper execution and completion of the work.

2. The Contractor shall verify all figures on the Contract Drawings before commencing the work; shall promptly notify the Engineer of any errors, inconsistencies, or omissions which may be discovered; and obtain specific instructions in writing before proceeding with the work. Omission from Contract Drawings or Specification or the misdescription of details of work which are manifestly necessary to carry out the intent of the Contract Drawings and Specification, or which are customarily performed, shall not relieve the Contractor from performing such omitted work (no matter how extensive) or misdescribed details of the work and they shall be performed as if fully and correctly set forth and described in the Contract Drawings and Specification at no additional expense or delay to the Authority.

C5.13 PRECEDENCE OF DOCUMENTS

A. In the event of any inconsistency between any requirement or provision of the Contract, the inconsistency shall be resolved by giving precedence, in descending order, to the following:

1. Form of Contract and any Change Orders
2. The RFP, Addendum(a) and Proposal Modification & Clarification Guideline(s) to the Contract

3. Contract Specification

4. Contract Plans and Drawings

5. Certifications and Other Pertinent Forms

6. The Contractor’s Proposal

**C5.14 ACCESS TO WORK AND RECORDS**

A. The Authority's authorized representatives shall have access, at any time during the Contractor's normal working hours, to the premises used by the Contractor to any plant or place where materials, work, or any part thereof, are being made, performed, or stored. The Authority shall arrange for inspections so as to avoid or minimize delay to the work.

B. The Contractor further agrees to provide the Authority access to any books, documents, papers and records of the Contractor and its suppliers which are directly pertinent to this Agreement, including all accounting and project management records and recordings relating to any labor, materials, plant, equipment, overhead and other costs used in the performance of work described in any Change Order, for the purposes of making audits, examinations, excerpts and transcriptions. The Contractor agrees to permit the Authority to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

C. Access shall be given or obtained both before and after completion of this Contract for the duration of the warranty period.

D. The Contractor agrees to maintain all books, records, accounts and reports required under this Agreement for a period of not less than three (3) 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 the Authority has disposed of all such litigation, appeals, claims or exceptions related thereto.

E. The Contractor shall insert a clause containing all of the provisions of this Section, including this paragraph, in all subcontracts of at least $50,000 under this Contract, altering the clause only as necessary to identify properly the contracting parties.
C5.15 ASSIGNING OR SUBCONTRACTING

A. The Contractor shall give its personal attention to the fulfillment of the Contract and shall keep the work under its control as well as direct, monitor and coordinate all necessary liaisons between its subcontractors and suppliers to insure the successful completion of the Contract.

B. The Contractor shall not subcontract, sell, transfer, assign, or otherwise dispose of the Contract or any portion thereof, or its right, title, or interest therein, if the cost exceeds ten percent (10%) of ninety percent (90%) of Total Base Contract Price, or if the subcontractor or supplier is to supply any of the major systems listed in Section 5.15E without written consent of the Authority.

In requesting such consent, the Contractor shall notify the Authority of the work to be performed by the proposed subcontractor and the subcontractor's name.

C. In any case, neither the subcontracting nor the transfer of any contract obligation shall release the Contractor of its liability under the Contract.

D. Any consent to subcontract any part of the work shall not be construed to be an acceptance by the Authority of the subcontract or any of its terms, but shall operate only as authorization to enter into the subcontract between the Contractor and the proposed subcontractor. The Authority assumes no liability for any obligations of the Contractor to its subcontractors. The Contractor shall include in all subcontracts, purchase orders and other agreements with suppliers or vendors a covenant that the subcontractor, vendor or supplier has no rights vis-à-vis the Authority and shall make no claim for payment against the Authority, its members or agents, for any good, materials and/or services supplied and/or performed under the supply agreement, or for any other cause for payment that may arise by reason of the relationship created between the Contractor and its subcontractors, vendors and suppliers.

E. The Authority is to be notified of any subcontractor or supplier retained to supply any of the following major systems:

- Propulsion
- Trucks and Major Truck Components
- Auxiliary Power
- Low Voltage DC Power
- HVAC
Carbody
Couplers
Draft Gear
Wheel Sets
Air Brake Equipment and Controls
Cab Signal Equipment
Door Systems
Seats
Vehicle Monitoring System
Network Equipment and Integrator
Communications Equipment including LED and LCD Signage
Lighting

Note: The Offeror in preparing a proposal submission should include, at minimum, on page B-94, the potential suppliers under its consideration, for the system/subsystem noted above.

All requests for approval under this section shall be submitted in writing no later than three (3) months following the Notice to Proceed.

F. The Contractor shall be responsible for the compliance of its subcontractors and suppliers with all requirements arising under U.S. federal, state, and municipal laws, ordinances, rules and regulations, as may be applicable.

G. The Contractor shall further be responsible for ensuring all its subcontractors and suppliers adhere to M/WBE Participation in accordance with Section C7.16.

H. Contractor shall identify major subcontractors identified in Section C5.15E within ninety (90) days of Notice to Proceed. Each major subcontractor shall be required to certify in writing its understanding of the full contractual technical provisions and specification no. VE-10-036 attached to each Purchase Order. Such certification shall be delivered to the Authority together with each Purchase Order. The Authority shall identify in writing those major subcontractors that shall be required to be present at the line-by-line review meetings of the technical provisions of the Contract. Each subcontractor shall also be required to be present
at applicable design review meetings as determined by the Authority.

C5.16 PROJECT MEETINGS

A. Meetings shall generally be held every two (2) weeks, or more frequently as scheduled by the Authority, at which time the Contractor shall be present to discuss any and all details as required by the Authority relative to the execution of the work. The Authority reserves the right to increase or decrease the number of meetings.

   1. Additional meetings shall be held as required by the Authority, or at the request of the Contractor in order to discuss the particular aspects of the work.

   2. Manufacturers, subcontractors, suppliers and/or other representatives, as determined necessary by the Authority, shall be present at any such meetings.

   3. Meetings shall generally take place at the Authority’s offices. Once a Final Assembly Facility in Massachusetts has been established, the meeting location may alternate between the Authority’s offices and the Contractor’s Final Assembly Facility, at the sole discretion of the Authority.

B. The Contractor will keep detailed minutes of all meetings, including but not limited to the following information:

   1. Date, time and location

   2. Attendees, including titles and affiliations

   3. Subjects discussed, and agreements reached

   4. Drawings and sketches submitted for review

   5. Action taken or assigned

C. A copy of the minutes of each meeting shall be prepared and delivered, within the time stipulated at the close of the meeting and/or as directed by the Authority's designee present at same.

D. The draft minutes shall be reviewed for any corrections, if necessary, by the Authority, after which three (3) final copies shall be prepared and signed by the Authority and the Contractor, with each party retaining one (1) copy.

E. Video conferencing shall be considered at the discretion of the Authority.

F. As of the date hereof, the Contractor has proposed and the Authority has approved certain
persons or entities to serve as Contractor’s representatives on the Executive Committee as identified on Schedule C5.16. None of Sojitz Corporation of America, Mr. Hats Kageyama or Mr. Robert Doyle shall be removed or replaced without the prior written consent of the Authority. At all times during the term, Mr. Hats Kageyama and Mr. Robert Doyle or, in each case, a replacement approved in writing by the Authority, shall be engaged by Contractor to provide services in connection with the obligations of the Contractor under the Contract.

G. Each of the persons identified on Schedule C5.16 under the heading, “Project Meetings” shall comprise the Project Team. Technical and commercial issues shall be discussed at Project Team meetings. It is the expectation of the Contractor and the Authority that the Project Team shall be responsible for execution of the work, performance of the Contract, and resolution of day-to-day issues as they are presented. The Contractor and the Authority agree to employ a cooperative effort and partnering approach to facilitate agreement on all aspects of the work, including both technical and commercial issues.

H. Each of the persons identified on Schedule C5.16 under the heading, “Monthly Project Director Meetings” shall comprise the Project Directors. Project Directors shall meet on a monthly basis. The Project Team shall exhaust its ability to reach agreement on any matter before bringing it to the attention of the Project Directors for resolution. It is the expectation of the Contractor and the Authority that in most instances issues will be resolved by the Project Team and that only mission critical issues as to which there is a good faith disagreement following good faith efforts to resolve such issues will be brought to the Project Directors. The Project Directors shall have the authority necessary to regularly resolve the matters presented by the Project Team.

I. Each of the persons identified on Schedule C5.16 under the heading, “Quarterly Meetings with Senior Management” shall comprise the Senior Management for purposes of this section. Meetings with Senior Management shall be held quarterly for the purpose of providing an update and status as to the progress of the work and any material matters involving scope, budget and timing. In the event that any mission critical item remains unresolved, it may be determined at such quarterly Senior Management meeting.

J. Each of the persons identified on Schedule C5.16 under the heading, “Semi-yearly Senior CNR Management and Senior MBTA Management” shall comprise the Senior CNR Management and Senior MBTA Management for purposes of this section. Meetings with Senior CNR Management and Senior MBTA Management shall be held semi-annually for the purpose of providing an update and status as to the progress of the work and a report on any material matters involving scope, budget and timing.

C5.17 PROJECT PHOTOGRAPHS

A. At the completion of the first Pilot Car for the Red Line, the first Pilot Car for the Orange Line, and the first Production Car for each of the lines, a set of color photographs,
showing at least thirty (30) views shall be provided to the Authority. The photographs shall be provided as 8” x 10” color prints. Each photograph shall also be provided as JPEG (.jpg) electronic files in two (2) different files sizes: 640 x 480 pixel resolution and 2446 x 1632 pixel resolution. The set of electronic files shall be provided to the Authority on a CD-ROM or other agreed upon medium. The quality of JPEG compression must ensure no defects or digital artifacts to the image. The Authority’s Engineer, Project Coordinator, or designee will determine the subject matter to be photographed. Photographs shall be taken with a digital camera with zoom capable of taking 24-bit color, 4 megapixels (2446 x 1632 pixel resolution) images and saving in JPEG format. Upon the acceptance of the photographs, the photographs and all rights thereof shall become property of the Authority. (Addendum No. 3)

B. All costs for the Project Photographs shall be included within the Contract price submitted.

C. The Authority's authorized representative(s) shall have the right to take additional photographs of the work with the Authority's equipment and at the Authority's expense.

D. Each photograph shall have permanently written on the back of the mounting an identification number and a legible description including the name of the project, Car number, date taken, descriptive data, and the names of the Authority and the Contractor.

E. The photographs shall be taken by a person experienced in such work and with the acceptance of the Engineer. Photographs, which in the judgment of the Engineer, are unsatisfactory, shall be retaken by the Contractor at his own expense.

C5.18 FURTHER OBLIGATIONS

A. All correspondence, drawings, data, or other written communications pertaining to this Contract shall be in the English language using the English system of weights and measures. All monies expressed shall be in United States dollars. All conversations between the Contractor and the Authority shall be in English. All written correspondence shall be by email communication as directed by the Contracting Officer, Project Coordinator, Engineer or designee, or, if in hard copy, on single sided 8-1/2” x 11” (216 x 279 mm) white sheets. An updated correspondence control/log shall be submitted monthly by the Contractor.

B. Oral communications, whether in person or by telephone, may be used to expedite communications, but shall in no way bind the Authority, unless confirmed in writing by authorized official(s).

C. In order to preclude misunderstandings and delays in the performance of the Contract arising from language difficulties, the Authority requires that representatives of the Contractor who serve as official liaisons to the Authority or its representatives shall be sufficiently fluent and versed in its speech, writing, and understanding of the English
language so as to enable a facile and comprehensive language intercourse between the Contractor and the Authority and its representatives. To the extent that it concerns their ability to communicate, the Authority reserves the right to reject any representative of the Contractor who is found by the Authority to be so deficient in ability to communicate in English as to be prejudicial to the Authority’s best interest.

Contractor shall identify and engage at its expense, subject to the prior written approval of the Authority, a full time Cultural Liaison to be present at all meetings to act as a technical interpreter and a cultural liaison for the duration of the Contract term. Contractor shall submit a detailed resume of any prospective Cultural Liaison, or replacement to any Cultural Liaison for approval by the Authority prior to any such replacement being engaged. Any substitution of such Cultural Liaison shall require the prior written approval of the Authority.

D. All dimensions shall be shown in both English and Metric units. Refer to T 21.07.02 for further requirements.

E. As set forth in Section C5.02, the Contractor shall submit drawings, as required, and schedules to verify that the Contractor's program timing is in compliance with all the requirements of the Contract.

F. The Contractor shall furnish to the Authority, with the delivery of the Pilot Cars, one (1) set of sturdy, multiunit fireproof steel flat drawing file cabinets of appropriate size and capacity to store all Contractor’s furnished drawings as detailed in the Contract Specification.

C5.19 FIRST ARTICLE INSPECTIONS PROCEDURES AND TEST SPECIFICATIONS

A. Thirty (30) days prior to commencement of any system, subsystem, or component First Article Inspection (FAI) or scheduled test, the Contractor shall submit for the Authority’s review and approval detailed Procedures and Test Specifications to which the system, subsystems, or components shall be manufactured.

B. All work done and all material furnished under this Contract shall be in full accordance with the Contract and Contract Specification and shall be subjected to thorough inspection.

C. The Authority shall be notified whenever work is to begin or is to be resumed on this Contract. Authorized representatives of the Authority shall be permitted access to all points of the work during the Contractor’s or subcontractors’ working hours. All work shall be subject to inspection and shall be pursued in a systematic manner. The presence of the Inspector shall not lessen the obligation of the Contractor or applicable subcontractor for performance of his work in accordance with the Contract requirements, or be deemed a defense on the part of the Contractor or subcontractor for infraction
thereof. The Authority shall have the right to reject all material and workmanship which does not fully conform to the Contract or approved Procedures and Test Specifications.

D. The Authority reserves the right to inspect and approve each component and any completed part of the work before similar work is undertaken by the Contractor. Any discrepancies or variations from the Contract Specification and/or drawings, except those previously approved, which inspection may reveal, shall be corrected prior to proceeding with the additional systems, subsystems or components, or the installation of new systems on the Pilot Cars. This First Article approval procedure shall be continued until the vehicle is completed and approved by the Authority. The first married pair of cars for the Orange Line and Red Line Vehicles as defined by Contract Specification thus completed shall be designated as the Pilot Cars. The first three married pairs for each line of cars shipped to the Authority shall be designated as the Pilot Consist.

E. Refer to T 19.05 for further FAI requirements.

C5.20 VEHICLE INSPECTIONS AND TESTS

A. All work done and all material furnished under this Contract shall be in full accordance with the Contract and Contract Specification and shall be subjected to thorough inspection.

B. The Authority shall be notified whenever work is to begin or is to be resumed on this Contract. Authorized representatives of the Authority shall be permitted access to all points of the work during the Contractor’s or applicable subcontractors’ working hours. All work shall be subject to inspection and shall be pursued in a systematic manner. The presence of the Inspector shall not lessen the obligation of the Contractor or Subcontractor for performance of his work in accordance with the Contract requirements, or be deemed a defense on the part of the Contractor or Subcontractor for infraction thereof. The Authority shall have the right to reject all material and workmanship which does not fully conform to the Contract or approved Procedures and Test Specifications.

C. If, during the Car’s manufacture, the Authority finds any item which is not in accordance with the Contract, no further or similar non-conforming work shall be done by the Contractor or the Subcontractor. The Contractor shall submit pertinent data for the Authority’s review and approval of said item. The Authority shall endeavor to respond promptly within ten (10) working days of its receipt. The Authority’s approval shall not be unreasonably withheld.

D. The Authority reserves the right to inspect and approve each component and any completed part of the work before similar work is undertaken to comply with the manufacturing schedule. Any discrepancies or variations from the Specifications and/or drawings, except those previously approved, which inspection may reveal, shall be corrected prior to proceeding with the additional systems, subsystems or components, or the installation of new systems.
E. Further information about the Authority’s resident inspectors at the Contractor’s manufacturing and assembly site(s) can be found in Section C4.06.
SECTION C - PART C6.00
DELIVERY AND ACCEPTANCE OF MATERIALS, VEHICLES, AND SPARE PARTS

C6.01 QUALITY OF SUPPLY

The Contractor shall furnish all materials required for the furnishing and delivery of Vehicles and Capital Spare Parts and other items in accordance with the Contract, and the materials shall meet the requirements of the Contract Specification and Other Contract Provisions for the kind of applications involving its use. Unless otherwise provided, only quality materials which are generally accepted in the industry and conform to the requirements of these Contract Specification shall be used in the work.

C6.02 TRADE NAMES AND ALTERNATIVES

A. For convenience in designation in the Contract Specification certain articles or materials to be incorporated in the work may be designated under trade names or the names of manufacturers and its catalog information.

B. Except in these instances where used in a particular project, either completed or in the course of completion, the use of an alternative article or material which the Contractor represents to be of at least equal quality and of the required characteristics for the purpose intended shall be permitted subject to all of the following requirements.

1. It is not the intent of the Contract Specification to have the Contractor seek acceptance from the Authority for the various interchangeable items of different manufacture that are normally stocked and used by the Contractor. It is the intent of the Contract Specification that alternative materials for major items of equipment, herein specified, be acceptable to the Authority.

2. The burden of proof as to the quality and suitability of alternatives shall be upon the Contractor and the Contractor shall furnish all information necessary as required by the Authority at no additional cost to the Authority.

3. There shall be no substitution for any accepted materials, component, design, or fabrication unless and until the proposed substitute has received written acceptance of the Authority. The Authority may require the removal of any substitute or unaccepted item which is installed by the Contractor without the written acceptance of the Authority. Any financial benefits accruing from the substitute materials, components, design, or fabrication shall be split between the Authority and the Contractor on a 70/30 – Authority/Contractor split respectively.

4. Where use of an alternative material involves redesign of or changes to other parts of the work, the cost and the time required to effect such redesign or changes shall be considered in evaluating the suitability of the alternative material. No additional cost will be paid by the Authority as a result of the Contractor's selection in using alternatives.
5. No test nor action relating to the acceptance of substitute materials shall be made until the request for substitutions is made in writing by the Contractor, accompanied by the complete data as to the equality of the materials proposed. Such request shall be in ample time to permit approval without delaying the work.

6. Whenever classifications, rating, or other certification by a body, such as UL, NEMA, or AREA, is part of the Specification for any material, Proposals for use of alternative materials shall be accompanied by reports from the listed or equivalent independent testing laboratory indicating compliance with Specification requirements.

7. The Contractor shall reasonably demonstrate that an adequate supply of materials, repair parts, and specialties of its own design and manufacture, as well as materials, repair parts, and the specialty parts of the Subcontractors, will be available promptly as the need by the Authority may arise.

C. It shall be understood that specifying a brand name, components, and/or equipment in this Specification shall not relieve the Contractor from its responsibility to produce the product in accordance with the Contract.

D. The Contractor is responsible for notifying the Authority of any inappropriate brand name, component and/or equipment that may be called for in the Contract Specification, and to propose a suitable substitute for consideration.

C6.03 STORAGE OF MATERIAL

All materials intended for use on the Vehicles shall be marked and stored in the Contractor's plant so as to be readily identified, and shall be adequately protected during handling and storage.

C6.04 VEHICLE DELIVERY CONDITIONS

A. Certificate of In-Plant Inspection and Release for Shipment

1. Unless specifically excepted by the Contract, and additionally at the sole discretion of the Authority, each Vehicle shipped from the Contractor's plant to the Authority shall be complete, ready-to-run. As a result of infrastructure limitations, the vehicles delivered under this Contract have absolute weight limits. The maximum weight for the Orange Line Vehicle is 110,000lbs, and for the Red Line Vehicle is 125,000lbs. Vehicles that exceed these maximum allowable weight limits will not be accepted.

2. Prior to the shipment of each Vehicle, the Contractor shall obtain a "Certificate of
In-Plant Inspection and Release for Shipment" signed by the Authority's Inspector, or other authorized representative at the Contractor's plant. The "Certificate" shall certify that, in the judgment of the Inspector, the Vehicle is complete and complies with the approved Contractor's drawings and samples, and other agreed upon conditions for shipment. The "Certificate of In-Plant Inspection and Release of Shipment" shall not, however, be construed nor inferred to constitute to any degree Vehicle acceptance by the Authority. The Contractor shall allow (1) working day for the Authority's Inspector to complete inspection of each vehicle prior to shipment.

3. In the event that Vehicles are complete and ready for shipment prior to the delivery dates specified in the Contract, the Contractor shall so notify the Authority. At the Authority's options, the Vehicles may be shipped.

B. Preparation for Delivery

1. All parts that must be removed to permit shipment and those items not permanently secured to the car, shall be securely boxed to prevent damage, and shipped in the locked car to which they belong.

2. If shipped by sea, all cars or components thereof, shall be enclosed to protect against damage from handling or from exposure to the Marine environment.

C. Conditions to Delivery

1. The Contractor shall complete and deliver all equipment and materials defined in the Contract, to the Massachusetts Bay Transportation Authority, Orange and Red Line Facilities or to alternate locations as designated by the Authority. All Vehicles shall be delivered in a secured and sealed condition prior to the Authority’s issuance of a receiving inspection report. The Contractor bears full responsibility for all related costs for the transport of the New Orange and Red Line Vehicles, Capital Spares, Training Aids, and related equipment as specified to the Authority’s F.O.B. destination.

2. It shall be further understood that from the time the Vehicles arrive on the Authority's property until such time as the Vehicles are accepted by the Authority for revenue service, the Contractor will be charged at the (flat labor rate of $100.00 per hour), if any work is performed on behalf of the Contractor.

3. The Contractor shall be responsible for all Vehicle related costs incurred during the "shipment", "receipt", “delivery” and retrofit, as applicable, of the Vehicles. (Addendum No. 7)
AND OPTIONS)

A. Contractor shall be bound by the delivery dates in the Contract and in required Contractor schedules approved by the Authority for the design, manufacture, testing and delivery of each Vehicle and associated Manuals, Diagnostic Test Equipment, Training Aids and other components included in Options V-XI (if exercised), including but not limited dates for First Article Inspection and completion of major hardware components, the delivery to the MBTA of the Pilot Cars; and subsequent delivery of the balance of the Vehicles on order (the “Delivery Schedule”). Quantity to be delivered shall be clearly noted.

B. Vehicles shall be delivered in accordance with the Delivery Schedule upon certification by the Engineer's authorized representative that all static testing specified in Specification No. VE-10-036 has been completed.

C. The Six (6) Orange Line No. 14 Pilot Cars configured in married pairs shall be completed at the Contractor’s facility for the Authority’s inspection, review and approval for production fleet release. Delivery of the Orange Line No. 14 Pilot Cars to the Authority shall be no later than thirty-six (36) months from Notice to Proceed.

D. Delivery of the Orange Line production fleet shall commence not later than forty-eight (48) months from Notice to Proceed at the rate of four (4) cars a month per line. Hours/Days of delivery shall be approved by the Authority.

E. The Six (6) Red Line No. 4 Pilot Cars configured in married pairs shall be completed at the Contractor’s facility for the Authority’s inspection, review and approval for production fleet release. Delivery of the Red Line No. 4 Pilot Cars to the Authority shall be no later than fifty-one (51) months from Notice to Proceed.

F. Delivery of the Base Red Line production fleet shall commence not later than 59 months from Notice to Proceed at the rate of four (4) cars a month per line. Hours/days of delivery shall be approved by the Authority.

G. During the test period for the Pilot Cars, the Contractor may continue work on other Cars at its own risk, but no additional Cars shall be shipped to the Authority until the approval of the Pilot Cars for production release.

H. Delivery of Option I Red Line Vehicles shall commence not later than one month following the final delivery base Red Line production fleet at the rate of four (4) cars a month per line. Hours/Days of delivery shall be approved by the Authority.

I. Failure to meet the delivery schedule for the Pilot Cars and all Production Cars, will result in Liquidated Damages as specified in Section C8.03 of these Documents.

C6.06 RECEIPT OF VEHICLES, SPARE PARTS AND OTHER MATERIALS

A. Receipt of Vehicles
1. Each completed Vehicle shall be received on its own wheels and in a ready-to-test condition at the Massachusetts Bay Transportation Authority, Orange and Red Line Facilities or to alternate locations as designated by the Authority. Each Vehicle will then be examined jointly by representatives of the Authority and the Contractor. The Authority will then issue a "Receiving Inspection Report" to the Contractor which will acknowledge receipt of the Vehicle and furnish appropriate notation as to its apparent "As-Received" condition. The "Receiving Inspection Report" will be signed by the Authority's representative and the Contractor's representative to attest to the stated condition of the Vehicle.

NOTE: The Contractor must advise the Authority five (5) days prior to anticipated delivery of each car to the MBTA designated location.

2. The Contractor shall refer to T 20 for details concerning post delivery/acceptance for revenue service testing.

B. Receipt of Spare Parts and Materials

1. Spare Parts and other Materials shall be received by the Authority's Receiving Department who shall prepare and sign a Receiving Report describing any missing parts or damage that may have occurred during shipment.

2. On receipt of any such report which indicates a short shipment or damaged item, the Contractor shall promptly replace any missing or damaged equipment and material to prevent delay of the project. Refer to Section C6.11 for further details for proper receipt of Capital Spares.

3. “Promptly” means in-stock items shall be shipped immediately while the re-manufacture and/or re-purchase of all other items shall be initiated without delay.

4. Notwithstanding the foregoing, the Contractor shall bear all risks of loss to each item until the same is delivered to the Authority as designated above.

C6.07 CONDITIONAL ACCEPTANCE OF VEHICLES

A. All new cars shall successfully complete all testing as specified in Technical Specification No. VE-10-036. The Pilot Cars shall also successfully complete all testing as specified in Technical Specification No. VE-10-036.

1. The Contractor shall maintain a minimum of one full-time on-site representative for technical and warranty support as well as all necessary materials to support the program during the period of Conditional Acceptance testing for all Cars to identify and resolve all deficiencies identified by the Authority and to maintain the warranty program. The Authority shall reserve the right of acceptance of all support personnel.
2. The Contractor shall assume the cost of all work related to acceptance testing, including crew costs and the cost of all repairs and defective component replacement (including labor) until the vehicles are accepted by the Authority at the Authority’s acceptance site or at a location as designed by the Authority. **Conditional Acceptance Testing is typically conducted during the third shift on overtime rates.** Note that the Authority’s current flat rate for test crew and equipment is $2,600 per 8-hour shift for dynamic train set. If additional testing warrants the use of Authority personnel as required by MBTA Operating and/or Safety Regulations, the Contractor shall be responsible for reimbursement of the stated additional individual(s) at the flat labor rate of $100.00 per hour.

This serves to address any and all reference(s) to the subject of flat rates cited in the Contract, in particular, without limitation, the following Sections:

Sections C6.07A2, C6.07A3, and C6.07C3

Section C6.04C2

Sections C4.01C, C4.02D, C4.02H

The Warranty shall commence upon Conditional Acceptance in accordance with Section C4.02 except for those parts requiring corrective action.

3. In addition to the foregoing costs, it shall be understood that retrofit or modification work will be performed by the Authority and shall be back-charged to the Contractor at the Authority’s **established flat labor rate of $100.00 per hour.** It shall be further understood that from the time the cars arrive on the Authority’s property and until such time as the cars are accepted by the Authority, the Contractor shall be back-charged, at the established flat rate for all work the Authority performs on behalf of the Contractor.

B. Should the Authority experience delays in its Conditional Acceptance program attributable to the Contractor because of defective materials, workmanship or design, the Contractor shall not be permitted to stockpile cars which have not been accepted on the Authority’s property pending resolution of the problems unless so agreed to by the Authority. **No more than eight (8) unaccepted cars per line shall be permitted to be delivered by the Contractor to the Authority.** Any delays in delivery of the cars that result from delays in the Conditional Acceptance program attributable to the Contract shall be grounds for Liquidated Damages under Section C8.03, and may constitute grounds for a default by the Contractor under the Agreement. (Addendum No. 3)

C. If, during Conditional Acceptance inspection, the Authority determines that a car(s) is (are) suitable for operation in revenue service, but that it is not totally responsive to the Specification requirements such that substantial delay might be incurred in implementing required corrective action(s), the Authority may, at its discretion, issue a "Certificate of Conditional Acceptance" for the car(s) for mutual execution by the Authority and the
Contractor. Such conditionally accepted cars shall then be available to the Authority for use in revenue service until such time as the Contractor is able to initiate and execute the necessary correction action(s).

1. Such "Conditional Acceptance of a car(s)" shall not negate the Contractor's eligibility for achieving a milestone payment in accordance with the Schedule of Partial Payments (Section C10.01B).

2. Warranty shall commence upon Conditional Acceptance in accordance with Section C4.02 except for those parts requiring corrective action. The warranty of such parts shall commence when such parts are installed and tested to the satisfaction of the Authority.

3. In addition to the foregoing costs, it shall be understood that retrofit or modification work will be performed by the Authority and shall be back-charged to the Contractor at the flat rate of $100.00 per hour. It shall be further understood that from the time the cars arrive on the Authority's property and until such time as the cars are accepted by the Authority, the Contractor shall be back-charged, at the flat labor rate of $100.00 per hour for all work the Authority performs on behalf of the Contractor.

C6.08 FINAL ACCEPTANCE OF VEHICLES

A. When all corrective actions and retrofits, if any, have been fully completed, and the car is considered by the Authority to be in full compliance with the Contract, the final Certificate of Acceptance will be executed by the Contractor and the Authority.

B. Acceptance on behalf of the Authority will be made in writing.

C6.09 WARRANTIES, GUARANTEES, INSTRUCTION SHEETS AND PARTS LIST

Manufacturer's warranties, guarantees, instruction sheets, and parts list, which the Engineer requires to be furnished, shall be delivered to the Engineer before conditional acceptance of the Pilot Cars. This requirement shall in no way relieve the Contractor of its obligations under Section C4.02.

C6.10 TRAINING AIDS

A. The Contractor shall refer to T 22 regarding Training Aids requirements.

B. Shipment of Training Aids, including the Option XI Training Simulator (if exercised) shall be so coordinated that they are delivered and in operating condition for training purposes in accordance with the training schedule and prior to the delivery of the Pilot Cars. The delivery schedule for Training Aids shall be reviewed and approved by the Technical Project Manager.
C. If Training Aids are required for operators during Pilot Car Testing, the Contractor shall make the necessary arrangements with the Authority to assure proper operational service/maintenance procedures.

D. Delivery of Training Aids shall be made to the Authority at one or more Boston area sites to be designated in the future. Notwithstanding the foregoing, the Contractor shall bear all risk of loss to each unit until the same is delivered to the Authority.

C6.11 SPARE PARTS (BASE CONTRACT AND OPTIONS)

A. General

The Contractor shall make all reasonable efforts to ensure the availability of replacement parts for these cars for a minimum of fifteen (15) years after the date of acceptance. Spare parts shall be interchangeable with the original equipment and shall be manufactured in accordance with the Quality Assurance Provisions of this Contract.

Should a part not be available through the Contractor for which there is no competitive equivalent available in the marketplace, the Contractor agrees to assist the Authority with drawings and specifications to facilitate component procurement by the Authority.

All Spare Parts, Capital Spares, and Consumable Spare Parts shall adhere to the following bar code requirements. All bar codes will be in Code 39, (according to ANSI standards). All assemblies, subassemblies and components shall have an identification label, which contains a part number, serial number, and bar code of vendor part number and sequential serial number. The label life expectancy shall be the same as the part to which it is attached. Each spare part or other material shall be clearly and precisely labeled. The Contractor shall notify an individual designated by the Authority, prior to shipment of any item, i.e., spares, Portable Test Units, manuals, etc.

As a result of any design modifications confirmed and approved during Advance Car testing, the Authority reserves the right to modify the unit price of individual Capital Spare Parts, in accordance with Section C11.00, as required. It is the Authority’s intent to minimize the need to retrofit Capital Spares. Any retrofit, if so required, is to be implemented at the Contractor’s expense prior to delivery to the Authority.

B. Delivery of Capital Spares

1. Delivery of the Capital Spares shall be made to the Authority in the Boston area at one or multiple sites to be designated in the future. Notwithstanding the foregoing, the Contractor shall bear all risk of loss until the units are delivered to the Authority.

Delivery details shall include the following:
a. Part Number(s) information and Vendor/Manufacturer/Supplier name if not directly produced by the Prime Contractor.

b. Unit price per line item.

Note: If providing spares or any parts under the designation “Vehicle Car Set (CS)”, the Contractor shall provide details (part numbers, vendor source, line item quantities, unit pricing of line items and other relevant data) for the purpose of the Authority’s asset inventory reconciliation.

2. Upon completion of the Pilot Train’s acceptance testing and Conditional Acceptance for revenue service in Boston, the Contractor shall submit for the Authority’s approval, a delivery schedule for the Capital Spares as identified in Section B Part A Item 2 and Option I Capital Spares and Additional Capital Spares Option IV (if exercised). The Authority reserves the right to adjust the quantities for Capital Spares listed in Section B Part A Item 2, Option I and Option IV within a thirty-six (36) month period from NTP. In preparing the delivery schedule, Contractor will consult with the Authority as to the number of units for each Capital Spare it elects to purchase. (Addendum No. 7)

For Orange Line Cars, all Capital Spares that are unique to the Orange Line plus 67% of Capital Spares that are interchangeable between Lines are due within two (2) years of Conditional Acceptance of the Orange Line Pilot Car but shall be delivered commensurate with the number of cars delivered. For Red Line Cars in the Base Contract, all Capital Spares that are unique to the Red Line plus 33% of Capital Spares that are interchangeable between Lines are due within two (2) years of Conditional Acceptance of the Red Line Pilot Car but shall be delivered commensurate with the number of cars delivered. For Additional Red Line Cars purchased under Option I, all Option I Capital Spares are due at dates that are commensurate with the number of additional cars delivered.

3. Capital Spare Parts shall be interchangeable with their corresponding part numbers. All spare parts shall be reconfigured to the latest revision during the Warranty Period. The Contractor shall make all efforts to have available at least two U.S. sources for spare parts.

a. Packaging shall consider the reliability of the parts and the requirements for inspection and inventory (e.g., the packaging selected to highly reliable parts shall be such that the parts can be identified, inspected, stored for long periods, and endure multiple inventories.

C. Consumable Spare Parts: The Contractor shall submit, two months after the approval of the design for the Pilot Cars, a list of recommended Consumable Spare Parts. This list shall detail parts required to maintain the fleet, identifying the vendor's name and address, vendor part number, full part description, unit cost, anticipated lead time, and estimated annual usage and include both inventory and non-inventory items.
D. **Master Recommended Spare Parts List.** Prior to the delivery of the first Pilot Car, the Contractor shall submit a master recommended spare parts list which include the following:

   a. Grouping by system, subsystems, as applicable for stocking identification.

   b. Generic name, trade name, description, Offeror’s/Contractor’s part number, contract price, manufacturer/vendor/supplier’s names and part numbers (if not directly produced by Prime Contractor), drawing references, and correlation with maintenance manuals.

   c. Correlation of recommended quantities with reliability requirements and lead time basis of the following classifications:

      - **Wear** - Parts that may be expected to require regular replacement under normal maintenance schedules

      - **Consumables** - Parts with an expected life of less than one year/based upon expected annual mileage of 80,000 miles per Car

      - **One Shot** - Parts that normally require replacement after performing their function one time

      - **Long Lead** - Parts that are not readily available from distributors or manufacturers

      - **Exchange Assemblies** - Assemblies that will be exchanged with failed units (or units that are not responding as specified) on the supplied equipment and that must be inventoried as complete assemblies

   d. A cross-reference and indexing system for replacement components common to more than one system (subsystem). Such components shall have only one part number.

E. Contractor shall be prepared to support the Pilot Car testing as provided in the Contract Specification with appropriate spares and/or other materials, as required.

F. Acceptance or rejection or each item of the Capital Spare Parts and Consumable Spare Parts shall be made within thirty (30) days of the receipt of each item.
SECTION C - PART C7.00
LEGAL REQUIREMENTS AND RESPONSIBILITY TO PUBLIC

C7.01 PERMITS AND LICENSES

The Contractor shall procure all permits and licenses in producing the end product, pay all charges, fees, and taxes, and give all notices necessary and incidental to the due and lawful prosecution of this Procurement.

C7.02 PAYMENT OF TAXES

A. No Federal Excise Tax shall be imposed, including any tax on transportation.

   1. The Authority is exempt from Massachusetts sales tax and shall furnish the Contractor with the necessary executed tax exemption certificates and certificate exemption number.

B. Contract price shall be inclusive of all compensation for rates and transportation charges which the Contractor is required to pay.

C7.03 CONFLICT OF INTEREST

A. It is understood and agreed that no gift, loan or anything of value has been or shall be given to any employee, agent or officer of the Authority in connection with the award or performance of this Contract.

B. It is further understood and agreed that no employment shall be made; and no renting, leasing or purchasing of equipment, supplies, or materials shall be arranged or made with or through any employee, agent, or officer of the Authority by the Contractor.

C. It is the responsibility of each Offeror to insure compliance with the Massachusetts Conflict of Interest Law, M.G.L. c. 268A and provide the required Conflict of Interest Certification with its proposal.

C7.04 PERSONAL LIABILITY OF AUTHORITY OFFICIALS

In carrying out any of the provisions of the Contract, or in exercising any power or authority granted to them by or within the scope of the Contract, there shall be no liability upon the Board of Directors, the Director of Materials Management (or designee), or authorized representatives thereof, either personally or as officials of the Authority, it being understood that in all such matters they act solely as agents and representatives of the Authority.
C7.05 PASSING OF TITLE AND RISK OF LOSS

A. Risk of loss or damage with respect to equipment or material covered by the Contract shall pass to the Authority upon receipt by the Authority, unless the loss or damage is determined to be the direct result of faulty workmanship by the Contractor or by faulty material supplied by the Contractor.

B. Title to materials to be furnished by the Contractor and incorporated into the vehicles covered by the Contract shall only pass to the Authority upon Conditional Acceptance in accordance with the Milestone Payment Schedule. Any (Conditional) Acceptance for revenue service does not relieve the Contractor of liability to correct defects as required by the Contract.

C. Title to the Authority's equipment shall remain in the Authority and shall not be divested by any repairs that may be made to the property of the Authority.

C7.06 JURISDICTION

A. This Contract shall be construed and shall operate according to the laws of the Commonwealth of Massachusetts.

B. The Contractor shall conform to all laws and regulations of the Commonwealth of Massachusetts and the Federal Government, as applicable to the Contract. (Add. No. 3)

C. It is further agreed between the parties hereto, that the Contractor, wherever incorporated and wherever allowed to do business, shall, in the event of any misunderstanding of the construction of the language contained in the Contract, violations of the terms of the Contract, and/or claims against the Authority, restrict its actions in seeking relief, recompense or damages to the processes in the venue of the Commonwealth of Massachusetts. No other action against the Authority, including the foregoing, shall be commenced in any other jurisdiction.

C7.07 LAWS TO BE OBSERVED

A. The Contractor should remain fully informed of all state and national laws, municipal ordinances, regulations, and decrees of bodies or tribunals affecting those engaged or employed in the work, materials used in the work, or any way affecting the conduct of the work.

B. If any discrepancy or inconsistency is discovered in the Contract in relation to any Federal/State/Local law, ordinance, regulations, order or decree; the Contractor shall forthwith report the same to the Authority in writing.

C. The Contractor shall at all times observe and comply with and shall cause all its agents,
employees and Subcontractors to observe and comply with, all existing Federal/State/Local laws, ordinances, regulations, orders, and decrees.

D. The Contractor, if a foreign corporation (a corporation established, organized or chartered under laws other than those of the Commonwealth of Massachusetts) shall comply with the provisions of Chapter 156D §§ 15.01 et seq. of the General Laws as amended, including but not limited to:

1. Service of process in all actions and proceedings against a foreign corporation may be served upon the Secretary of State of the Commonwealth of Massachusetts in accordance with M.G.L. c. 156D § 15.10.

2. A foreign corporation shall, not later than 10 days after it commences transacting business in the Commonwealth, deliver to the Secretary of State a certificate for filing. The certificate filed must comply with M.G.L. c. 156D § 15.03.

3. A foreign corporation authorized to do business in the Commonwealth a registered office and a registered agent within the Commonwealth in accordance with M.G.L. c. 156D § 15.07.

4. The contractor shall file with the Authority a certificate from the Secretary of State for the Commonwealth of Massachusetts stating the contractor has complied with Chapter 156D and the date of compliance.

E. Other out-of-state business organizations, such as an individual proprietorship, partnership, etc., shall appoint an agent in this Commonwealth for the service of legal process and furnish a copy of such appointment to the Secretary of State for the Commonwealth of Massachusetts prior to the issuance of a Contract by the Authority.

F. The Contract shall provide that changes in the Contract work which are necessitated by laws or regulations which are enacted or promulgated after the date of proposal submittal shall constitute Contract changes in accordance with the change order provision of the Contract (See Section C11.00).

G. The Contractor shall fully comply, to the extent required by law, with Chapter 521 of the Acts of 1990, § 7, as amended by Chapter 329 of the Acts of 1991 and the Massachusetts Executive Office of Health and Human Services - Office for Children - Regulation 102 CMR 12.00, and shall provide the required Certification of Compliance with Regulation 102 CMR 12.00 Dependent Care Assistance Program Including Child Care with its proposal.

This law effective July 1, 1992, is being administrated jointly by the Commonwealth of Massachusetts Office for Children (OFC) and the Department of Procurement and General Services (DPGS). Any inquiries addressing general information may be addressed to the Department of Procurement and General Services.
H. All information provided with respect to the Contract shall be handled as confidential information in accordance with Massachusetts Public Records Laws, M.L.G. c. 66, section 10. The receiving party will not use any confidential information of the disclosing party for any purpose not expressly permitted by the Contract, and will disclose the confidential information of the disclosing party only to those parties, including employees, contractors, subcontractors, suppliers and agents of the receiving party who have a need to know such confidential information for purposes of the Contract and who are under a duty of confidentiality no less restrictive than the receiving party’s duty hereunder. The receiving party will protect the disclosing party’s confidential information from unauthorized use, access, or disclosure in the same manner as the receiving party protects its own confidential or proprietary information of a similar nature and with no less than reasonable care.

Each party’s obligation with respect to the confidential information of a disclosing party shall expire seven (7) years after the termination or expiration of this Contract or as required by law in the case of Nonpublic Personal Information, as defined in Title V of the Gramm-Leach-Biley Act of 1999, Pub. L. 106-102; provided, however, that each party’s obligations with respect to the trade secrets of a disclosing party shall remain in effect throughout the term and at all times thereafter, but only for so long as such information remains a trade secret.

C7.08 INDEMNIFICATION

The Contractor shall indemnify, defend, and save harmless the Authority and all its officers, agents, and employees against all suits, claims, or liability of every name and nature, for or due to any injuries to persons or damage to property to the extent arising out of or in consequence of the acts of the Contractor in the performance of the work covered by the Contract or failing to comply with the terms and conditions of the Contract, whether by the Contractor or the Contractor’s employees or Subcontractors.

C7.09 INSPECTION AND AUDIT

The Authority shall have access to the site of construction/manufacture/assembly and shall have the right to inspect all work under this Contract.

The Authority reserves the right to audit compliance by the Contractor of all Contract requirements including but not limited to the U.S. Domestic Contact and Massachusetts Final Assembly requirements in Sections C7.17 and C7.18.
C7.10 MISCELLANEOUS PROVISIONS

A. Choice of Law/Venue

Except as otherwise set forth herein, this Contract shall be governed and construed in accordance with the laws of the Commonwealth of Massachusetts. All actions, whether sounding in contract or in tort, relating to the validity, construction interpretation, and enforcement of this Contract shall be instituted and litigated in the United States District Court for the District of Massachusetts or Suffolk County Superior Court, Commonwealth of Massachusetts and in no other. In accordance herewith the parties to this Contract submit to the jurisdiction of the courts of the Commonwealth of Massachusetts.

B. Non-Waiver

The failure of the Authority at any time to insist upon a strict performance of any terms, conditions and covenants herein shall not be deemed a waiver of any subsequent breach or default of the terms, conditions, and covenants herein contained.

C. Prohibitive Interests

No Board Member, officer or employee of the Authority, officer or employee of any independent authority or political subdivision of the Commonwealth of Massachusetts, officer, employee or elected official of the Commonwealth of Massachusetts, officer, employee or elected official of any city, county or town within the Commonwealth of Massachusetts, officer, employee or elected official of any city, county or town authority within the Commonwealth of Massachusetts, during his/her tenure and for one (1) year thereafter shall have any interest, direct or indirect, in this Contract or the proceeds thereof.

No member of or delegate to the Congress of the United States shall be admitted to any share or part of this contract or to any benefit arising there from.

D. INTENTIONALLY OMITTED

E. Entire Agreement

This Contract sets forth the entire and integrated agreement between the Authority and the Contractor, and there are no covenants, promises, agreements, conditions or understandings, either oral or written between them other than set forth in this Contract.

F. Severability
If any term, condition, provision or paragraph of this Contract shall be held illegal, unenforceable, invalid or in conflict with any law governing performance under this Contract, then at the option of the Authority, this Contract shall remain in full force and effect as if such illegal, unenforceable, invalid or conflicting term, condition, provision or paragraph were not contained therein and the remainder of the Contract shall remain in full force and effect.

G. **Headings Not Binding**

The headings appearing at the beginning of the Articles, paragraphs or subparagraphs in this Contract have been inserted for identification and reference purpose only.

H. **Legal Address of Contractor**

Any notice of communication to the Contractor shall be deemed serviced if delivered to the Contractor or to the Address named in the Proposal, or if deposited in the U.S. Post Office, postage prepaid, addressed to the Contractor as aforesaid; and the date of service shall be the date of such delivery, or, if mailed, five (5) days after such mailing; provided, however, that any notice of default shall be sent by certified mail.

I. **GENERAL TERMS**

**Assignment.** Neither this Agreement nor any rights granted hereby may be assigned by the Contractor without the prior written consent of the Authority. Any attempt by the Contractor to assign any rights, duties or obligations without the requisite consent shall be void and without force or effect. Contractor hereby certifies, covenants and agrees that all work to be performed in accordance with the Contract shall be performed only at the locations and only by the staff previously identified to the Authority at the time of the submittal of the Proposal as being under the control of the Contractor. No work shall be performed at any other location or by any other staff without the prior written approval of the Authority, notwithstanding and without regard to any changes in the organizational structure of the Contractor, including without limitation, any acquisition, merger, combination or other business reorganization.

**Modification.** This Agreement can only be modified by a written agreement duly signed by persons authorized to sign agreements on behalf of the Contractor and of the Authority, any variance from the terms and conditions of this Agreement and in any order or other written notification given by either party shall have no force or effect.

**Relationship of Parties.** The Authority and the Contractor will be and shall act as independent contractors, and neither party is authorized to act as an agent or partner of, or joint venture with, the other party for any purpose. Neither party by virtue of this Agreement shall have any right, power, or authority to act or create any obligation, express or implied, on behalf of the other party.
The Contractor shall furnish labor that can work in harmony with all other elements of labor employed or to be employed at the Authority.

The Contractor shall prepare and submit a Workforce Plan which shall include the Contractor’s plan for the solicitation and hiring of Massachusetts facility workforce and shall confirm that the Contractor will pay rates of wages and benefits comparable to the wages and benefits paid to workers holding comparable positions in the region in which the facility is located. The Workforce Plan will recognize the importance of developing a diverse workforce that reasonably reflects the demographics of the community.

The Contractor agrees that all persons employed by it to manage or work on the Authority’s premises shall conduct themselves at all times in an orderly and proper manner so as not to annoy or offend persons using said premises or employees of the Authority; and, further, that the Contractor at the request of the Authority will, for cause shown, remove from the contracted work, any employee who shall cause any annoyance or offense as aforesaid. The Contractor further covenants and agrees that, in the exercise of the rights and privileges granted, its employees or representatives will not deface or damage the property of the Authority, deposit or scatter any rubbish, debris, waste, litter, or other matter in or about said premises. The Contractor agrees to assume liability for such actions on the part of its employees except to the extent caused by the Authority’s or its employees, agents or representatives’ negligence or willful misconduct.

The Contractor will pay their workers working on the Authority’s property and on Contractor’s property in Massachusetts, no less than the prevailing rates of wages and fringe benefits for their trades as published by the Massachusetts Department of Labor and Industries, as well as all other applicable labor laws.

J. INTENTIONALLY OMITTED

K. Asbestos

The MBTA has implemented an asbestos abatement program; therefore, it is the Authority's policy that asbestos-containing materials shall not be employed in future construction, vehicle renovation, repair and maintenance projects unless it can be proved unequivocally by the manufacturer or contractor that no suitable asbestos-free product exists.

L. Right to Know Clause

The Contractor agrees to submit a Material Safety Data Sheet (MSDS) for each toxic or hazardous substance, or mixture containing such substance, pursuant to M.G. L. c. 111F, and the regulations contained in 310 CMR §§ 33.00 et seq. when deliveries are made. The Contractor agrees to deliver all containers properly labeled pursuant to M.G.L. c. 111F and regulations contained in 310 CMR §§ 33.00 et seq. Failure to submit an MSDS
and/or label on each container will place the Contractor in breach of the Contract.

Copies of MSDS are to be sent in duplicate to MBTA at:

1. MBTA Safety Department
   Attn: Industrial Hygienist
   21 Arlington Avenue, Bldg. 2
   Charlestown, MA 02129

2. MBTA Everett Stores
   Attn: MSDS
   80 Broadway
   Everett, MA 02149

M. Drug and Alcohol Free Workplace Requirement

All Contractors, Contractors' employees, vendors, visitors and volunteers are to be free of the effects of illegal drugs and alcohol, controlled substances, or other prohibitive substances, when they are on MBTA property performing MBTA business. In addition, all referenced parties are prohibited from using, possessing, selling or distributing any illegal drugs or alcohol, controlled substances or other prohibited substances when they are on MBTA property or performing MBTA business.

It is the responsibility of the Contractor to advise their employees of this requirement and to ensure that employees meet this "fitness for duty" standard. Violators of this policy will not be allowed to remain on MBTA property or to continue conducting business for or with the MBTA.

Contractors' employees, who violate this policy are to be removed from performing any work on this Contract and are not to be employed on any other MBTA contract.

Subject to any limitations or exclusions required by any applicable law regarding privacy and Contractor’s privacy policies, the Contractor will furnish the MBTA a written report documenting the actions taken with regard to any of its employees who violate this policy, within thirty (30) days of the violation.

The Contractor will accept all liability arising from violation of this policy by his/her employees except to the extent caused by the Authority or its employees’, agents’ or representatives’ negligence or willful conduct.

N. INTENTIONALLY OMITTED

O. Debarment and Suspension

The Contractor will meet the requirements of 2 CFR Part 180 and 2 CFR Part 1200 related to Debarment, Suspension, Ineligibility and Voluntary Exclusion throughout the period of the Contract. The Contractor shall not enter into a subcontract or supplier for materials or services in excess of $25,000 at any tier with any party which is debarred or suspended or is otherwise excluded from or ineligible for participation in Federal assistance programs. (Addendum No. 8)
RFP NO. CAP 27-10  NEW ORANGE AND RED LINE VEHICLES  C7-9

P.  INTENTIONALLY OMITTED

Q.  INTENTIONALLY OMITTED

R.  Hiring of MBTA Retirees

The Contractor shall comply with the MBTA’s Hiring of Retirees Policy. The MBTA’s Hiring of Retirees Policy prohibits the Authority from contracting with an MBTA retiree or an employment agency for the MBTA retiree’s direct services. In addition to the Certification requirements provided in Section B Part B, the Contractor is required to provide immediate notification of the arrival or departure of all MBTA retirees, and periodic updates upon request by the MBTA, throughout the life of the Contract.

C7.11 SECURITY REQUIREMENTS

Contractor shall comply with the MBTA’s Security Requirements as stated herein subject to any limitations, restrictions or exclusions required by any applicable law. Upon execution of the Contract and no later than completion of the first Milestone in Section C10.01B, the Contractor shall:

A.  Submit a complete list of Contractor’s employees, subcontractors, and agents that will perform work on the MBTA’s property for the MBTA under this Contract. At a minimum, the list shall include:

- Name and Employee Number/Identifier
- Address
- Job Title
- Hours and location of work.

Note: Immediate notification, in writing, is required for listed employees, subcontractors, and agents who leave Contractor’s (direct or indirect) employment and/or any new employees, subcontractors or agents who are to be added to this list. Contractor is required to provide, upon request by the MBTA, periodic updates of the list throughout the life of the Contract.

B.  Conduct for all current and future employees performing work on the MBTA’s property under this Contract, a legally available criminal background check, including a Criminal Offender Record Information (CORI) background check with the Massachusetts Criminal History Systems Board and a Driver’s History Check with the Massachusetts Registry of Motor Vehicles (if applicable). The CORI check shall include a Level II Sex Offenders Registry check. To the extent not already available to the Contractor, the Contractor shall apply for and make best efforts to obtain CORI access. The Contractor shall provide written documentation to the Authority that demonstrates the Contractor’s compliance with the aforementioned requirements. Furthermore, the Contractor shall conduct these
background and driver history checks at least once every two (2) years, or as otherwise specified by the MBTA. Any employee of the Contractor’s with a history that includes a felony conviction, any conviction for theft, or who appears otherwise unsuitable to perform the work that is the subject of this solicitation throughout the term of this agreement or any extensions thereof, shall not be assigned by the Contractor to perform work under this agreement.

The MBTA reserves the right to have MBTA Transit Police perform the required background checks, and shall promptly notify the Contractor in writing of any such action.

C. Distribute an MBTA-issued photograph identification badge to all Contractor employees, subcontractors, and agents who work on MBTA property. The badge shall have the name and a recent photograph of the employee, subcontractor or agent (i.e., within last three (3) years). The following information shall be listed on the back of the identification badge: training Certifications, safety training, and other related security training required by the MBTA. No employee, subcontractor or agent of the Contractor will be allowed on MBTA property without wearing the MBTA-issued identification badge.

D. Insure that Contractor’s employees, subcontractors, and agents:

Are not allowed on MBTA property except as required for stated work;

Are not allowed on MBTA property before and after service hours unless explicitly, contractually required to be there; and

Are forbidden from carrying firearms on MBTA property.

E. Provide to the MBTA, upon its request, any documents that pertain to:

Contractor employee, subcontractor or agent conduct on MBTA property;

Security training; and

Monitoring/auditing of Contractor employees or agents while on MBTA property.

F. If, at any time during the term of this agreement, and also during any and all extensions thereof, the MBTA establishes new or revised security policies and procedures as they relate to the Contractor’s performance under this agreement, the Contractor shall comply with such policies and procedures as deemed reasonable by the MBTA and the Contractor.
G. The MBTA takes serious the retention of sensitive customer information critical to the business viability of the Authority. Moreover the protection of this information is paramount because of the ever-present threat of theft and/or identity fraud. AS the Authority and its Contractors implement, upgrade and extend their information technology systems and resources, they shall do so with respect to all applicable laws, regulatory compliance and best practices to maintain the confidentiality, integrity, and availability of sensitive customer information. Additionally, the Contractor shall create an Information Privacy and Security Policy to be approved by the MBTA.

C7.12 LIMITATION OF LIABILITY

In no event shall the Contractor be liable to the Authority for any indirect, special, incidental or consequential damages except to the extent that any such damages are included in liquidated damages and/or any such damages are recoverable under such policies of insurance required to be carried by the Contractor. (Addendum No. 7)

C7.13 RIGHT-OF-WAY SAFETY TRAINING REQUIREMENTS

The Contractor will comply with the MBTA Safety Training Requirements as stated herein. All contract employees working on MBTA property that is within twenty-five (25) feet of on the Right-of-Way shall attend the MBTA’s eight (8) hour Right-of-Way Safety Training held at a MBTA facility in Boston. Successful completion of this training program will be valid for a period of two (2) years. Personnel receiving proper safety training by the MBTA will be issued a security badge with the proper safety training designation. The Contractor shall ensure that its employees, subcontractors, and agents intended to work on MBTA property near or on the Right-of-Way under this Agreement will not enter upon MBTA property until they have received the requisite safety training.

C7.14 ACCESS TO RECORDS

A. The Contractor agrees to provide the Authority access to any books, documents, papers and records in of the Contractor in electronic or hard copy form which are directly pertinent to this Agreement for the purposes of making audits, examinations, excerpts and transcriptions.

B. The Contractor agrees to permit the Authority to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

C. The Contractor agrees to maintain all books, records, accounts and reports required under this Agreement for a period of not less than three years after the date of termination or expiration of this Agreement, except in the event of litigation or settlement of claims arising from the performance of this Agreement, in which case Contractor agrees to
maintain same until the Authority has disposed of all such litigation, appeals, claims or exceptions related thereto.

C7.15 EQUAL EMPLOYMENT OPPORTUNITY / AFFIRMATIVE ACTION

A. The MBTA is committed to Affirmative Action and Equal Opportunity and expects Offerors to adopt, at minimum, the same level of commitment to equal opportunity and the creation of a diverse workforce that is inclusive of minorities and women.

1. In connection with the execution of this Contract, the Contractor shall not discriminate against any employee or applicant for employment because of race, color, sex, national origin, religion, age, disability or veteran status.

2. The Contractor shall take affirmative action to insure that applicants are employed, and that employees are treated during their employment without regard to race, age, religion, color, sex, national origin, disability or veteran status.

3. Such actions shall include, but not be limited to the following; employment, upgrading, demotion, or transfer; layoff, or termination; rates of pay, or other forms of compensation; and selection for training, including apprenticeship.

4. The Massachusetts Bay Transportation Authority is an equal opportunity employer. Upon request, the Contractor shall provide certification(s) of compliance with Federal and State Equal Opportunity Laws.

B. Contract Assurance

The Offeror and its consultants, contractors, subconsultants, and suppliers shall not discriminate on the basis of race, color, national origin, sex, or other protected category as defined by Massachusetts law in the performance of this Contract or any contracts funded in whole or in part with financial assistance from the Commonwealth of Massachusetts.

The Offeror shall take all necessary and reasonable steps to ensure nondiscrimination in the award and administration of contracts funded in whole or in part with financial assistance from the Commonwealth of Massachusetts.

C7.16 MINORITY AND WOMEN OWNED BUSINESS ENTERPRISE PARTICIPATION (M/WBE)

The M/WBE participation documentation and associated forms: the M/WBE Utilization Form, M/WBE Participation Schedule, M/WBE Letter of Intent, and M/WBE Affidavit, along with the Contractor's approved M/WBE Plan are incorporated by reference into the Contract.
Upon award of the Contract and on a quarterly basis thereafter, the Contractor must submit executed subcontracts or purchase orders to the MBTA for all M/WBE identified on the M/WBE Participation Schedule.

A. Purpose

It is the policy of the Commonwealth and the MBTA to promote equity of opportunity in state contracting; and, to that end, to encourage full participation of minority and women owned businesses in all areas of state contracting. It is the MBTA’s intention to create a level playing field on which minority and women owned businesses can compete fairly for contracts. It is also the MBTA’s goal to:

- Ensure nondiscrimination in the award and administration of contracts funded in whole or in part with financial assistance from the Commonwealth of Massachusetts;

- Ensure efforts to promote contracting with minority and women owned businesses are narrowly tailored in accordance with applicable law;

- Help remove barriers to the participation of minority and women owned businesses in contracts funded in whole or in part with financial assistance from the Commonwealth of Massachusetts; and

- Assist in the development of minority and women owned firms that can compete successfully in the marketplace.

B. M/WBE Participation

The Authority strongly encourages the use of Minority Owned and Women Owned Business Enterprises (M/WBE) as consultants, contractors, subconsultants, subcontractors, and suppliers. This is in addition to all other equal opportunity employment requirements of this Contract. The Contractor shall cooperate with the Authority to seek opportunities for M/WBE participation. The Contractor shall exercise good faith efforts to achieve this goal.

For the purposes of this Contract, the MBTA will only accept M/WBEs that are certified, at the time of Proposal opening, by the Massachusetts Supplier Diversity Office formerly known as the State Office of Minority and Women Business Assistance.

C. Termination of M/WBE Subcontractor

The Contractor shall not terminate for convenience the M/WBE subcontractor(s) listed in the M/WBE Participation Schedule and then perform the work of the terminated M/WBE subcontractor with its own forces or an affiliate, without the MBTA’s prior written consent. When a M/WBE subcontractor is terminated or fails to complete its work on the Contract for any reason, the Contractor shall make good faith efforts to find another
M/WBE subcontractor to substitute for the original M/WBE and immediately notify the Authority in writing of its efforts to replace the original M/WBE.

D. Continued Compliance

The Authority shall monitor the Offeror’s M/WBE utilization during the life of the Contract. The Offeror shall submit quarterly written reports to the Authority that summarize the total M/WBE value for this Contract. These reports shall provide the following details:

- M/WBE utilization established for the Contract;
- Total value of expenditures with M/WBE firms for the quarter; and
- Total value of expenditures with M/WBE firms from inception of the Contract.

Reports and other correspondence must be submitted to the Contracting Officer with copies provided to the Project Manager. Reports shall continue to be submitted quarterly until final payment is issued or until M/WBE participation is completed.

The Contractor shall permit the Authority to have access to necessary records to examine information as the Authority deems appropriate for the purpose of investigating and determining compliance with the M/WBE participation provisions, including, but not limited to, records of expenditures, invoices, and contract between the Contractor and other M/WBE parties entered into during the life of the Contract. All data and record(s) pertaining to M/WBE participation shall be maintained by the Contractor.

C7.17 DOMESTIC U.S. CONTENT REQUIREMENT

A. Definitions

Component means any article, material, or supply, whether manufactured or unmanufactured, that is directly incorporated into the end product at the final assembly location.

End product means any vehicle, structure, product, article, material, supply, or system, which directly incorporates constituent components at the final assembly location, that is acquired for public use, and which is ready to provide its intended end function or use without any further manufacturing or assembly change(s).

Final Assembly is the creation of the end product from individual elements brought together for that purpose through application of manufacturing processes. If a system is
being procured as the end product, the installation of the system qualifies as final assembly.

*Manufactured product* means an item produced as a result of the manufacturing process.

*Manufacturing process* means the application of processes to alter the form or function of materials or of elements of the product in a manner adding value and transforming those materials or elements so that they represent a new end product functionally different from that which would result from mere assembly of the elements or materials.

*Rolling stock* means transit vehicles such as buses, vans, cars, railcars, locomotives, trolley cars and buses, and ferry boats, as well as vehicles used for support services.

*System* means a machine, product, or device, or a combination of such equipment, consisting of individual components, whether separate or interconnected by piping, transmission devices, electrical cables or circuitry, or by other devices, which are intended to contribute together to a clearly defined function. Factors to consider in determining whether a system constitutes an end product include: Whether performance warranties apply to an integrated system (regardless of whether components are separately warranted); whether products perform on an integrated basis with other products in a system, or are operated independently of associated products in the system; or whether transit agencies routinely procure a product separately (other than as replacement or spare parts).

*United States* means the several States, the Commonwealth of Puerto Rico, the District of Columbia, Guam, American Samoa, the U.S. Virgin Islands, and the Commonwealth of the Northern Mariana Islands.

*Manufactured end products* means infrastructure projects not made primarily of steel or iron, including structures (terminals, depots, garages, and bus shelters), ties and ballast; contact rail not made primarily of steel or iron; fare collection systems; computers; information systems; security systems; data processing systems; and mobile lifts, hoists, and elevators.

B. Domestic U.S. Content Requirement

The cost of rolling stock components produced in the United States must be more than 60 percent of the cost of all rolling stock components.

1. Typical Components of Rail Rolling Stock

   The following is a list of items that typically would be considered components of rail rolling stock. This list is not all inclusive.

   - Car shells,
   - Engines,
Main transformer,
Pantographs,
Traction motors,
Propulsion gear boxes,
Interior linings,
Acceleration and braking resistors,
Propulsion controls,
Low voltage auxiliary power supplies,
Air conditioning equipment,
Air brake compressors,
Brake controls,
Foundation brake equipment,
Articulation assemblies,
Train control systems,
Window assemblies,
Communication equipment,
Lighting, seating, doors,
Door actuators and controls,
Wheelchair lifts and ramps to make the vehicle accessible to persons with disabilities,
Couplers and draft gear,
Trucks,
Journal bearings,
Axles,
Diagnostic equipment, and
Third rail pick-up equipment.

a. Train control equipment

Train control equipment includes, but is not limited to, the following equipment:

- Mimic board in central control
- Dispatcher's console
- Local control panels
- Station (way side) block control relay cabinets
- Terminal dispatcher machines
- Cable/cable trays
- Switch machines
- Way side signals
- Impedance bonds
- Relay rack bungalows
- Central computer control
• Brake equipment
• Brake systems
• Cab Signaling;
• ATO Equipment;
• ATP Equipment;
• Wayside Transponders;
• Trip Stop Equipment;
• Wayside Magnets;
• Speed Measuring Devices;
• Car Axle Counters;
• Communication Based Train Control (CBTC).

b. Communication equipment

Communication equipment includes, but is not limited to, the following equipment:

• Radios
• Space station transmitter and receivers
• Vehicular and hand-held radios
• PABX telephone switching equipment
• PABX telephone instruments
• Public address amplifiers
• Public address speakers
• Cable transmission system cable
• Cable transmission system multiplex equipment
• Communication console at central control
• Uninterruptible power supply inverters/rectifiers
• Uninterruptible power supply batteries
• Data transmission system central processors
• Data transmission system remote terminals
• Line printers for data transmission system
• Communication system monitor test panel
• Security console at central control
• Antennas;
• Wireless Telemetry Equipment;
• Passenger Information Displays;
• Communications Control Units;
• Communication Control Heads;
• Wireless Intercar Transceivers;
• Multiplexers;
• SCADA Systems;
• LED Arrays;
Screen Displays such as LEDs and LCDs for communication systems;
- Fiber-optic transmission equipment;
- Fiber-optic transmission equipment;
- Frame or cell based multiplexing equipment;
  Communication system network elements.

c. Traction power equipment

Traction power equipment includes, but is not limited to the following:

- Primary AC switch gear
- Primary AC transformer rectifiers
- DC switch gear
- Traction power console and CRT display system at central control
- Bus ducts with buses (AC and DC)
- Batteries
- Traction power rectifier assemblies
- Distribution panels (AC and DC)
- Facility step-down transformers
- Motor control centers (facility use only)
- Battery chargers
- Supervisory control panel
- Annunciator panels
- Low voltage facility distribution switch board
- DC connect switches
- Negative bus boxes
- Power rail insulators
- Power cables (AC and DC)
- Cable trays
- Instrumentation for traction power equipment
- Connectors, tensioners, and insulators for overhead power wire systems
- Negative drainage boards
- Inverters
- Traction motors
- Propulsion gear boxes
- Third rail pick-up equipment
- Pantographs
- Propulsion Control Systems;
- Surge Arrestors;
2. Production in the United States

a. A component may be manufactured at the final assembly location if the manufacturing process to produce the component is an activity separate and distinct from the final assembly of the end product.

b. A component is considered to be manufactured if there are sufficient activities taking place to advance the value or improve the condition of the subcomponents of that component; that is, if the subcomponents have been substantially transformed or merged into a new and functionally different article.

i. Except as provided in paragraph (vi) of this section concerning raw materials, a subcomponent is any article, material, or supply, whether manufactured or unmanufactured, that is one step removed from a component in the manufacturing process and that is incorporated directly into a component.

ii. For a component to be produced in the United States, more than 60 percent of the subcomponents of that component, by cost, must be of domestic origin, and the manufacture of the component must take place in the United States. If, under the terms of this part, a component is determined to be produced in the United States, its entire cost may be used in calculating the cost of domestic content of an end product.

iii. A subcomponent is of domestic origin if it is manufactured in the United States.

iv. If a subcomponent manufactured in the United States is exported for inclusion in a component that is manufactured outside the United States and it receives tariff exemptions under the procedures set forth in 19 CFR 10.11 through 10.24, the subcomponent retains its domestic identity and can be included in the calculation of the domestic content of an end product even if such a subcomponent represents less than 60 percent of the cost of a particular component.

v. If a subcomponent manufactured in the United States is exported for inclusion in a component manufactured outside the United States and it does not receive tariff exemption under the procedures set forth in 19 CFR 10.11 through 10.24, the subcomponent loses its domestic identity and cannot be included in the calculation of
the domestic content of an end product.

vi. Raw materials produced in the United States and then exported for incorporation into a component are not considered to be a subcomponent for the purpose of calculating domestic content. The value of such raw materials is to be included in the cost of the foreign component.

vii. If a component is manufactured in the United States, but contains less than 60 percent domestic subcomponents, by cost, the cost of the domestic subcomponents and the cost of manufacturing the component may be included in the calculation of the domestic content of the end product.

viii. For purposes of this section, except as provided in paragraph (x) of this section:

(1) The cost of a component or a subcomponent is the price that a bidder or offeror must pay to a subcontractor or supplier for that component or subcomponent. Transportation costs to the final assembly location must be included in calculating the cost of foreign components and subcomponents.

(2) If a component or subcomponent is manufactured by the bidder or offeror, the cost of the component is the cost of labor and materials incorporated into the component or subcomponent, an allowance for profit, and the administrative and overhead costs attributable to that component or subcomponent under normal accounting principles.

ix. The cost of a component of foreign origin is set using the foreign exchange rate at the time the bidder or offeror executes the Buy America certificate.

x. The cost of a subcomponent that retains its domestic identity consistent with paragraph () of (iv) this section shall be the cost of the subcomponent when last purchased, f.o.b. United States port of exportation or point of border crossing as set out in the invoice and entry papers or, if no purchase was made, the value of the subcomponent at the time of its shipment for exportation, f.o.b. United States port of exportation or point of border crossing as set out in the invoice and entry papers.

xi. Labor costs involved in final assembly shall not be included in
calculating component costs.

xii. The actual cost, not the bid price, of a component is to be considered in calculating domestic content.

C. Application of FTA Waivers

Components or subcomponents that are covered by a current published waiver granted by the Administrator of the Federal Transit Administration may be considered to be of domestic origin for purposes of this section. The burden of proof establishing that a component or subcomponent is covered by an FTA waiver is on the Contractor.

C7.18 FINAL ASSEMBLY OF PRODUCTION (NON-PILOT) VEHICLES IN MASSACHUSETTS REQUIREMENT

Final Assembly of all Production (Non-Pilot) Vehicles delivered under this Contract must take place in Massachusetts. For purposes of this Section, Final Assembly means the creation of the End Product from individual elements brought together for that purpose through the application of manufacturing processes. At a minimum, Final Assembly:

A. Includes the following operations: (1) installation and interconnection of propulsion control equipment, propulsion cooling equipment brake equipment, energy sources for auxiliaries and controls, heating and air conditioning, communications equipment, motors, wheels and axles, and suspensions and frames; (2) the inspection and verification of all installation and interconnection work; and (3) the in-plant testing of the stationary product to verify all functions; or

B. Includes include such other manufacturing processes and operations as may be approved by the Authority.

C7.19 APPROPRIATION CONTINGENCY

The Authority reserves the right to amend the Contract to include provisions applicable to FTA-funded procurements in the event that federal funds will be used for this Agreement.
C8.01 CLAIM FOR DELAY OR SUSPENSION OF THE WORK

A. The Contractor hereby agrees that it shall have no claim for damages of any kind on account of any delay in commencement and/or hindrances of the work or any delay or suspension of any portion thereof, except as hereinafter provided.

1. If the Authority determines that performance of all or any major portion of the work is suspended, delayed or interrupted for any unreasonable period of time by an act or failure to act by the Authority in the administration of the Contract as required by the Contract, and without the fault or negligence of the Contractor, an adjustment to the Contract shall be made by the Authority, in accordance with the change order provisions of Section C11.00.

   a. The Contractual adjustment may be for

      (1) An extension of time; and/or

      (2) An increase or decrease in the actual cost of performance of the Contract.

   b. Cost adjustments, as further detailed in Sections C8.01A3 and C8.01A4, shall be based on generally accepted cost standards as established under the Federal Acquisition Regulation (FAR) Part 31.

2. Claims for extensions of time are covered by Section C8.02.

3. An adjusted increase in the actual cost of performance of the Contract shall exclude profit. The term profit as used herein, includes without limitation profit, and in the case of delays, earnings on lost business.

4. An adjusted increase in the actual cost of performance of the Contract may include overhead of the labor, equipment and material attributable to the delay or suspension.

   The term overhead, as used herein, includes all costs of performance, except hourly wages actually paid for labor and prices for materials actually paid to vendors.

5. No adjustment shall be made if the performance by the Contractor would have been prevented by other causes even if the work had not been suspended, delayed or interrupted by the Authority.

6. No claim shall be allowed under this Subsection for the Authority's failure to act as required by the Contract within the time specified in the Contract (or if no time
is specified, within a reasonable time) for any cost incurred more than two (2) weeks before the Contractor shall have notified the Authority in writing of its claim due to the Authority's failure to act.

7. The Contractor shall submit in writing not later than thirty (30) days after the termination of such suspension, delay, or interruption, the amount of the claim and breakdown of how the amount was computed.

B. Any dispute concerning whether the delay or suspension is unreasonable or any other question of fact arising under this paragraph shall be determined by the Authority. Such determination and decision, in case any question shall arise, shall be a condition precedent to the right of the Contractor to receive any money hereunder.

C8.02 DETERMINATION AND EXTENSION OF CONTRACT TIME FOR COMPLETION

A. It is an essential part of this Contract that the Contractor shall perform fully, entirely, and in an acceptable manner, the work required under the Contract within the timeframes established in the Contract, including but not limited to timeframes included in schedules proposed by the Contractor and accepted by the Authority, except that the Contract time for completion shall be adjusted as follows:

1. In case the commencement of the work is delayed or any part thereof is delayed or suspended by the Authority (except for reasons caused the fault or neglect of the Contractor), the Contractor shall be granted an extension of time in which to complete the work or any portion of the delay less a reasonable period of time within which it could have done necessary preliminary work.

2. Each Change Order as issued will include a statement of additional time, if any, that is agreed upon by the Contractor and the Authority as required for the completion of this Contract by reason of the Change Order, and no other time allowance on account of the performance of the work covered by such Change Order shall be allowed.

B. The Contractor shall be bound by the timeframes in schedules proposed by the Contractor and approved by the Authority. The parties acknowledge that time is of the essence with respect to meeting the milestones in such schedules.

C. The Authority's apparent waiver of, or failure to enforce these provisions or any other provisions related to or in any way concerning any delay shall not be deemed a waiver of requirements of this Section or for any other provision in the Contract and/or for any other delay.
C8.03 LIQUIDATED DAMAGES

Time is of the essence, and operation of the cars as scheduled is of paramount importance to the Authority. It is agreed that this Section shall be construed and treated by the parties not as imposing a penalty upon the Contractor for failing fully to complete the work as agreed in the proposal nor as it may have been intended, but as liquidated damages to compensate the Authority for certain costs incurred by the Authority because of the failure of the Contractor to fully complete the certain provisions of the Contract as adjusted.

A. Delivery Factor

The amount of agreed liquidated damages to be deducted per calendar day from the Contract price for failure to complete delivery of the Vehicles as specified herein shall be five hundred dollars ($500) per day per car. These liquidated damages shall be applied to each car for each and every day it is delayed beyond the Delivery Schedule as specified in Section C6.05 of the Contract.

1. When delay occurs or the Contractor is unable to perform in accordance with the Contract, due to reasonable causes beyond the control of the Contractor, including but not limited to, acts of God, acts of government or any government agency, war or war conditions, sabotage, strikes, lockouts, accidents, fire, flood, typhoons, hurricanes, explosions, damage to plant, equipment, or facilities (Force Majeure Event), the time for performance and completion of the work shall be adjusted and extended as required to accommodate the delay and its effect and Contractor shall not be liable for any liquidated damages specified under the contract or any damages of any kind as a result of said delay.

2. Permitting the Contractor to continue to deliver Vehicles after the time fixed for its completion, or after the date to which time for delivery may have been extended, shall in no way operate as a waiver on the part of the Authority of any of its rights under the Contract.

B. Technical Assistance

Liquidated damages shall also be claimed during the warranty period in the event the Contractor fails to make available to the Authority qualified personnel to provide technical assistance to correct defects in either its equipment or the equipment furnished by the Subcontractors. Whenever the Authority discovers a defect that is of such a nature as to require that a car be withheld from revenue service, the Technical Project Manager or designee will verbally advise the Contractor of the problem, and the Contractor will be granted no more than seventy-two (72) hours to make available to the Authority such quantity of competent personnel as may be reasonably needed to initiate effective corrective action. If the Contractor fails to provide the technical assistance within seventy-two (72) hours, the Authority shall assess against the Contractor an amount of five hundred dollars ($500) per day per car for each and every day the car is out of revenue service until such time as the Contractor initiates work on such car during the applicable warranty period. Provided that in no event shall the Authority assess against
the Contractor an amount in excess of five hundred dollars ($500) per day, per car, in the aggregate under Section C8.03B and C8.03C of this Section C8.03. (Addendum No. 7)

C. **Material Availability**

Liquidated damages shall also be claimed during the warranty period in the event the Contractor fails to make available to the Authority an adequate quantity of materials/replacement parts and/or components necessary to correct defects in either its equipment or the equipment furnished by the subcontractors. Whenever the Authority discovers a defect that is of such a nature as to require that a car be withheld from revenue service, the Technical Project Manager or designee will verbally advise the Contractor of the problem, and the Contractor will be granted no more than ten days to make available to the Authority such quantity as may be reasonably needed to initiate effective corrective action. If the Contractor fails to provide the material, parts or componentry within ten days, the Authority shall assess against the Contractor an amount of five hundred dollars ($500) per day per car for each and every day the car is out of revenue service until such time as the Contractor initiates work on such car during the applicable warranty period. Provided that in no event shall the Authority assess against the Contractor an amount in excess of five hundred dollars ($500) per day, per car, in the aggregate under Section C8.03B and C8.03C of this Section C8.03. (Addendum No. 7)

D. **Accrued Liquidated Damages**

There shall be deducted from any money due or to become due to the Contractor at the time of final payment, a sum representing the accrued liquidated damages. Such deductions shall not be considered a penalty, but as the agreed monetary damages sustained by the Authority because the Contractor was unable to provide cars which fully met the service standards required. Should the money due to the Contractor be insufficient to cover such agreed liquidated damages, then the Contractor forthwith shall pay the remainder to the Authority.

E. **Total Liquidated Damages**

Liquidated damages shall be limited to fifteen percent (15%) of the total Contract Value as adjusted through Change Order(s). (Addendum No. 7)

**C8.04 SUSPENSION OF WORK**

A. The Authority, for reasons beyond its control, may at any time, by written order to the Contractor, stop all or any part of the work called for by this Contract for a period of thirty (30) days upon delivery of the order to the Contractor and for any further period to which the parties may agree. Any such order shall be specifically identified as a Stop Work Order issued pursuant to this Section. Upon receipt of such an order, the Contractor shall forthwith comply with its terms and take all reasonable steps to mitigate the costs allocable to the work covered by the order during the period of work stoppage. Within a period of thirty (30) days after a Stop Work Order is delivered to the Contractor,
or within any extension of that period to which the parties shall have agreed, the Authority shall either:

1. Cancel the Stop Work Order; or

2. Terminate the work covered by such order and pay to the Contractor all reasonable termination charges.

B. If a Stop Work Order issued under this Section is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. An equitable adjustment will be made in the delivery schedule or Contract price, or both, and the Contract will be modified in writing accordingly, if:

1. The Stop Work Order results in an increase in the time required for, or in the Contractor's cost properly allocable to, their performance of any part of this Contract; and

2. The Contractor asserts a claim for such adjustment within thirty (30) days after the end of the period of work stoppage; provided that, if the Authority decides the facts justify such action, the Authority may receive and act upon such claim asserted at any time prior to final payment under the Contract.

C. If a Stop Work Order is not canceled and the work covered by such order is terminated hereunder, the reasonable costs resulting from the Stop Work Order will be allowed in arriving at the termination settlement.

C8.05 CLAIMS AND DISPUTES

A. Any dispute arising at any time under the Contract which is not disposed of by agreement through a Change Order, Section C11.00, shall be decided in the first instance by the Authority, who shall reduce its decision to writing without unreasonable delay.

1. If the Contractor fails to submit a claim within thirty (30) days of the Authority's dispute of the Change Order request pursuant to Section C11.00, that claim shall be deemed waived by the Contractor without further recourse.

2. Any claim must be brought to the attention of the Authority within fifteen (15) days of the occurrence of the event which raised the claim. Providing written notice to the Authority of a claim within the fifteen (15) day period is a condition precedent to any claim. If the Contractor fails to give notice within the fifteen (15) day period, the claim shall be deemed waived by the Contractor without further recourse. (Addendum No. 8)
B. The decision of the Authority shall be final and conclusive unless, within thirty (30) days from the date of receipt of such copies thereof, the Contractor mails or delivers to the Authority a written notice of rejection, in which event the decision of the Authority shall have no further effect and either party may have the dispute and the subject matter thereof settled by a court of competent jurisdiction located within Suffolk County in the Commonwealth of Massachusetts.

C. In the event the Authority fails to make a decision as aforesaid on any dispute within a reasonable period after having been requested to do so by the Contractor, then either party may have the dispute and the subject matter thereof settled directly by a court of competent jurisdiction located within Suffolk County in the Commonwealth of Massachusetts (See also Section C8.05F).

D. Pending final settlement of any dispute, both parties shall proceed diligently with the performance of the Contract and in accordance with the Authority's decision, if any.

E. Notwithstanding any provisions of this section or any other provision of this Contract, it is expressly agreed and understood that any court proceeding arising out of a dispute under the contract shall be heard by a Court de novo and the court shall not be limited in such proceeding to the issue of whether the Authority acted in an arbitrary, capricious or grossly erroneous manner.

F. Nothing in paragraphs A – E above precludes the parties from informally resolving a claim or dispute or prevents a negotiated settlement of a claim or dispute prior to resolution by the courts.

**C8.06 TERMINATION FOR CONVENIENCE**

A. The Authority may terminate performance of work under this Contract in whole, or from to time, in part if the Contracting Officer determines that a termination is in the Authority’s best interest. The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of the termination and the effective date.

B. The Contractor shall be paid the contract price for completed work accepted by the Authority not previously paid for, costs incurred in the performance of the work terminated, but excluding any costs attributable to work paid or to be paid for completed work, reasonable close-out costs, and profit on such costs determined to be fair and reasonable under the principles outlined in Section 49.202 of the Federal Acquisition Regulations (FAR). Profit on close-out costs and anticipatory profits shall not be allowed. The cost principles of Part 31 of the FAR shall govern all costs claimed, agreed to, or determined under this clause.

C. The Contractor shall within three (3) months of receipt of the Notice of Termination submit its termination claim to be paid by the Authority.
D. If the Contractor has any property in its possession belonging to the Authority, the Contractor shall account for the same, and dispose of it in the manner the Authority directs. The Contractor shall transfer title to the Authority and deliver in the manner, at the times, and to the extent, if any, directed by the Contracting Officer the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced as a part of, or acquired in connection with the performance of, the work terminated, and the completed or partially completed plans, drawings, information, and other property which, if the Contract had been completed, would have been furnished to the Authority.

C8.07 ABANDONMENT OR DEFAULT BY CONTRACTOR

A. The following shall constitute an event of default by the Contractor under this Contract:

1. Failure to adhere to the Delivery Schedule in Section C6.05 or any extension;

2. Failure to make progress, so as to endanger performance of the Contract;

3. A breach of any material term of the Contract; or

4. The Contractor becomes insolvent or is declared bankrupt or commits any act of bankruptcy or insolvency.

B. In the event of a default by the Contractor for failure to adhere to the Delivery Schedule or any extension, failure to make progress so as to endanger performance of the Contract, or a breach of any material term of the Contract, the Authority’s right to terminate the Contract may be exercised if the Contractor does not cure such failures or breach within twenty-one (21) days after receipt of notice from the Authority specifying the grounds for default. If the Contractor becomes insolvent or is declared bankrupt or commits any act of bankruptcy or insolvency, the Authority’s right to terminate for default is immediate.

C. Upon an event of default, and after the requisite cure period in Section C8.07B, the Authority has the full power and authority to immediately declare the Contractor to be in default and issue a written Notice of Termination for Default or Notice of Partial Termination for Default to the Contractor at least twenty-one (21) calendar days prior to the effective date of such termination. Contractor shall discontinue all work, or any part thereof, under this Contract in accordance with the Notice. The Authority shall have the right, as the Authority may determine, to immediately draw upon the Irrevocable Stand-By Letter of Credit to procure other materials, plant, tools, appliances, equipment, supplier and property for the completion of the work required under the Contract, or such part thereof, and to charge the expense of said labor and materials, plant, tools, appliances, equipment, supplies and property to the Contractor.

The expense so charged may be deducted and paid for by the Authority out of such monies as may be due or at any time thereafter become due to the Contractor under and
by virtue of this Contract, and the Contractor shall, upon completion of the work, or such part thereof, or from time to time during the course of the completion of the work, or such part thereof, as the Authority may require, forthwith pay to the Authority the excess, if any, of the cost to the Authority of the completion of the work, or such part thereof, over the amount payable to the Contractor for the same work and materials under the terms of this Contract. The Contractor, unless directed to discontinue all work, shall continue the remainder of the work in conformity with the terms of this Contract and in such manner not to hinder or interfere with other Contractors of the Authority, or with persons or workmen employed, as above provided by the Authority by Contract or otherwise, to do any part of the work or to complete the same under the provision of this Paragraph.

The Contractor shall transfer title to the Authority and deliver in the manner, at the times, and to the extent, if any, directed by the Contracting Officer the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced as a part of, or acquired in connection with the performance of, the work terminated, and the completed or partially completed plans, drawings, information, and other property which, if the Contract had been completed, would have been furnished to the Authority.

The Authority may also bring any suit or proceeding for specific performance, injunction, or to recover damages, obtain any other relief, or for any other purpose proper under this Contract.
C10.01 TERMS OF PAYMENT

A. The following constitutes the method of payment of this Contract:

1. The Authority shall make all payments to the Contractor in United States Dollars.

2. Payment for the vehicles will be made by check or wire transfer within thirty (30) days after receipt of properly prepared Contractor's invoice and upon completion of the milestone corresponding to the payment due.

3. Milestone payments shall be achieved and become eligible for payment only in the sequential order listed below in Section C10.01B.

4. The Contractor shall provide a certificate at the time of each milestone, certifying the invoice amount is true and accurate, that the milestone has been achieved, and that the accumulative amount invoiced by the Contractor to date does not exceed the amount listed in Section C10.01B. Additionally, for payment approval by the Authority, all requests for payment must be in compliance with all requirements of the Contract.

5. For payment purposes, the Contractor will adjust all applicable prices on the milestone payment chart in accordance with any executed change orders.

6. When the first milestone payment is prepared, the Contractor shall submit to the Project Manager for Administration, with a copy to the Technical Project Manager, a cash draw down forecast indicating the estimated amount of each milestone payment by month projected through the completion of the project.

C10.01B SCHEDULE OF PARTIAL PAYMENTS

Payment for Items 1a, 1b, 3, and 4 of the Base Award, and options executed at award, excluding option vehicles and capital spare parts, as provided in Section B shall be based on the following Payment Schedule.

All Capital Spare Parts shall be invoiced separately and will be paid upon Acceptance as provided in Section 10.02C.

C10.01B1

O- Refers to Orange Line Vehicles
R- Refers to Red Line Vehicles
OR- Refers to milestones affecting both vehicles simultaneously
<table>
<thead>
<tr>
<th>Payment Number</th>
<th>Payment Milestone Orange Line</th>
<th>Payment Milestone Red Line</th>
<th>Incremental Payment %</th>
<th>Accumulative Payment % Orange Line</th>
<th>Accumulative Payment % Red Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR-1</td>
<td>Approval of Master Schedule and Management Plan including engineering and production schedules, project management and quality assurance program</td>
<td></td>
<td>5.0%</td>
<td>2.5%</td>
<td>2.5%</td>
</tr>
<tr>
<td>OR-2</td>
<td>Approval of Reliability Program Plan [CDRL 02-07]</td>
<td></td>
<td>1.0%</td>
<td>3.0%</td>
<td>3.0%</td>
</tr>
<tr>
<td>OR-3</td>
<td>Placement of major supplier purchase orders listed in C5.15F</td>
<td></td>
<td>5.0%</td>
<td>5.5%</td>
<td>5.5%</td>
</tr>
<tr>
<td>O-4</td>
<td>Approval of Orange Line design phase Reliability Prediction Summary Report [CDRL 02-06] and System Safety Program Plan [CDRL 02-17]</td>
<td>Approval of Red Line design phase Reliability Prediction Summary Report [CDRL 02-06] and System Safety Program Plan [CDRL 02-17]</td>
<td>0.5%</td>
<td>6.0%</td>
<td></td>
</tr>
<tr>
<td>R-4</td>
<td>Approval of Preventative Maintenance Schedule [CDRL 02-14], and Mean Time to Repair [CDRL 02-15]</td>
<td></td>
<td>1.0%</td>
<td>6.5%</td>
<td>6.5%</td>
</tr>
<tr>
<td>OR-5</td>
<td>Approval of Orange Line Pilot Car FAI (First Married Pair), Service Support for Orange Line Pilot Cars including Integrated Draft Manuals, Training</td>
<td>Approval of Red Line Pilot Car FAI (First Married Pair), Service Support for Red Line Pilot Cars including Integrated Draft Manuals, Training</td>
<td>1.0%</td>
<td>2.0%</td>
<td>8.5%</td>
</tr>
<tr>
<td>O-6</td>
<td>Orange Line Final Design Review approval</td>
<td></td>
<td>2.0%</td>
<td>8.5%</td>
<td></td>
</tr>
<tr>
<td>R-6</td>
<td>Red Line Final Design Review approval</td>
<td></td>
<td>2.0%</td>
<td>8.5%</td>
<td></td>
</tr>
<tr>
<td>OR-8</td>
<td>Approval of Line Major Sub system FAIs</td>
<td></td>
<td>2.5%</td>
<td>21.0%</td>
<td>16.0%</td>
</tr>
<tr>
<td>OR-9</td>
<td>Approval of Warranty Plan</td>
<td></td>
<td>1.0%</td>
<td>16.5%</td>
<td>16.0%</td>
</tr>
<tr>
<td>O-10</td>
<td>Approval of Orange Line Pilot Car FAI (First Married Pair)</td>
<td></td>
<td>2.5%</td>
<td>19.0%</td>
<td></td>
</tr>
<tr>
<td>O-11</td>
<td>Service Support for Orange Line Pilot Cars including Integrated Draft Manuals, Training</td>
<td></td>
<td>1.0%</td>
<td>20.0%</td>
<td></td>
</tr>
<tr>
<td>O-12</td>
<td>Orange Line Pilot Train Delivery (6 cars)</td>
<td></td>
<td>2.5%</td>
<td>22.5%</td>
<td></td>
</tr>
<tr>
<td>O-13</td>
<td>Orange Line Pilot Train Conditional Acceptance (all tests completed, including Pilot Train Reliability Test) and delivery of special tools [CDRL 22-33]</td>
<td></td>
<td>2.5%</td>
<td>25.0%</td>
<td></td>
</tr>
<tr>
<td>O-14</td>
<td>Orange Line Production Car Conditional Acceptance (Divided evenly between 73 married pairs)</td>
<td></td>
<td>21.0%</td>
<td>46.0%</td>
<td></td>
</tr>
<tr>
<td>R-10</td>
<td>Approval of Red Line Pilot Car FAI (First Married Pair)</td>
<td></td>
<td>2.5%</td>
<td>19.0%</td>
<td></td>
</tr>
<tr>
<td>R-11</td>
<td>Service Support for Red Line Pilot Cars including Integrated Draft Manuals, Training</td>
<td></td>
<td>1.0%</td>
<td>20.0%</td>
<td></td>
</tr>
<tr>
<td>R-12</td>
<td>Red Line Pilot Train Delivery (6 cars)</td>
<td></td>
<td>2.5%</td>
<td>22.5%</td>
<td></td>
</tr>
<tr>
<td>Payment Number</td>
<td>Payment Milestone Orange Line</td>
<td>Payment Milestone Red Line</td>
<td>Incremental Payment %</td>
<td>Accumulative Payment % Orange Line</td>
<td>Accumulative Payment % Red Line</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------------------------</td>
<td>-----------------------------</td>
<td>-----------------------</td>
<td>------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>R-13</td>
<td>Red Line Pilot Train Conditional Acceptance (all tests completed, including Pilot Train Reliability Test) and delivery of special tools [CDRL 22-33]</td>
<td>2.5%</td>
<td>25.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-14</td>
<td>Red Line Production Car Conditional Acceptance (Divided evenly between 34 married pairs)</td>
<td>11.0%</td>
<td>36.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-15</td>
<td>Completion of Orange Line Training</td>
<td>2.0%</td>
<td>48.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-17</td>
<td>Approval and Delivery of Orange Line Final Manuals</td>
<td>2.0%</td>
<td>50.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-15</td>
<td>Completion of Red Line Training</td>
<td>2.0%</td>
<td>38.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-17</td>
<td>Approval and Delivery of Red Line Final Manuals</td>
<td>2.0%</td>
<td>40.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-16</td>
<td>Successful Completion of the Orange Line Fleet in Service Reliability Demonstration Test [CDRL 02-12]</td>
<td>3.0%</td>
<td>53.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-16</td>
<td>Successful Completion of the Red Line Fleet in Service Reliability Demonstration Test [CDRL 02-12]</td>
<td>2.0%</td>
<td>42.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-18</td>
<td>Successful completion of the Contract, including but not limited to Red Line As-Built Drawings [CDRL 21-07], and Contractor’s specification. Completion of all outstanding retrofits for the fleet, delivery of all Capital Spares, Special Tools, and completion of all administrative and technical matters with the exception of the warranty program. No final payment will be made until Final Acceptance of all Cars by the Authority.</td>
<td>2.5%</td>
<td>55.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-18</td>
<td>Successful completion of the Contract, including but not limited to, Orange Line As-Built Drawings [CDRL 21-06], and Contractor’s specification. Completion of all outstanding retrofits for the fleet, delivery of all Capital Spares, Special Tools, and completion of all administrative and technical matters with the exception of the warranty program. No final payment will be made until Final Acceptance of all Cars by the Authority.</td>
<td>2.5%</td>
<td>44.5%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Orange Line and Red Line Milestones shall be submitted separately. Milestone timelines shall be in accordance with the approved Master Schedule. Refer to Section C5.02.
## SCHEDULE OF PARTIAL PAYMENTS FOR RED LINE OPTION CARS

<table>
<thead>
<tr>
<th>Payment No.</th>
<th>Incremental Payment %</th>
<th>Accumulative Payment %</th>
<th>Payment Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>20%</td>
<td>20%</td>
<td>Completion of first two (2) Option Carbody shells at Carbuilders facility</td>
</tr>
<tr>
<td>BB</td>
<td>20%</td>
<td>40%</td>
<td>Delivery to the Authority of the first two (2) Option Cars</td>
</tr>
<tr>
<td>CC</td>
<td>10%</td>
<td>50%</td>
<td>Conditional Acceptance of the first two (2) Option Cars plus ten (10) days of successful revenue service</td>
</tr>
<tr>
<td>DD</td>
<td>25%</td>
<td>75%</td>
<td>Upon delivery of each of the remaining Cars, 25% of the Contract price per Car shall be paid. The sum of payments claimed under this milestone shall at no time exceed 75% of the total Car contract price</td>
</tr>
<tr>
<td>EE</td>
<td>20%</td>
<td>95%</td>
<td>Upon Conditional Acceptance of each of the balance due, 20% of the contract price per Car shall be paid. The sum of payments claimed under this milestone shall at no time exceed 95% of the Car contract price</td>
</tr>
<tr>
<td>FF</td>
<td>5%</td>
<td>100%</td>
<td>Successful completion of the Option, including all Outstanding retrofits, spare parts, and administrative and technical matters, with the exception of the Warranty Programs.</td>
</tr>
</tbody>
</table>

### BASIS OF PAYMENT

Basis for payment shall be as follows:

A. In the event the Contractor has subcontracted any of the work in accordance with the provision of Section C5.15, prior to final payment, the Contractor shall furnish a instruments executed by all Subcontractors/Suppliers providing for the waiver of all claims against and release of the Authority, in a form acceptable to the Authority, for the work performed or the equipment or material furnished by each subcontractor.

B. The acceptance by the Contractor for the final payment shall operate as and shall be a release of the Authority and every member, agent, and employee thereof, from all claim and liability to the Contractor for anything done, furnished for, or relating to the work, or
for any act or neglect of the Authority or any person relating to or affecting the work.

C. The price for Capital Spare Parts shall be payable upon Acceptance by the Authority. As provided in Section C6.12D, acceptance or rejection or each item of the Capital Spare Parts shall be made within thirty (30) days of the receipt of each item.

C10.03 - PAYMENT OF OPTIONS

A. The payment of options for additional vehicles shall be in accordance with the Schedule of Partial Payments for Red Line Option Cars as stated in Section C10.01B2 in accordance with the quantity executed.

B. The payment for Option Spares shall be in accordance with Section C10.02C.

C10.04 PAYMENT FOR CHANGE ORDERS

In accordance with Section C10.01, the Contractor shall prepare an invoice for approved change order(s) on an individual vehicle basis and become eligible for payment at the time of Conditional Acceptance of each vehicle.
SECTION C - PART C11.00
CHANGE ORDERS

C11.01 CHANGES IN WORKSCOPE (CHANGE ORDERS)

The Contractor shall make such additions, deletions, or changes in the work not herein otherwise provided for, when and as ordered in writing by the Authority. The Authority’s written order shall contain particular reference to this Section.

A. A change in work will not extend the time of completion of the Contract nor amend the terms and conditions of the Contract unless so noted for a given change order.

B. All Change Orders shall be issued in writing by the Contracting Officer. Section C11.04 sets forth those Change Orders for which concurrence of other officials is required before a Change Order is properly authorized.

C. No departure shall be made from this Contract, including the Contract Specification, nor any change made in material, design or selection or equipment accepted hereunder without the written acceptance of the Contracting Officer (and concurrence of other officials under Section C11.04, if applicable).

D. Any changes which are ordered or authorized during the performance of this Contract shall be made promptly by the Contractor.

E. Where changes require the cooperation of one or more subcontractors, the Contractor shall be responsible for such changes and shall inform the subcontractors accordingly. Contractor shall incorporate in all agreements with subcontractors, suppliers and vendors the substance of this clause so as to permit changes under the subcontracts and supply agreements to comply with changes issued by the Authority pursuant to this Section.

C11.02 CONTRACTOR'S WRITTEN NOTICE

Upon receipt of a Change Order pursuant to this Section, the Contractor shall within a minimum of twenty (20) working days, excluding holidays, of the receipt of the Change Order give written notice including a cost and time estimate to the Authority stating it to be either an alteration to, deviation from, addition to, or deletion from the Contract, or advise the Authority that the requested change exceeds the Contractor’s capabilities. The purpose of this Notice is to enable the Authority to take such action deemed necessary in light of the Contractor's request. Additional time may be allowed subject to the approval of the Contracting Officer or his designee.
C11.03 CONTRACTOR’S REQUEST FOR EQUITABLE ADJUSTMENT TO CONTRACT PRICE AND DELIVERY SCHEDULE

Within thirty (30) days of the submission under Section C11.02, Contractor shall submit a writing which shall include the following information:

A. A detailed description of the scope of work covered by the Change Order.

B. A request for an equitable adjustment to the Contract prices (if applicable). Any price adjustment shall be limited to reasonable, allowable and allocable costs (direct and indirect) plus a reasonable allocation for profit, based upon the standards and principles in Part 31 of the Federal Acquisition Regulation (FAR). The request shall be supported by detailed cost and pricing data as defined in FAR Section 2.101. The cost detail should be comprehensive, separated by labor, materials, other direct costs, overhead, fringe benefits, General & Administrative and other indirect charges, and readily traceable into the Contractor's accounting records and underlining supporting documentation. Reasonableness of profit shall be determined based on the technical level of work and the associated risk but shall be capped at 10% of burdened labor and 5% of materials and other direct costs. Prices shall be quoted in United States of America dollars (no cents) on a per Car basis. Indirect costs shall be supported by actual historical rates and projected rates and supported by audited financial statements. Within six (6) months of each year of contract performance, Contractor shall submit a report on all indirect incurred costs, reconciling estimated indirect costs with actual indirect costs, and agree to an adjustment of the Change Order price based on the actual costs.

C. A request for the extension or modification of the Delivery Schedule, if needed, and the rationale therefor.

D. Whenever the estimated price of a change or series of related changes exceeds $100,000, the Contractor, for each change or series of related changes, shall maintain separate accounts, by job order or other suitable accounting procedure, of all incurred segregable, direct costs (less allocable credits) of work, both changed and not changed, allocable to the change.

E. A failure to agree on an equitable adjustment shall be resolved under Section C8.05. During the pendency of any such dispute, Contractor shall diligently proceed with the performance of all Contract obligations, including those embodied in all Change Orders.

C11.04 WORKSCOPE AUTHORIZATION

The Contractor shall not proceed with any work beyond the scope of the Contract until written authorization is given by the Contracting Officer and concurrence is granted as specified in Section C11.04A. Concurrency of the Chief of Strategic Business Initiatives of the MBTA.
General Manager of the MBTA, Secretary and CEO of the Massachusetts Department of Transportation, and Board of Directors of the Massachusetts Department of Transportation, is required, at the levels in Section C11.04A.

A. **Executive Level**

<table>
<thead>
<tr>
<th>Role</th>
<th>Cost of Change Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contracting Officer</td>
<td>Up to $100,000, in addition to $3,000 per change per vehicle, not to exceed $20,000 per vehicle</td>
</tr>
<tr>
<td>Chief of Strategic Business Initiatives</td>
<td>$100,001 to $250,000</td>
</tr>
<tr>
<td>General Manager</td>
<td>$250,001 to $5,000,000</td>
</tr>
<tr>
<td>Secretary and CEO</td>
<td>$5,000,001 to $15,000,001</td>
</tr>
<tr>
<td>Board of Directors</td>
<td>$15,000,000 and greater</td>
</tr>
</tbody>
</table>

B. Employees of the Authority are not authorized to request work to be performed or services to be provided other than as specified above.

C. **The Authority shall not accept any responsibility whatsoever for work or services for which there is no specific proper authorization.**

C11.05 CHANGE STATUS REPORT

The Contractor shall maintain a record of all Change Orders issued by the Authority and all Change Orders requested by the Contractor and accepted by the Authority.

A. Changes shall be logged and listed on a Change Status Report that identifies the action taken on each change.

B. The Change Status Report shall be updated at least monthly and copies submitted to the Contracting Officer, the Project Coordinator, the Engineer and all other designated officials.

C. A separate report shall be prepared and updated quarterly showing the original and revised Contract cost per Car delineating all additions on a per item and per Change Order basis, with the format of the report to be approved by the Contracting Officer.

C11.06 EXECUTED CHANGE ORDERS

A. All Change Orders shall be executed in accordance with the terms and conditions of the
B. All executed Change Orders shall constitute the entire agreement between the Authority and the Contractor with regard to any and all costs and time extensions related to Change Order work.

C. Contractor shall issue invoice(s) for executed Change Order(s) on a per Car basis at the milestone corresponding to the Conditional Acceptance of said Car or at the Conditional Acceptance of the incorporation of the defined workscope, whichever occurs last. Payment will be made in accordance with Section C10.00.

C11.07 NON-WAIVER

The Authority's apparent waiver of, or failure to enforce these provisions for any change in scope of the work shall not be deemed a waiver of requirements of this section for any other change.

C11.08 CONTRACTOR PROPOSED CHANGES

A. The Contractor may at any time submit to the Authority in writing for review and acceptance or denial, proposed modifications to the Contract which will benefit the Authority. The Authority shall review and may accept such modifications. Upon acceptance by the Authority of the proposed changes, the Authority shall execute and issue a Change Order.

B. Denial of a proposed modification shall neither provide the Contractor with any basis for a claim for damages nor release the Contractor from contractual responsibilities.
SECTION D

FORM OF CONTRACT
AGREEMENT made this _________________ day of ____________________, 201_ by and
between the Massachusetts Bay Transportation Authority, a body politic and a political subdivision of the
Commonwealth of Massachusetts, herein called the "Authority and/or Procuring Agency" and
______________________________ herein called the "Contractor".

The parties to this Contract, each in consideration of the agreement on the part of the other contained, do
hereby agree as follows:

The Contractor agrees to furnish and deliver to the Authority _______________________ in strict
conformity with the provisions contained in the Contract, dated __________, 201_, all of which are made a
part hereof.

The Authority agrees to pay the Contractor the sum of $____________________(U.S.
Dollars) for the __________________________ subject to the terms and conditions set
forth in this Contract.

In witness whereof, the parties have executed this Contract under seal, on the year and day above written.

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

BY: ________________________________

General Manager (or authorized designee)

CONTRACTOR:

BY: ________________________________

Title

SEAL

Approved as to Form

*Important: Attach proof of Authority of Officer or Agent to sign Contract.
SECTION E

PERFORMANCE GUARANTEE
Letter Of Credit Forms

CERTIFICATE

IRREVOCABLE STAND-BY LETTER OF CREDIT

The undersigned states that he/she is ________________________________ of the (Title)

________________________________ (The “Beneficiary”) and hereby Certifies on behalf (Name of Beneficiary)
of the Beneficiary to ________________________________ (the “Bank”), with (Name of Issuing Bank)

Reference to Irrevocable Standby Letter of Credit No. __________________________ issued by the Bank (the “Letter of Credit”), that:

1. The undersigned is duly authorized to execute and deliver this certificate on behalf of the Beneficiary.

2. The Beneficiary is making a drawing under the Letter of Credit.

3. An Event of Default has occurred under Contract No. ____________.

4. The amount of the draft presented with this certificate does not exceed the total maximum amount drawable today under the Letter of Credit as provided therein.

IN WITNESS WHEREOF, this certificate is executed this _______________ day of _____, 20____.

(NAME OF BENEFICIARY)

By: __________________________

Its: __________________________
Letter Of Credit Forms

BANK DRAFT

FOR VALUE RECEIVED

Pay on presentment to ______________________ the sum of ____________________
(Name of Beneficiary) Dollars ($).

Charge the Account of ______________________ Irrevocable Standby
(Name of Issuing Bank)

Letter of Credit No. _________________ Dated: ______________________, 20___.

To ______________________
(Name of Issuing Bank)

(NAME OF BENEFICIARY)

By: ______________________

Its: ______________________
LETTER OF CREDIT FORMS

BANK LETTER OF COMMITMENT FOR LETTER OF CREDIT

[ON BANK LETTERHEAD]

Re: (Proposer Name), MBTA Project No. ____________

To: MBTA

Dear Sirs:

This letter serves to confirm that our bank will issue an unconditional, irrevocable, non-transferable standby letter of credit naming Massachusetts Bay Transportation Authority (“MBTA”) as beneficiary, in the amount of $____________, within five (5) business days of receipt of written notice from MBTA or [Proposer Name] that [Proposer Name] has been selected as a successful proposer for the referenced Project. It is further agreed that any action arising under the letter of credit will be subject to jurisdiction and venue in the Commonwealth of Massachusetts and governed by Massachusetts law; provided that if the issuing bank has no office in Massachusetts, the Letter of Credit will be subject to jurisdiction and venue in the State of New York, and governed by New York law. This letter shall remain in full force and effect until said letter of credit is delivered to MBTA in form and substance acceptable to MBTA or upon the withdrawal or termination of this letter upon ten (10) days’ prior written notice to the Office of the General Counsel, MBTA. (Addenda Nos. 7/8)

Dated:

By:

Bank Officer ______________
SECTION F

I  REQUEST FOR CLARIFICATION FORM

II  GOVERNMENT AGENCIES

III GENERAL INFORMATION: CHAPTER 521 OF THE GENERAL LAWS OF THE COMMONWEALTH OF MASSACHUSETTS - 102 CMR: OFFICE FOR CHILDREN
SECTION F

ATTACHMENT I

REQUEST FOR CLARIFICATION
SECTION F

Attachment I

REQUEST FOR CLARIFICATION

TO: Massachusetts Bay Transportation Authority

FROM:

REF: RFP No.: CAP 27-10
SPEC No.: (1) VE-10-036
(Check as applicable)

RFP PAGE:

SECTION REFERENCE:

REQUEST FOR CLARIFICATION DESCRIPTION:

*Pagination should follow a continuous and sequential order of page numbers regardless of the number of separate submittals made. Please list only one question or comment per page.

瘠e. Date of Submission Page Number
October 31, 2013 1 - 18
November 2, 2013 19 - 31
December 22, 2013 32 - 50

(Use additional sheet if more space is required)
SECTION F

ATTACHMENT II

GOVERNMENT AGENCIES
The following is provided as information only and does not intend to represent all agencies that may have bearing on this document.

**Federal Agencies**

U.S. Department of Transportation  
400 Seventh Street S.W.  
Washington, DC  20590  
TEL: (202) 426-4040

**Commonwealth of Massachusetts - State Agencies**

Massachusetts Department of Transportation (MassDOT)  
State Transportation Building  
10 Park Plaza Suite 4160  
Boston, MA  02116  
TEL: (877) 623-6846

Registry of Motor Vehicles  
630 Washington Street  
Boston, MA 02110-1615  
TEL: (617) 351-9000

Department of Telecommunications & Energy  
100 Cambridge Street  
Boston, MA  02202  
TEL: (617) 727-3559

Supplier Diversity Office (SDO)  
The McCormack Building  
One Ashburton Place, Room 1313  
Boston, MA  02108  
TEL: (617) 502-8831

Secretary of State for the Commonwealth of Massachusetts  
Executive Office - State House  
Boston, MA  
TEL: (617) 727-9180
SECTION F

ATTACHMENT III

COMMONWEALTH OF MASSACHUSETTS REGULATION
102 CMR: OFFICE FOR CHILDREN
NOTE: THIS REGULATION IS APPLICABLE TO ALL FIRMS DOING BUSINESS WITH THE COMMONWEALTH OF MASSACHUSETTS OR ANY OF ITS AUTHORITIES AND/OR AGENCIES REGARDLESS OF WHETHER THE PARTICIPATING FIRM IS FROM MASSACHUSETTS OR ELSEWHERE.

ALL FIRMS DOING BUSINESS WITH THE MASSACHUSETTS BAY TRANSPORTATION AUTHORITY MUST COMPLY WITH THIS REGULATION

TO OBTAIN A COPY OF THE LAW OR THE REGULATIONS:
These are separate publications, and must be requested individually. They can be obtained at either a local library (for Xeroxing) or the State House Book Store (for a fee). The regulations are the most important aspect of the law, and include explanations of eligibility rules and compliance standards. **when requesting the regulations, ask for 102 CMR 12.00.** The State House Book Store telephone number is (617) 727-2834.

TO FIND OUT ABOUT THE LAW ITSELF, THE IMPLEMENTATION SYSTEM AND THE LEGAL ASPECT:
The Department of Administration and Finance (617-727-2040) is familiar with what the State is doing overall. This Department is familiar with the formalities and technicalities of the law.

The Operational Services Division (OSD) and/or the Authority's Office of General Counsel (Tel: 617-722-3160) can answer questions from a legal or technical standpoint. The DPGS can also help employers and/or potential bidders (whether from the Commonwealth of Massachusetts or from non-Massachusetts jurisdictions) to determine whether or not they are subject to Chapter 521/Regulation 102 CMR 12.00. Therefore, employers and/or potential bidders wanting information on exemptions or whether an already-existing Dependent Childcare Assistance Program (DCAP) satisfies this new law should contact DPGS at (617) 727-7500.

TO FIND OUT ABOUT DEVELOPING A DEPENDENT CHILDCARE ASSISTANCE PROGRAM (DCAP):
MASSPIRG has published a manual that guides employers in setting up a DCAP by themselves. This book can be purchased from MASSPIRG for a fee of $35. MASSPIRG may also be able to answer additional questions about establishing a DCAP. Their number is (617) 292-4800.
102 CMR: OFFICE FOR CHILDREN

102 CMR 12.00: MINIMUM STANDARDS FOR CHILD CARE TUITION ASSISTANCE AND ON-SITE OR NEAR-SITE SUBSIDIZED CHILD CARE PLACEMENTS

Section
12.01: Introduction
12.02: Definitions
12.03: General Rules
12.04: Minimum Standards

12.01: Introduction

These standards, adopted in accordance with St. 1990, c.321. s.t. as amended by St. 1991, c339. stress, the commitment of state government to provide employees with affordable child care for the purpose of allowing employees to be gainfully employed. Pursuant to St. 1990, c 521. s.7. as amended by St. 1991. c. 339, on and after July 1, 1992, no contract for goods and services of any type shall be awarded by the State or any of its authorities to an employer having 50 or more full-time employees unless the employer has established a dependent care assistance program ("DCAP") or cafeteria plan whose benefits include a DCAP. An employer may offer its employees child care tuition assistance or on-site or near-site subsidized child care placements. In fulfilling its mandate to develop minimum standards for child care tuition assistance and on-site or near-site subsidized child care placements, the Office for Children has developed 102 CMR 12.00.

12.02: Definitions

As used in 102 CMR 12.00, the following words shall have the following meaning unless the context otherwise requires:

Award. The notification to an employer of the State's decision to enter into a contract with said employer for the procurement of goods or services.

Child. A child of the employee under age 13 for whom the employee is entitled to claim an exemption on his or her federal income tax return: a dependent 13 years of age through 21 years of age inclusive for whom the employee is entitled to claim an exemption on his or her federal income tax return who is physically incapable of caring for himself or herself, and who regularly spends at least eight hours each day in the employee's household: or a child of the employee who is not a dependent but who regularly is in the employee's legal or physical custody for at least six months of the year.

Contract. A legally binding and enforceable written agreement to provide goods or services in consideration of compensation to be paid by the State. For the purposes 102 CMR 12.00, the term "Contract" shall not refer to:
   a) Grants-in-aid;
   b) Provider Participation Agreements issued under the States's Medical Assistance (Medicaid) Program;
   c) Amendments, renewals, and extensions of contracts as defined by applicable statutes and procurement regulations awarded prior to July 1, 1992;
(d) Procurement of goods or services pursuant to 802 CMR 2.28 (PD); or
(e) procurement in which funds are earmarked by law for a specifically identified contractor of class of contracts

**Exempt Employer.** Any employer which certifies that it employs fewer than 50 full-time (35 hours per week) employees on the date of the award of the contract.

**Legal Child Care.** Care and supervision of infants and children licensed pursuant to M.G.L. c.28A or otherwise permitted by applicable law, arranged for the purpose of allowing the employee to be gainfully employed. Examples of such care and supervision include the following: in-home care providers, au pair services, care by relative, homemaker services, family day care homes, group day care homes, day care centers, preschool programs, nursery schools, private kindergartens, before and after-school programs, temporary shelter care programs, and programs which offer night care, and summer day camps for children.

**Near-site.** The child care facility is within three miles or 15 minutes travel time, whichever is less.

**On-site.** On the premises.

**Placement.** A reserved slot at a legal child care facility that meets the needs of the child(ren) of the employees.

**Qualified Employer.** An employer which certifies that it has established a dependent care assistance program which may be a cafeteria plan whose benefits include a dependent care assistance program, or child care tuition assistance, or on-site or near-site subsidized child care placements to its employees.

**Qualifying Individual.** A child of the employee under age 13 for whom the employee is entitled to claim an exemption on his or her federal income tax return; a dependent for whom the employee is entitled to claim an exemption on his or her federal income tax return who is physically or mentally incapable of caring for himself or herself, and who regularly spends at least eight hours each day in the employee's household; or a child of the employee who is not a dependent but who regularly is in the employee's legal or physical custody for at least six months of the year.

**Secretary.** The Secretary of the State's Executive Office for Administration and Finance or his or her designee.

**State.** The Commonwealth of Massachusetts and any authority established as a public instrumentality of the Commonwealth of Massachusetts.

**Subsidized Child Care.** Child care provided by an employer or another at less than the actual charge for child care at that particular child care facility.

**Tuition Assistance.** Monetary assistance by an employer to or on behalf of employees toward the cost of providing child care. Such assistance may include vouchers, cash assistance, or reimbursement.
12.03 General Rules

(1) General Rule. Except as provided in 102 CMR 12.03(2), the State shall not make an Award of any Contract to an employer unless said employer is a Qualified or Exempt Employer.

(2) Special Emergency. Notwithstanding the provisions of 102 CMR 12.03(1), the State may make an Award of a Contract to an employer which is neither Qualified no Exempt upon certification by the procuring governmental unit and the Secretary that:
   (a) failure to award a contract to the particular employer would pose a substantial threat to the life, health, safety, or welfare of persons or the protection of property;
   (b) there is only one employer which, by virtue of unique capabilities or circumstances, proprietary technology, exclusive copyrights, patents or licenses, monopoly status (including all cases in which the contractor is a public department or utility), is qualified to deliver the goods or perform the services specifically required and failure to deliver the goods or perform the services specifically required would involve the health or safety of the people or their property; or requiring compliance with 102 CMR 12.03 would violate federal law, contravene the orders of a court of competent jurisdiction or cause the loss of federal funds.

(3) Discrimination. Contributions or benefits provided pursuant to 102 CMR 12.04 shall not discriminate in favor or employees who are officers, owners, or highly compensated, or their dependents consistent with Internal Revenue Code Section 129. Discrimination will result in possible adverse action on the contract or a refusal to enter into a contract.

12.04: Minimum Standards

(1) Dependent care assistance program. A qualified employer which offers its employees a dependent care assistance program shall meet the requirements of Sections 125 or 129 of the Federal Internal Revenue Code of 1986 or any successor section, as amended and in effect for the taxable year.

(2) Minimum standard applicable to tuition assistance and on-site or near-site subsidized child care placements. A qualified employer which chooses to offer to its employees either tuition assistance or on-site or near-site subsidized child care placements shall contribute in cash or in kind a minimum amount equal to at least .25% of the employer's annual gross payroll. For the purposes of 102 CMR 12.04(2), employee is defined as any person who is regularly scheduled to work for an employer for at least 17-1/2 hours per week.

REGULATORY AUTHORITY

St. 1990, c.521, s.7; St. 1991, c.329.