THIS PRINT COVERS CALENDAR ITEM NO.: 11

SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY

DIVISION: Transit Services

BRIEF DESCRIPTION:

Authorizing the Director of Transportation to execute SFMTA Contract No. 2013-19: Procurement of New Light Rail Vehicles (LRV4), with Siemens Industry, Inc., to procure up to 260 LRVs, associated services, spare parts, special tools, training and documentation, in an amount not to exceed \$1,192,651,577, and for a term not to exceed 15 years; and finding that the procurement is exempt under the California Environmental Quality Act.

SUMMARY:

- The SFMTA has a fleet of 151 Light Rail Vehicles (LRVs). These vehicles went into service beginning in 1996 and are scheduled for retirement starting in 2021.
- The SFMTA is seeking to procure up to 260 new light rail vehicles to serve all of the Agency's LRV needs for the next 25 years, including the Central Subway Project and projected ridership increases.
- The scope of work of the Contract includes the design, manufacture, delivery and testing of the LRVs, together with associated services, spare parts, special tools, training and documentation.
- In March 2013, the SFMTA issued a Request for Qualifications to pre-qualify car builders who will be eligible to receive the Request for Proposals (RFP). Four car builders submitted Statements of Qualifications, and all four were deemed eligible to receive the RFP.
- In September 2013, the SFMTA issued the RFP to the four qualified car builders and received proposals from two car builders in February 2014. The selection panel scored the submittals and determined that Siemens Industry, Inc. was the highest-ranked proposer.
- The contract includes acquisition of 24 LRVs for near-term service expansion, replacement of 151 LRVs, and an option for up to 85 vehicles for longer-term service expansion requirements.
- Planned funding for the base portion of the contract will come from revenue bonds, federal, state and local funds. Funding for the option LRVs has not yet been identified.

ENCLOSURES:

- 1. SFMTAB Resolution
- 2. Agreement

APPROVALS:	DATE
DIRECTOR	July 8, 2014
SECRETARY	July 8, 2014

ASSIGNED SFMTAB CALENDAR DATE: July 15, 2014

PURPOSE:

The purpose of this item is to obtain authorization for the Director of Transportation to execute a contract with Siemens Industry, Inc. to provide up to 260 LRVs. The procurement will provide vehicles for the Central Subway, as well as replacing the existing fleet and providing an option for additional service expansion vehicles.

GOAL:

The goal of this project is to improve equipment availability and reliability in order to meet the following goal and objectives of the SFMTA's Strategic Plan:

Goal 2: Make transit, walking, bicycling, taxi, ridesharing and carsharing the preferred means of travel Objective No. 2.1: Improve customer service and communications Objective No. 2.2: Improve transit performance

DESCRIPTION:

Scope of Work:

As part of its regular daily passenger transit service, the SFMTA has a fleet of 151 LRVs. Vehicles in service operate 21 hours per day, 365 days a year, on the Muni Metro system. These vehicles typically have a lifespan of 25 years, and will be scheduled for retirement starting in 2021.

The planned procurement will provide up to 260 new LRVs, together with associated services, spare parts, special tools, training and documentation. This procurement applies a number of lessons learned from recent fleet procurements as well as experience with the current LRV fleet. First, the order quantity of vehicles was maximized, to ensure the best value as well as a uniform fleet for the foreseeable future. Second, the procurement utilizes a performance specification rather than a prescriptive detailed specification which allows the carbuilders the flexibility to offer proven technologies thereby increasing reliability while decreasing costs. And third, the procurement emphasizes the importance of overall life cycle costs, ease of maintenance, and increased reliability.

The new LRVs are expected to have a 25-year life, which assumes that the cars will undergo a mid-life overhaul, funding for which was identified as part of the Transportation 2030 process.

The SFMTA requires new LRVs for three purposes:

- 24 LRVs for near-term increased service demand for the Central Subway Project and Mission Bay, and system-wide growth along those corridors. These vehicles would be scheduled for delivery from 2016 through 2018;
- (2) The replacement of the existing fleet of 151 LRVs, with deliveries projected to start in 2021 and continue through 2028; and
- (3) Up to 85 LRVs to meet additional projected growth in ridership and system capacity expansion needs through 2040.

The base quantity in the contract will be 175 LRVs, addressing the first two needs discussed above. The contract provides that the base amount per car (\$3,327,250) will cover the first 24 LRVs, and contains escalation provisions for the next 151 cars.

The contract includes an allowance for escalation and a formula for determining escalation, based on separate material and labor manufacturing industry indices. In shorter contracts, the risk of inflation is typically taken by the contractor and is built into the price. The duration of this contract (15 years), however, effectively precluded the proposers from factoring in escalation costs into the price proposed for the vehicles. The proposers would have had to either submit a very high price for each vehicle or not bid at all due to the level of risk.

The contract escalation provisions allow the SFMTA to pay the Contractor escalation reflecting the actual annual increase (or decrease) in both material and labor costs (as opposed to a single combined escalation percentage). As an example, if there were a one percent decrease in material costs in a given year, and a three percent increase in labor costs, those percentages would be factored into the annual escalation on the vehicles separately. The contract also contains escalation provisions for equipment, such as spare parts, based on the manufacturing index for materials. Following is a table showing how the estimated escalation affects the contract price. ¹

		Escalation	
	Value	Allowance	Total
Base 175	\$ 648,632,001	\$ 133,300,188	\$ 781,932,189
Option 40	\$ 161,134,617	\$ 14,920,188	\$ 176,054,805
Option 45	\$ 149,805,495	\$ 84,859,087	\$ 234,664,582
Total	\$ 959,572,113	\$ 233,079,464	\$ 1,192,651,577

The contract contains an option to procure up to 85 additional vehicles for service expansion. SFMTA estimates that approximately 40 cars of the option will be needed from 2018 to 2020 to cover service demands, and the remaining option vehicles will cover the expansion needs from 2028 to 2040. The escalation provisions in the contract would also apply to the option vehicles.

The technical/performance-related requirements are set forth in the Technical Specifications. The new LRVs will be compatible with SFMTA's existing light rail system and any planned extensions.

The Contractor will be required to supply all labor, inspections, engineering, special tools, training, manuals, materials, parts, and other equipment required to design, build, test, and commission the new LRVs to provide a level of performance, safety, quality of materials, workmanship, and reliability sufficient to provide a 25-year minimum car service. The Contractor will also prepare all required detailed drawings, design calculations, stress analysis, and other specified technical documentation.

The work shall be performed at the Contractor's facility in Sacramento, except for the qualification and acceptance testing, which will be performed in San Francisco.

¹ For budgetary purposes, the SFMTA estimated the escalation allowance at four percent annually for materials and labor. Note that the escalation allowance factors in the number of years before the SFMTA would receive the vehicles. In the case of the replacement vehicles, for example, the SFMTA plans on receiving new vehicles as the current vehicles retire, starting in 2021.

Procurement Process

This procurement follows an extensive outreach program whereby the SFMTA conducted discussions with several carbuilders to: solicit interest and competition in the procurement, explain the proposed procurement process, communicate critical needs of the SFMTA and identify potential cost drivers in the Contract Terms and Technical Specification. The procurement process uses a two phased approach to select a contractor. The first phase was the issuance of a Request for Qualifications (RFQ) in March 2013 to pre-qualify prospective car builders. In response to the RFQ, four companies submitted Statements of Qualifications (SOQs) in April 2013: CAF USA, Inc. (CAF), Siemens Industry Inc. (Siemens), AnsaldoBreda SpA (AnsaldoBreda), and Kawasaki Railcar Inc. (Kawasaki). After reviewing their SOQs, the SFMTA decided that all four car builders were eligible to continue to the next phase of the procurement.

The second phase was the issuance of an RFP in September 2013 to the qualified car builders. In February 2014, SFMTA received proposals from two qualified car builders: CAF and Siemens. Kawasaki and AnsaldoBreda did not submit proposals.

Three panels evaluated the proposers' submittals. First, a Qualitative Responsibility Panel, composed of the City's Risk Manager and the SFMTA's Chief Financial Officer, evaluated past performance and financial strength of the proposers, which was weighted 10 percent of the proposers' scores. A Technical Evaluation Committee, composed of staff from the SFMTA possessing different skills sets and representing different areas crucial to the vehicle procurement program (including project management, engineering, maintenance, safety and planning), evaluated the proposals based on general organization, format and clarity; vehicle design and characteristics; and management approach and schedule. The resulting scores were weighted at 65 percent of the proposers' scores. A separate Price Evaluation Committee rated the price proposals using a formula that had been described in the RFP. Price was weighted as 25 percent of the scores. Finally, proposers had the ability to earn up to 10 additional points for proposing creative alternates to technical, management, schedule and payment approaches.

After the scores were compiled, Siemens emerged as the highest-ranked proposer. The scores of the two proposers are provided below:

Car Builders	Scores
Siemens	91
CAF	54

In summary, the Siemens proposal demonstrated superiority over the CAF proposal in all criteria used to evaluate the two proposals:

- Stronger technical proposal, offering higher reliability exceeding Specifications requirements
- Proven, well documented approach to project management and quality assurance
- Single, Sacramento based location for project management, engineering and design, carshell manufacture, final assembly and post-delivery support
- Financially stable parent company, offering parent company guarantee and financing to support the procurement
- Proven history of on-time performance, committed to beating the required delivery schedule

- Offering alternate approaches to improve the performance, reliability and efficiency of the project, from both a technical standpoint and from based on commercial/financial considerations
- Lower price Siemens proposed \$ 3.34M per vehicle versus CAF's price of \$4.21M, not including contract non-recurring costs.

The RFP and Negotiated Procurement Procedure offered a discretionary Best and Final Offer (BAFO) procedure, whereby SFMTA could establish a competitive range and negotiate with all proposers in the competitive range. However, due to the significant disparity in the scoring, SFMTA elected to forego a BAFO process and instead invite Siemens, the highest-ranked proposer, to negotiate a contract.

Protest

On June 9, 2014, CAF filed a formal protest, maintaining that SFMTA should have conducted negotiations with CAF and issued a BAFO.² SFMTA staff determined that the protest was without merit and denied the protest. CAF appealed the protest to the Director of Transportation, who also denied the protest.

ALTERNATIVES CONSIDERED:

The current fleet does not have the capacity to support increased service demand resulting from both the Central Subway extension and future expansion needs identified in recent ridership projections. The alternative considered was to procure only 24 LRVs to serve the immediate need for the service expansion associated with the Central Subway Extension. A second procurement for the replacement of the existing fleet would then be conducted at a later date. Procurement of 24 cars is a relatively small quantity of vehicles that would be unlikely to result in sufficient competition or competitive pricing. In addition, if SFMTA procured a 24-car fleet, that fleet would be different from both the current fleet and the ultimate replacement fleet. Operating two separate fleets for an extended period would cause operation and maintenance challenges, as well as increased costs associated with separate fleets.

FUNDING IMPACT:

The total contract with Siemens Industry, Inc. is a maximum of \$1,192,651,577. This amount includes 175 LRVs, plus options for up to 85 additional LRVs, including all required labor, inspections, engineering, special tools, training, manuals, materials, spare parts, and other equipment specified by the SFMTA.

A funding plan for the base contract of 175 LRVs is in place. Funding for the initial 24 expansion cars includes \$26M from the Central Subway Project (FTA, Prop 1B State Bond, Prop K and other funds) and the balance from future SFMTA revenue bonds (subject to approval of the SFMTA Board).

Nearly 80 percent of the funding for the 151 replacement LRVs will come from future FTA formula grant funds programmed by the Metropolitan Transportation Commission (with the remaining 20 percent from local matching funds from a variety of sources, including Prop K and future Revenue Bonds).

 $^{^2}$ The official protest letter followed letters that CAF sent in April and May 2014, after the evaluation of the proposals was completed, in which CAF made similar arguments.

Potential funding sources, still undetermined, for the 85 Option Vehicles include developer contributions, Transit Impact Development Fees, Transit Sustainability Fees, FTA's Core Capacity Expansion Program, bridge toll funds, SFMTA revenue bonds, local vehicle license fee, local sales tax, and/or State funds. The use of SFMTA commercial paper or other gap financing is likely to be required to cover those periods during which budgeted funding is not accessible.

The RFP invited proposers to suggest alternate approaches to financing gaps in vehicle delivery. As an alternate approach, Siemens offered vendor financing to bridge the gap between available funding and vehicle delivery requirements. The Agreement includes a provision to negotiate financing with Siemens if funds can be secured to repay such a loan.

The priority for funding is for approximately 40 option vehicles to be delivered between 2018 and 2021 due to the urgent need to meet service demands. Vendor-provided financing for the 40 option vehicles may be available should SFMTA determine that such financing is feasible and advantageous to the Agency, with any final financing agreement to be approved by this Board. The option(s) will be exercised only in the event that funding is secured.

OTHER APPROVALS RECEIVED OR STILL REQUIRED:

The contract will require approval from the Board of Supervisors.

The Department of City Planning has determined that the replacement and expansion vehicle portions of the procurement are statutorily exempt under Section 21080(b)(11) of the California Resources Code and Section 15275(a) of the implementing CEQA Guidelines because those portions of the procurement involve an increase of service on rail lines already in use. The vehicles for the Central Subway Project were covered under the Central Subway Final Supplemental EIS/EIR, Case No. 1996.281E. The Planning Department's determination is on file with the Secretary to the SFMTA Board of Directors. The proposed action is an Approval Action as defined by San Francisco Administrative Code Chapter 31.

The City Attorney's Office has reviewed this calendar item.

RECOMMENDATIONS:

Staff recommends that the SFMTA Board authorize the Director of Transportation to execute SFMTA Contract No. 2013-19: Procurement of New Light Rail Vehicles (LRV4) with Siemens Industry, Inc. for an amount not to exceed \$1,192,651,577, and for a term not to exceed 15 years.

SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY BOARD OF DIRECTORS

RESOLUTION No.

WHEREAS, The San Francisco Municipal Transportation Agency ("SFMTA") currently operates a fleet of 151 light rail vehicles (LRVs), which are scheduled for retirement starting in 2021; and,

WHEREAS, The start of revenue service for the Central Subway Extension will require an additional 24 light rail vehicles to be delivered by 2018; and,

WHEREAS, Ridership projections and planned service expansions indicate a need for an additional 85 light rail vehicles over the next ten years; including 40 light rail vehicles needed between 2018 and 2021; and,

WHEREAS, In order to procure new LRVs to meet these anticipated needs, the SFMTA issued a Request for Qualifications in March 2013 seeking Statements of Qualification (SOQs) from LRV car builders; and,

WHEREAS, The SFMTA received SOQs from four car builders, and after evaluating the SOQs, found all four car builders eligible to continue on to the Request for Proposals (RFP) phase of the procurement; and,

WHEREAS, In September 2013, the SFMTA issued an RFP for the procurement of up to 260 LRVs, with a scope of work that includes the design, manufacture, delivery and test of LRVs, together with associated services, spare parts, special tools, training and documentation; and,

WHEREAS, In February 2014, the SFMTA received proposals from two car builders; after reviewing the proposals, the selection panel determined Siemens Industry, Inc. to be the highest-ranked proposer; and,

WHEREAS, The SFMTA has negotiated a final agreement with Siemens Industry, Inc., to procure up to 260 LRVs, associated services, spare parts, special tools, training and documentation, for an amount not to exceed \$1,192,651,577, and a term not to exceed 15 years; and,

WHEREAS, The base portion of the contract for 175 LRVs will be funded with federal, state and local funds; and

WHEREAS, The Department of City Planning has determined that the replacement and expansion vehicle portions of the procurement are statutorily exempt under Section 21080(b)(11) of the California Resources Code and Section 15275(a) of the implementing CEQA Guidelines because those portions of the procurement involve an increase of service on rail lines already in use; and

WHEREAS, The vehicles for the Central Subway Project were reviewed as part of the Central Subway Final Supplemental EIS/EIR, certified by the Planning Commission on August 7, 2008, and on August 19, 2008 this Commission, in Resolution No. 08-150 adopted the findings and conclusions with respect to Central Subway Final Supplemental EIS/EIR; and based upon this Commission's review of the Final Supplemental EIS/EIR, the Commission finds that no additional environmental review is required under Public Resources Code section 21166; now, therefore, be it,

RESOLVED, That the SFMTA Board of Directors authorizes the Director of Transportation to execute SFMTA Contract No. 2013-19: Procurement of New Light Rail Vehicles (LRV4), with Siemens Industry, Inc., to procure up to 260 LRVs, associated services, spare parts, special tools, training and documentation, in an amount not to exceed \$1,192,651,577, and for a term not to exceed 15 years; and be it further

RESOLVED, That the SFMTA Board of Directors authorizes the Director of Transportation to enter into negotiations with Siemens Industry, Inc. to provide financing for approximately 40 Option vehicles to be delivered between 2018 and 2021 should SFMTA determine that such financing is feasible and advantageous to the Agency, with any final financing agreement to be approved by this Board; and be it further

RESOLVED, That the SFMTA Board of Directors urges the Board of Supervisors to approve this Agreement.

I certify that the foregoing resolution was adopted by the Municipal Transportation Agency Board of Directors at its meeting of July 15, 2014.

> Secretary to the Board of Directors San Francisco Municipal Transportation Agency

Agreement Between

The City and County Of San Francisco

San Francisco Municipal Transportation Agency

And

Siemens Industry, Inc.

For

Procurement of New Light Rail Vehicles (LRV4)

Contract No. SFMTA-2013-19

TABLE OF CONTENTS

1.				ds; Budget and Fiscal Provisions; Termination in the Event of
2.	Term	of the /	Agreen	nent4
3.	Effect	ive Dat	te of Ag	greement4
4.	Work	Contra	ctor Ag	grees to Perform4
5.	Comp	ensatio	on	
6.	Guara	anteed	Maxim	um Costs4
7.	Paym	ent; Inv	voice F	ormat5
	7.1.	Amou	nt	
	7.2.	Invoic	es	
	7.3.	Progre	ess Pa	yments5
	7.4.	Excha	ange R	ate Risk6
	7.5.	Escala	ation	
		7.5.1	Sole I	Remedy for Cost Increases6
		7.5.2	Rese	rved6
		7.5.3	Adjus	tment Methodolgy6
			(a)	Labor Indices6
			(b)	Material Indices6
			(c)	Determination of Base and Current Indices7
			(d)	Determination of Escalated Price7
		7.5.4	Escal	ation for Price of Spare Parts7
		7.5.5	Escal	ation for Price of Train Simulator7
	7.6.	Relea	se	
8.	Subm	itting F	alse C	laims; Monetary Penalties7
9.	Disall	owance	Э	
10.	Taxes	S		
	10.1.	Paym	ent of	Taxes
	10.2.	Posse	essory	Interest 8
11.	Paym	ent Do	es Not	Imply Acceptance of Work 9
12.	Qualif	ied Pe	rsonne	I 9

13.	Respo	onsibility for E	Equipment	9
14.	Indep	endent Contr	actor; Payment of Taxes and Other Expenses	9
	14.1.	Independen	t Contractor	9
	14.2.	Payment of	Taxes and Other Expenses	10
15.	Insura	ance; Bonds		10
	15.1.	Insurance		10
	15.2.	Bonds/Lette	r of Credit	12
		15.2.1 Gene	eral	12
		15.2.2 Secu	rity	12
		(a)	Phase 1 (24 Base Order Vehicles)	12
		(b)	Phase 2 (Base Order Vehicles 25-175)	13
		(c)	Optional Delivery Phase (Option Vehicles 1-25)	13
		15.2.3 Labo	r and Materials Bond	13
		(a)	Phase 1 (24 Base Order Vehicles)	13
		(b)	Phase 2 (151 Base Order Vehicles)	14
		(C)	Phase 2 (Option Vehicles 1-85)	14
		15.2.4 Warr	anty Bond	14
		15.2.5 Requ	irements for Letter of Credit	15
		(a)	General Requirements	15
		(b)	Financial Institution	15
		(c)	Demand on Letter of Credit	15
		(d)	Expiration or Termination	15
		(e)	Return of Letter of Credit	16
		(f)	Excessive Demand	16
		15.2.6 Requ	irements for Bonds	16
16.	Indem	nification		17
	16.1.	General		17
	16.2.	Duty to Defe	end	17
	16.3.	Intellectual I	Property	17
	16.4.	Limitation of	f Liability	17
	16.5.	Notice of Cl	aim	17
17.	Incide	ntal and Con	sequential Damages	18
18.	Liabili	ty of City		18
SFMTA	Contract	No. SFMTA-201	3-19 Volume 1 ii n:\ptc\as2013\1000417\00931306.doc	

19.	Liquidated Damages/ Weight Incentives			
	19.1. Liquidated Damages			
	19.2. Weight Limits and Incentives			
20.	Default; Remedies	19		
	20.1. Event of Default	19		
	20.2. Remedies	19		
21.	Termination for Convenience			
	21.1. Exercise of Option			
	21.2. Contractor Actions			
	21.3. Contractor Invoice			
	21.4. Non-Recoverable Costs	21		
	21.5. Deductions	21		
	21.6. Survival	21		
22.	Rights and Duties Upon Termination or Expiration	21		
	22.1. Survival of Sections	21		
	22.2. Contractor Duties	21		
23.	Conflict of Interest	21		
24.	Proprietary or Confidential Information of City			
25.	Notices to the Parties			
26.	Intellectual Property			
	26.1. Works for Hire; Ownership of Results			
	26.2. Licenses Granted			
	26.2.1 Computerized Software and Systems			
	26.2.2 Other Deliverables			
	26.3. Proprietary Materials			
27.	Exhibits	24		
28.	Audits and Inspection of Records	24		
29.	Subcontracting	24		
30.	Assignment	24		
31.	Non-Waiver of Rights	24		
32.	Reserved			
33.	Reserved			
34.	Nondiscrimination; Penalties	24		

	34.1. Contractor Shall Not Discriminate	. 24
	34.2. Subcontracts	. 25
	34.3. Nondiscrimination in Benefits	. 25
	34.4. Incorporation of Administrative Code Provisions by Reference	. 25
35.	Tropical Hardwoods and Virgin Redwood Ban	. 25
36.	Drug-Free Workplace Policy	. 25
37.	Resource Conservation	. 25
38.	Compliance with Americans with Disabilities Act	. 26
39.	Sunshine Ordinance	. 26
40.	Public Access to Meetings and Records	. 26
41.	Notification of Limitations on Contributions	. 26
42.	Requiring Minimum Compensation for Covered Employees	. 27
43.	First Source Hiring Program	. 27
44.	Prohibition on Political Activity with City Funds	. 27
45.	Preservative-Treated Wood Containing Arsenic	. 27
46.	Modification of Agreement	. 27
	46.1. City-Ordered Changes	. 27
	46.2. Regulatory Changes	. 28
	46.3. Schedule Changes	. 28
47.	Authority of Project Manager; Claims; Disputes	. 28
	47.1. Authority of Project Manager	. 28
	47.2. Claims for Additional Compensation	. 28
	47.3. Other Claims	. 29
	47.4. Resolution of Disputes	. 29
	47.5. No Cessation of Work	. 29
	47.6. Alternative Dispute Resolution	. 29
	47.7. Disputes Among Contractor's Partners	. 29
48.	Agreement Made in California; Venue	. 29
49.	Construction	. 29
50.	Entire Agreement	. 30
51.	Compliance with Laws	. 30
52.	Services Provided by Attorneys	. 30
53.	Reserved	. 30

iv

54.	Severability				
55.	Protection of Private Information	30			
56.	Time of Essence				
57.	Technical Specifications	30			
	57.1. Fabrication	30			
	57.2. Omission	30			
58.	Project Management Plan	31			
59.	Reserved	31			
60.	FTA Requirements	31			
61.	Cooperative Drafting	31			
62.	Warranty	31			
63.	Title	31			
64.	Option Vehicles, Equipment and Spare Parts	31			
	64.1. Option for New Light Rail Vehicles	31			
	64.2. Option for Additional Spare Parts	31			
	64.3. Spare Parts For Options	31			
	64.4. Optional Train Simulator	32			
	64.5. Financing of Option Vehicles	32			
65.	Precedence of Contract Documents	32			
66.	Deliveries	32			
	66.1. Predelivery Tests and Inspections	32			
	66.2. Delivery Procedure	32			
	66.3. Spare Parts Delivery Procedure	32			
67.	Acceptance Of Vehicles	33			
	67.1. Procedure	33			
	67.2. Conditional Acceptance	33			
	67.3. Assumption of Risk of Loss	33			
68.	Repairs Prior To Acceptance	33			
	68.1. Repairs by Contractor	33			
	68.2. Repairs by SFMTA	34			
69.	Unavoidable Delays	34			
	69.1. Definition	34			
	69.2. Notification of Delay	34			
SFMTA	Contract No. SFMTA-2013-19 Volume 1 v n:\ptc\as2013\1000417\00931306.doc				

	69.3. Request for Extension	34
70.	MacBride Principles—Northern Ireland	35

Exhibits

Exhibit 1	Schedule of Prices
Exhibit 2	Payment Schedule
Exhibit 3	Project Delivery Schedule
Exhibit 4	FTA Requirements
Exhibit 5	Warranty Provisions
Exhibit 6	Parent Company Guarantee

City and County of San Francisco San Francisco Municipal Transportation Agency One South Van Ness 7th Floor San Francisco, California 94103

Agreement between the City and County of San Francisco and

Siemens Industry, Inc.

This Agreement is made this ______ day of _____, 2014, in the City and County of San Francisco, State of California, by and between: Siemens Industry, Inc. at 7464 French Road, Sacramento, CA 95828 ("Contractor") and the City and County of San Francisco, a municipal corporation ("City"), acting by and through its Municipal Transportation Agency ("SFMTA").

Recitals

A. SFMTA wishes to obtain the services of a qualified firm to procure up to 260 Light Rail Vehicles.

B. A Request for Qualifications ("RFQ") was issued on March 29, 2013, and City qualified three proposers to submit proposals.

C. A Request for Proposals ("RFP") was issued on September 30, 2013 to the qualified proposers, and City selected Contractor as the highest-qualified proposer pursuant to the RFP.

Now, THEREFORE, the parties agree as follows:

Definitions

<u>Acceptance</u>: The formal written acceptance by the City that all Work, or a specific portion thereof, under the contract has been satisfactorily completed.

<u>Award</u>: Notification from the City to Contractor of acceptance of Contractor's proposal, subject to the execution and approval of a satisfactory Contract and bond to secure the performance of the Contract, and to such other conditions as may be specified or otherwise required by law.

Base Order: Work referenced as Items 1 – 7 in Exhibit 1.

<u>Certification</u>: Certification by the Controller that funds necessary to make payments as required under the Contract are available in accordance with the City's Charter.

<u>City</u>: The City and County of San Francisco.

<u>Conditional Acceptance</u>: The circumstance in which a Vehicle has been delivered to SFMTA and placed in revenue service despite not having met all requirements for Acceptance.

<u>Conformed Contract Documents</u>: The Contract documents revised to incorporate information included in the Contractor's Proposal and accepted by the City.

<u>Contract, Agreement</u>: The written contract executed by the City and Contractor, covering the performance of the work and furnishing of labor, materials, equipment, tools, and services, including work incidental to the procurement, to include the Technical Specifications, all Conformed Contract Documents, the Contractor's Proposal, the Contract bonds or other security, and all and Contract Modifications.

<u>Contract Modification</u>: A written amendment to the Contract, agreed to by the City and Contractor, covering changes in the Contract documents within the general scope of the Contract and establishing the basis of payment and time adjustments for the work affected by the changes.

<u>Contractor</u>: The proposer to whom the Award is made.

Controller: Controller of the City.

Correction: The elimination of a defect.

Days: Unless otherwise designated, "Days" as used in the Contract shall mean calendar days.

<u>Defect</u>: Any patent or latent malfunctions or failure in manufacture or design of any component or subsystem.

Director: The Director of Transportation of the SFMTA or his or her designee.

Engineer: The SFMTA Engineer assigned to the Contract or designated agent.

<u>Final Acceptance</u>: The formal written acceptance by the Director of Transportation or his or her designee that all contract deliverables for the Contract have been satisfactorily completed and accepted.

Light Rail Vehicles: The Vehicles procured under this Contract, also referred to as "Cars," "LRV4s," or "Vehicles."

<u>Material and/or Equipment</u>: The Light Rail Vehicles (including all parts and equipment installed in them) and other deliverables furnished by the Contractor under the provisions of the Contract.

Notice To Proceed (NTP): A written notice to the Contractor of the date on which it shall begin prosecution of the work to be done under the contract.

Option: A unilateral right in the Contract, by which, for a specified time, the SFMTA may elect to purchase, at a pre-determined price specified in the Contract, additional Work called for by the Contract.

Phase 1: Work related to the acquisition of 24 Base Order Vehicles to supplement the existing fleet when SFMTA Central Subway opens.

Phase 2: Work related to the acquisition of 151 Base Order Vehicles to replace the existing LRV fleet.

Project Manager: The Project Manager assigned to the Contract for the SFMTA, or his or her designated agent.

Proposal: The technical and management information and prices submitted by Contractor in response to the RFP.

<u>Related Defect(s)</u>: The damages inflicted on any component or subsystem as a direct result of a Defect.

Request for Qualifications; RFQ: The Request for Qualifications issued by the SFMTA on March 29, 2013 to qualify proposers for the RFP.

<u>Request for Proposals; RFP</u>: The Request for Proposals issued by the SFMTA on September 30, 2013, to procure up to 260 Light Rail Vehicles.

<u>SFMTA</u>: The San Francisco Municipal Transportation Agency, an agency of the City with responsibility for the Municipal Railway and the Division of Sustainable Streets (Parking and Traffic).

Subcontractor, Supplier: Any individual, partnership, firm, or corporation that, under an agreement with Contractor, undertakes integrally on the Project the partial or total design, manufacture, performance of, or furnishes one or more items of work under the terms of the contract. As used in this Agreement, the terms Subcontractor and Supplier are synonymous.

Technical Specifications: The portion of the Conformed Contract Documents that contain the specifications, provisions, and requirements that detail the Work and the materials, products (including the assembly and testing), and other requirements relative to the manufacturing and construction of the Work.

<u>Work</u>: The furnishing of all design, engineering, manufacturing, labor, supervision, services, products, materials, machinery, equipment, tools, supplies, and facilities and the performance of all requirements called for by the Contract and necessary to the completion and warranty of the Vehicles.

<u>Working Days</u>: Those calendar days during which regular business is conducted excluding Saturdays, Sundays, and all Federal, State, and municipal holidays that are observed by the SFMTA during the duration of the Contract.

Acronyms

AW0	Assigned Weight (empty load)
FDR	Final Design Review
FTA	Federal Transit Administration
PDR	Preliminary Design Review
RFP	Request for Proposals
RFQ	Request for Qualifications
SOQ	Statement of Qualifications

1. Certification of Funds; Budget and Fiscal Provisions; Termination in the Event of Non-Appropriation.

1.1. This Agreement is subject to the budget and fiscal provisions of the City's Charter. Charges will accrue only after prior written authorization certified by the Controller, and the amount of City's obligation hereunder shall not at any time exceed the amount certified for the purpose and period stated in such advance authorization.

1.2. This Agreement will terminate without penalty, liability or expense of any kind to City at the end of any fiscal year if funds are not appropriated for the next succeeding fiscal year. If funds are appropriated for a portion of the fiscal year, this Agreement will

terminate, without penalty, liability or expense of any kind at the end of the term for which funds are appropriated.

1.3. City has no obligation to make appropriations for this Agreement in lieu of appropriations for new or other agreements. City budget decisions are subject to the discretion of the Mayor and the Board of Supervisors. Contractor's assumption of risk of possible non-appropriation is part of the consideration for this Agreement.

THIS SECTION CONTROLS AGAINST ANY AND ALL OTHER PROVISIONS OF THIS AGREEMENT.

2. Term of the Agreement.

Subject to Section 1, the term of this Agreement shall not exceed 15 years from the Effective Date.

3. Effective Date of Agreement.

This Agreement shall become effective on the date the Controller has certified to the availability of funds and Contractor has been notified in writing.

4. Work Contractor Agrees to Perform.

The Contractor agrees to perform the Work provided for in the Technical Specifications, and in the Contractor's Proposal (as incorporated into the Conformed Contract Documents), according to the Project Delivery Schedule set forth in Exhibit 3.

5. Compensation.

5.1. In no event shall the amount of this Agreement exceed One Billion, One Hundred Ninety-Two Million, Six Hundred Fifty-One Thousand, Five Hundred Seventy-Seven Dollars (\$1,192,651,577). The breakdown of costs associated with this Agreement appears in the Schedule of Prices (Exhibit 1) and Payment Schedule (Exhibit 2).

5.2. No charges shall be incurred under this Agreement nor shall any payments become due to Contractor until equipment, reports, services, or both, required under this Agreement are received from Contractor and approved by SFMTA as being in accordance with this Agreement. City may withhold payment to Contractor in any instance in which Contractor has failed or refused to satisfy any material obligation provided for under this Agreement.

5.3. In no event shall City be liable for interest or late charges for any late payments.

6. Guaranteed Maximum Costs.

6.1. The City's obligation hereunder shall not at any time exceed the amount certified by the Controller for the purpose and period stated in such certification.

6.2. Except as may be provided by laws governing emergency procedures, officers and employees of the City are not authorized to request, and the City is not required to reimburse the Contractor for, Commodities or Services beyond the agreed upon contract scope unless the changed scope is authorized by amendment and approved as required by law.

6.3. Officers and employees of the City are not authorized to offer or promise, nor is the City required to honor, any offered or promised additional funding in excess of the maximum amount of funding for which the contract is certified without certification of the additional amount by the Controller.

6.4. The Controller is not authorized to make payments on any contract for which funds have not been certified as available in the budget or by supplemental appropriation.

6.5. This contract will be initially certified for \$ _____. Contractor shall not incur costs in excess of such amount without written authorization from the SFMTA, signed by the SFMTA Chief Financial Officer, or his or her designee.

7. Payment; Invoice Format

Invoices furnished by Contractor under this Agreement must be in a form acceptable to the Controller, and must include the Contract Progress Payment Authorization number. All amounts paid by City to Contractor shall be subject to audit by City. Progress payments shall be made by the City to Contractor at the address specified below:

7.1. Amount. Subject to any subsequent deductions for Liquidated Damages for late delivery of Contract deliverables as specified in Section 19 of this Agreement, the City agrees to pay an amount not to exceed the compensation amount stated in Section 5.1 of this Agreement and in accordance with the terms and conditions of this Agreement.

7.2. Invoices. Contractor's invoices shall be submitted to the following address:

San Francisco Municipal Transportation Agency Transit Division 1 South Van Ness Avenue, Room 7068 San Francisco, CA 94103 Attention: Ms. Trinh Nguyen P.E., Senior Program Manager

Each invoice shall include:

- Relevant milestones;
- Contract order number;
- Quantity of items;
- Description of items;
- Unit price;
- Total invoice amount.
- Supporting documentation and/or documentation referencing submittal or delivery.

7.3. Progress Payments. SFMTA shall make payments as the work proceeds in accordance with the progress payment provisions as set forth in the Payment Schedule (Exhibit 2). Progress payments shall be conditioned on either (1) transfer of title, free of encumbrances, to the City for the portion of the components, equipment or material paid for by the progress payment, plus a certificate of insurance required by Section 15.1 of this Agreement; or (2) issuance of a letter of credit in conformance with the provision of Section 15.2.5 in the amount of the progress payment. Progress payments for which a letter of credit shall be required are as follows: Milestones A, B and C of Item 1 of Exhibit 2 to this Agreement, and Milestones A, B (except if title is delivered prior to payment by SFMTA) and C of Item 2 of Exhibit 2 to this Agreement. Letter(s) of credit for such progress payments will be released upon Acceptance of 80 percent of the total Vehicles for each respective phase: Phase 1 Base Order Vehicles, Phase 2 Base Order Vehicles, and Option Vehicles.

In lieu of a letter of credit to secure progress payments, Contractor may elect to increase its performance bond required under Section 15.2.2 of this Agreement by the cumulative amount of progress payments for each of the above Milestones and any other items for which Contractor elects to submit security instead of transferring title. Such increase in the amount of the performance bond shall be included in the amount of the performance bond submitted at the time of Contract Award. This increase in the amount of the performance bond shall constitute security for all progress payments for which the bond is issued should Contractor default with respect to any provision of this Agreement. In lieu of an increase in the Performance Bond, an Advance Payment

Bond, in a form acceptable to the City's Risk Manager, or other security acceptable to the City's Risk Manager, will also be accepted. For any Advance Payment Bond or increase in the Performance Bond based upon the above, the Advance Payment Bond will be released or the Performance Bond will be reduced based upon Acceptance of 80 percent of the total Vehicles for each respective phase: Phase 1 Base Order Vehicles, Phase 2 Base Order Vehicles, and Option Vehicles.

All Work covered and paid for during the construction of the Light Rail Vehicles shall become the sole property of SFMTA. This provision shall not be construed as relieving the Contractor from the sole responsibility for all Work upon which payments have been made or for the restoration of all damaged Work or as waiving the right of SFMTA to require the fulfillment of all of the terms of the Contract specifications. The Contractor shall remain liable for insuring and delivering the material in the final form as specified in the Contract, and shall replace material at no cost to SFMTA in the event it is not delivered and accepted by SFMTA.

Contractor shall prepare invoices supported by evidence satisfactory to SFMTA that the Work invoiced has been accomplished and that the materials listed, if any, are stored and ready for use. City will endeavor to pay 30 days after receipt of the complete invoice package.

7.4. Exchange Rate Risk. The City will not make price adjustments on this Contract to protect the Contractor from fluctuations in the value of the applicable foreign currency in relation to the United States dollar.

7.5. Escalation. SFMTA will make price adjustments to this Contract to protect Contractor from economic inflation as set forth below. This adjustment will apply to the Base Order Phase 2 Vehicles, the Option Vehicles (Section 64.1), the optional Train Simulator, the spare parts for Phase 2, and the Option spare parts (see Section 7.5.4 below).

7.5.1. Sole Remedy for Cost Increases. This escalation adjustment shall be the sole remedy for any increases or decreases in the Contractor's costs for Phase 2 Vehicles, Option Vehicles, equipment and spare parts due to inflation or deflation. Adjustments will be calculated applied independently for each Option exercised.

7.5.2. Reserved.

7.5.3. Adjustment Methodology. The unit price of the Vehicle shall be broken down by the percentages of labor and material comprising the unit price as follows: 35% material, 60% labor, and 5% profit. The profit portion of the unit price shall not be subject to adjustment. In making any price adjustments under this Section, SFMTA will use the labor and material indices published by the U.S. Department of Labor, Bureau of Labor Statistics (BLS) at www.bls.gov/iag/tgs/iag335.htm and www.bls.gov/iag/tgs/iag336.htm.

(a) Labor Indices. SFMTA will make any adjustments based on the change in the following indices, equally weighted:

(i) Unit Labor Cost Index for the NAICS Manufacturing Series, Code 335, Electrical Equipment, Appliance and Component Manufacturing, and

(ii) Unit Labor Cost Index for the NAICS Manufacturing Series, Code 336, Transportation Equipment.

(b) Material Indices. SFMTA will make adjustments based on the change in the following indices, equally weighted:

(i) Producer Price Index (PPI) for the NAICS Manufacturing Series, Code 335, Electrical Equipment, Appliance and Component Manufacturing, and

(ii) The Producer Price Index (PPI) for the NAICS Manufacturing Series, Code 336, Transportation Equipment.

(c) Determination of Base and Current Indices

(i) SFMTA will determine the Base labor and material indices by calculating the arithmetic average of the final published indices for the three months prior to the date of Notice to Proceed.

(ii) SFMTA will determine the current labor and material indices for Phase 2 Vehicles by calculating the arithmetic average of the final published indices for the three months prior to one year before the scheduled date of delivery of the first Car of Phase 2 in accordance with Exhibit 3, Project Delivery Schedule.

(iii) SFMTA will negotiate and agree escalation to be applied to the Options at the time Options may be exercised.

(d) Determination of Escalated Price

(i) SFMTA will use the unit price of Vehicles as adjusted by any Contract Modifications in effect at the time of escalation (Adjusted Unit Price).

(ii) SFMTA will escalate the Adjusted Unit Prices of Vehicle according to the methodology in Section 7.5.3(c) to determine the escalated Vehicle unit price.

7.5.4. Escalation for Price of Spare Parts. Any price adjustment for spare parts shall be determined according to the methodology described above for escalating the price of Vehicles and in accordance with the table below.

Schedule of Prices Reference	Base Phase 1 Cars 1-24	Base Phase 2 Cars 25-175	Option Vehicles Cars 1-85
Nominal Spare (item 5)	NO ESCALATION	In accordance with Phase 2, Section 7.5.3 (c)(ii)	
Optional Spare (item 8)	In accordance with Section 7.5.3(c)(iii)	In accordance with Section 7.5.3(c)(iii)	
Spares for Option Vehicles (item 9)			In accordance with Section 7.5.3(c)(iii)

7.5.5. Escalation for Price of Train Simulator. Any price adjustment for the optional train simulator shall be determined according to the methodology described above for Option Vehicles, Section 7.5.3(c)(iii).

7.6. Release. The Contractor shall, if required by the City, execute and deliver at the time of final payment and as a condition precedent to final payment, a release in a form satisfactory to the City, discharging the City, its officers, agents and employees of and from liabilities, obligations, and claims arising under this Contract.

8. Submitting False Claims; Monetary Penalties.

Pursuant to San Francisco Administrative Code §21.35, any contractor, subcontractor or consultant who submits a false claim shall be liable to the City for three

times the amount of damages which the City sustains because of the false claim. A contractor, subcontractor or consultant who submits a false claim shall also be liable to the City for the costs, including attorneys' fees, of a civil action brought to recover any of those penalties or damages, and may be liable to the City for a civil penalty of up to \$10,000 for each false claim. A contractor, subcontractor or consultant will be deemed to have submitted a false claim to the City if the contractor, subcontractor or consultant: (a) knowingly presents or causes to be presented to an officer or employee of the City a false claim or request for payment or approval; (b) knowingly makes, uses, or causes to be made or used a false record or statement to get a false claim allowed or paid by the City; (c) conspires to defraud the City by getting a false claim allowed or paid by the City; (d) knowingly makes, uses, or causes to be made or used a false record or statement to pay or transmit money or property to the City; or (e) is a beneficiary of an inadvertent submission of a false claim to the City, subsequently discovers the falsity of the claim, and fails to disclose the false claim to the City within a reasonable time after discovery of the false claim.

9. Disallowance

If Contractor claims or receives payment from City for a service, reimbursement for which is later disallowed by the State of California or United States Government, Contractor shall promptly refund the disallowed amount to City upon City's request. At its option, City may offset the amount disallowed from any payment due or to become due to Contractor under this Agreement or any other Agreement.

10. Taxes

10.1. Payment of Taxes. The City will reimburse the Contractor for any levied sales tax on articles purchased by the City under this Agreement. However, if the Contractor cannot be authorized to collect and pay the sales taxes to the State of California, then the City will pay the sales tax directly to the State. Contractor shall be solely responsible for any penalties, interest or fees assessed as a result of late or erroneous payment of such taxes except to the extent that the City is responsible for making payments directly to the State.

The City warrants that it is a public entity exempt from certain federal excise taxes and in connection therewith that it has obtained a federal excise tax exemption certificate. Contractor will pay all other taxes, including possessory interest taxes, licenses, imposts, duties, and all other governmental charges of any type whatsoever levied upon or as a result of this Agreement or Work performed pursuant hereto.

10.2. Possessory Interest. Contractor recognizes and understands that this Agreement may create a "possessory interest" for property tax purposes. Generally, such a possessory interest is not created unless the Agreement entitles the Contractor to possession, occupancy, or use of City property for private gain. If such a possessory interest is created, then the following shall apply:

10.2.1. Contractor, on behalf of itself and any permitted successors and assigns, recognizes and understands that Contractor, and any permitted successors and assigns, may be subject to real property tax assessments on the possessory interest;

10.2.2. Contractor, on behalf of itself and any permitted successors and assigns, recognizes and understands that the creation, extension, renewal, or assignment of this Agreement may result in a "change in ownership" for purposes of real property taxes, and therefore may result in a revaluation of any possessory interest created by this Agreement. Contractor accordingly agrees on behalf of itself and its permitted successors and assigns to report on behalf of the City to the County Assessor the information required by Revenue and Taxation Code section 480.5, as amended from time to time, and any successor provision.

10.2.3. Contractor, on behalf of itself and any permitted successors and assigns, recognizes and understands that other events also may cause a change of ownership of the possessory interest and result in the revaluation of the possessory interest. (see, e.g., Rev. & Tax. Code section 64, as amended from time to time). Contractor accordingly agrees on behalf of itself and its permitted successors and assigns to report any change in ownership to the County Assessor, the State Board of Equalization or other public agency as required by law.

10.2.4. Contractor further agrees to provide such other information as may be requested by the City to enable the City to comply with any reporting requirements for possessory interests that are imposed by applicable law.

11. Payment Does Not Imply Acceptance of Work

The granting of any payment by City, or the receipt thereof by Contractor, shall in no way lessen the liability of Contractor to replace unsatisfactory work, equipment, or materials, although the unsatisfactory character of such work, equipment or materials may not have been apparent or detected at the time such payment was made. Materials, equipment, components, or workmanship that does not conform to the requirements of this Agreement may be rejected by City and in such case must be replaced by Contractor without delay.

12. Qualified Personnel

Work under this Agreement shall be performed only by competent personnel under the supervision of and in the employment of Contractor. Contractor will comply with City's reasonable requests regarding assignment of personnel, but all personnel, including those assigned at City's request, must be supervised by Contractor. Contractor shall commit adequate resources to complete the project within the project schedule specified in this Agreement.

13. Responsibility for Equipment

City shall not be responsible for any damage to persons or property as a result of the use, misuse or failure of any equipment used by Contractor, or by any of its employees, even though such equipment be furnished, rented or loaned to Contractor by City.

14. Independent Contractor; Payment of Taxes and Other Expenses

14.1. Independent Contractor. Contractor or any agent or employee of Contractor shall be deemed at all times to be an independent contractor and is wholly responsible for the manner in which it performs the services and Work requested by City under this Agreement. Contractor or any agent or employee of Contractor shall not have employee status with City, nor be entitled to participate in any plans, arrangements, or distributions by City pertaining to or in connection with any retirement, health or other benefits that City may offer its employees. Contractor or any agent or employee of Contractor is liable for the acts and omissions of itself, its employees and its agents. Contractor shall be responsible for all obligations and payments, whether imposed by federal, state or local law, including, but not limited to, FICA, income tax withholdings, unemployment compensation, insurance, and other similar responsibilities related to Contractor's performing services and Work, or any agent or employee of Contractor providing same. Nothing in this Agreement shall be construed as creating an employment or agency relationship between City and Contractor or any agent or employee of Contractor.

Any terms in this Agreement referring to direction from City shall be construed as providing for direction as to policy and the result of Contractor's work only, and not as to the means by which such a result is obtained. City does not retain the right to control the means or the method by which Contractor performs work under this Agreement.

14.2. Payment of Taxes and Other Expenses. Should City, in its discretion, or a relevant taxing authority such as the Internal Revenue Service or the State Employment Development Division, or both, determine that Contractor is an employee for purposes of collection of any employment taxes, the amounts payable under this Agreement shall be reduced by amounts equal to both the employee and employer portions of the tax due (and offsetting any credits for amounts already paid by Contractor which can be applied against this liability). City shall then forward those amounts to the relevant taxing authority.

Should a relevant taxing authority determine a liability for past services or Work performed by Contractor for City, upon notification of such fact by City, Contractor shall promptly remit such amount due or arrange with City to have the amount due withheld from future payments to Contractor under this Agreement (again, offsetting any amounts already paid by Contractor which can be applied as a credit against such liability).

A determination of employment status pursuant to the preceding two paragraphs shall be solely for the purposes of the particular tax in question, and for all other purposes of this Agreement, Contractor shall not be considered an employee of City. Notwithstanding the foregoing, should any court, arbitrator, or administrative authority determine that Contractor is an employee for any other purpose, then Contractor agrees to a reduction in City's financial liability so that City's total expenses under this Agreement are not greater than they would have been had the court, arbitrator, or administrative authority determined that Contractor was not an employee.

15. Insurance; Bonds

15.1. Insurance

15.1.1. Without in any way limiting Contractor's liability pursuant to the "Indemnification" section of his Agreement, Contractor shall maintain in force, during the full term of the Agreement, insurance in the following amounts and coverages:

(a) Workers' Compensation, in statutory amounts, with Employers' Liability Limits not less than \$1,000,000 each accident, illness or injury. The Worker's Compensation policy shall be endorsed with a waiver of subrogation in favor of the City for all work performed by the Consultant, its employees, agents and subcontractors; **and**

(b) (i) Commercial General Liability Insurance with limits not less than \$50,000,000 each occurrence Combined Single Limit for Bodily Injury and Property Damage, including Contractual Liability, Personal Injury, Products and Completed Operations, and any exclusion for railroads shall be removed; **or** (ii) A combination of Umbrella or Excess Insurance and Commercial General Liability Insurance with combined limits not less than \$50,000,000 each occurrence Combined Single Limit for Bodily Injury and Property Damage, including Contractual Liability, Personal Injury, Products and Completed Operations; such coverage shall be written on a follow form basis, and any exclusion for railroads shall be removed; **and**

(c) Commercial Automobile Liability Insurance with limits not less than \$1,000,000 each occurrence Combined Single Limit for Bodily Injury and Property Damage, including Owned, Non-Owned and Hired auto coverage, as applicable; **and**

(d) Garage Liability insurance (if applicable, in SFMTA's sole discretion, based on means and methods employed by Contractor), including coverage for garage operations arising from premises/operations, product/completed operations, contracts, owned vehicles, non-owned vehicles

and damage to vehicles owned by others (bailment), with a minimum limit of liability of \$2,000,000 each occurrence Combined Single Limit for Bodily Injury and Property Damage; **and**

(e) Garagekeepers' Legal Liability insurance (if applicable, in SFMTA's sole discretion, based on means and methods employed by Contractor), with an endorsement for coverage of Light Rail Vehicles, comprehensive form, with limits not less than \$2,000,000 each occurrence; and

(f) All Risk Property Insurance with replacement cost coverage and limits of no less than (amount TBD based on value of maximum cars stored). Insurance shall cover all risk of physical loss or damage to the Contractor's site, including buildings, contents, any storage facility and its contents; and

(g) Professional liability insurance, applicable to Contractor's profession, with limits not less than \$10,000,000 each claim with respect to negligent acts, errors or omissions in connection with professional services to be provided under this Agreement; **and**

(h) Unless otherwise covered by Commercial General Liability and/or Umbrella or Excess Insurance specified in paragraph 15.1.1(b)(i), Transit Liability coverage with limits not less than \$50,000,000, to be in place prior to testing of Vehicles on any public or third-party rails; **and**

(i) Crane Operator's/Riggers Liability Insurance (if applicable), covering crane operations while at Contractor's site with limits of no less than \$10,000,000 per occurrence and in the aggregate. This insurance applies only if Contractor uses a crane in the performance of the Work; **and**

(j) Any shipping contractor or subcontractor shall carry, at a minimum, physical damage insurance (including destruction, damage, fire and theft) in the amount of not less than the value of the item(s) shipped, as stated in Exhibit 1A, Price Item 2, and commercial liability insurance in the amount of not less than \$1,000,000.

15.1.2. Commercial General Liability, Business Automobile Liability Insurance, Garagekeepers' Legal Liability, Transit Liability and Shippers Coverage policies must provide the following:

(a) Name as Additional Insured the City and County of San Francisco, its Officers, Agents, and Employees.

(b) That such policies are primary insurance to any other insurance available to the Additional Insured, with respect to any claims arising out of this Agreement, and that insurance applies separately to each insured against whom claim is made or suit is brought.

15.1.3. Waiver of Subrogation. Contractor agrees to waive subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss. Contractor agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation.

15.1.4. All policies shall provide 30 Days' advance written notice to City of cancellation or reduction in coverage for any reason, mailed to the following address:

San Francisco Municipal Transportation Agency Transit Division 1 South Van Ness Avenue, 7th Floor, San Francisco, CA 94103 Attention: Ms. Trinh Nguyen P.E., Senior Program Manager LRV4, Contract No. SFMTA-2013-19 **15.1.5.** Should any of the required insurance be provided under a claimsmade form, Contractor shall maintain such coverage continuously throughout the term of this Agreement and, without lapse, for a period of five years beyond the expiration of this Agreement, to the effect that, should occurrences during the contract term give rise to claims made after expiration of the Agreement, such claims shall be covered by such claims-made policies

15.1.6. Should any of the required insurance be provided under a form of coverage that includes a general annual aggregate limit or provides that claims investigation or legal defense costs be included in such general annual aggregate limit, such general annual aggregate limit shall be double the occurrence or claims limits specified above.

15.1.7. Should any required insurance lapse during the term of this Agreement, requests for payments originating after such lapse shall not be processed until the City receives satisfactory evidence of reinstated coverage as required by this Agreement, effective as of the lapse date. If insurance is not reinstated, the City may, at its sole option, terminate this Agreement effective on the date of such lapse of insurance.

15.1.8. Before commencing any operations under this Agreement, Contractor shall do the following: (a) furnish to City certificates of insurance, and additional insured policy endorsements with insurers with ratings comparable to A- VIII or higher, that are authorized to do business in the State of California, and that are satisfactory to City, in form evidencing all coverage's set forth above, and (b) furnish complete copies of policies promptly upon City request.

15.1.9. Approval of the insurance by City shall not relieve or decrease the liability of Contractor hereunder.

15.1.10. If a subcontractor will be used to complete any portion of this agreement, the Contractor shall ensure that the subcontractor shall provide all necessary insurance and shall name the City and County of San Francisco, its officers, agents and employees and the Contractor listed as additional insureds.

15.2. Bonds/Letter of Credit

15.2.1. General. The following provisions set forth financial guarantees that must be met by Contractor. Contractor may choose to meet the requirements of this Section 15.2 by obtaining either the required bonds or an irrevocable letter of credit ("Letter of Credit") in an equivalent amount, or a combination of the two types of instruments. In addition, for each subsequent Vehicle delivery phase described below, Contractor may elect to change how the obligations are met by furnishing a bond to cover an obligation previously covered by a Letter of Credit or vice-versa, subject to approval of the SFMTA and the City's Risk Manager. The Contractor may provide a Parent Company Guarantee in lieu of the bond required under this Agreement, subject to the approval of the SFMTA and the City's Risk Manager. The form of the Parent Company Guarantee is provided in Exhibit 6.

15.2.2. Security. Contractor shall furnish to the City either a performance bond or a Letter of Credit for each phase of delivery as set forth below:

(a) Phase 1 (24 Base Order Vehicles)

(i) A performance bond or Letter of Credit in the amount of 25 percent of the total price for Phase 1 within 20 Days following the receipt of the notice of award of the Contract.

(ii) If requested by Contractor and agreed to by City, the amount of the performance bond may be reduced, or the City may authorize a reduction in the amount of the Letter of Credit from 25 percent

to 12.5 percent of the total price for Phase 1 upon Acceptance or Conditional Acceptance of the 24th Car. Upon expiration of the warranty period of the 24th Car, the City will release the performance bond (or authorize the release of the Letter of Credit) covering the 24 Cars. Alternatively, the City may release the performance bond (or authorize the release of the Letter of Credit) upon Acceptance or Conditional Acceptance of the 24th Car provided that Contractor has furnished to City a warranty bond or Letter of Credit in accordance with the requirements of Section 15.2.4.

(b) Phase 2 (151 Base Order Vehicles – 25-175)

(i) Contractor shall furnish to the City a performance bond or Letter of Credit in the amount of 25 percent of the total price for Phase 2 no later than 18 months prior to the planned delivery of Base Order Vehicle 25; Contractor shall issue a phase commencement letter to the City no later than 30 days prior to the issuance of the performance bond or Letter of Credit.

(ii) If requested by Contractor and agreed to by City, the amount of the performance bond may be reduced (or the City may authorize a reduction in the amount of the Letter of Credit) as Phase 2 Vehicles are Accepted as follows:

(A) from 25 percent to 20 percent of the total price for Phase 2 upon expiration of the warranty period of the 75th Car;

(B) from 20 percent to 15 percent of the total price for Phase 2 upon expiration of the warranty period of the 125th Car.

(iii) Upon expiration of the warranty period of the 175th Car, the City will release the performance bond or authorize the release of the Letter of Credit. Alternatively, the City may release the performance bond or authorize the release of the Letter of Credit upon Acceptance or Conditional Acceptance of the 175th Car provided Contractor has furnished to City a warranty bond or Letter of Credit in accordance with the requirements of Section 15.2.4 at the time of Acceptance or Conditional Acceptance of the 175th Car.

Optional Delivery Phase (Option Vehicles 1-85). . . If (C) SFMTA exercises the option for delivery of additional Vehicles (Option Vehicles), Contractor shall furnish to the City a performance bond or Letter of Credit in the amount of 25% of the total option price within 20 Days of Contractor's receipt of notice from SFMTA of the Agency's intention to exercise the option. The amount of the performance bond for the Option Vehicles may be reduced (or the City may authorize a reduction in the amount of the Letter of Credit for such Vehicles) from 25% to 5% upon Acceptance or Conditional Acceptance of the last Option Vehicle. The City will release the performance bond or authorize the release of the Letter of Credit, upon the expiration of the warranty period of the last Option Vehicle. Alternatively, the City may release the performance bond or authorize the release of the Letter of Credit upon Acceptance or Conditional Acceptance of the last Option Vehicle provided that Contractor has furnished the City with a warranty bond or Letter of Credit in accordance with the requirements of Section 15.2.4.

15.2.3. Labor and Materials Bond.

(a) Phase 1 (24 Base Order Vehicles) Within 20 days following the receipt of notice of Award of the Contract, the Contractor shall furnish to City either a labor and materials bond (in the form to be approved by

the City) or a Letter of Credit in the amount of 25 percent of the of the total price for Phase 1, to guarantee Contractor's payment of materials, provisions, or other supplies used for or in the performance of Phase 1 of the contract. Upon delivery and acceptance by the City of 75 percent of the contracted number of Vehicles for Phase 1, the amount of the labor and materials bond may be reduced (or the City may authorize a reduction in the amount of the Letter of Credit) to 30 percent of the original amount. Upon final payment by the City for all Contract deliverables under Phase 1, the obligations of the Contractor and surety under the labor and materials bond shall be released by the City in writing (or in the case of a Letter of Credit, the City shall authorize the release of the Letter of Credit for this purpose). The original bond document(s) shall be retained by the City.

Phase 2 (151 Base Order Vehicles). Contractor shall (b) furnish to the City either a labor and materials bond or Letter of Credit in the amount of 25 percent of the total price for Phase 2, to guarantee Contractor's payment of materials, provisions, or other supplies used for or in the performance of Phase 2 no later than 18 months prior to the planned delivery of Base Order Vehicle 25: Contractor shall issue a phase commencement letter to the City no later than 30 days prior to the issuance of the performance bond or Letter of Credit. Upon delivery and acceptance by the City of 75 percent of the contracted number of Vehicles for Phase 2, the amount of the labor and materials bond may be reduced (or the City may authorize a reduction in the amount of the Letter of Credit) to 30 percent of the original amount. Upon final payment by the City for all Contract deliverables under Phase 2, the obligations of the Contractor and surety under the labor and materials bond shall be released by the City in writing (or in the case of a Letter of Credit, the City shall authorize the release of the Letter of Credit for this purpose). The original bond document(s) shall be retained by the City.

(c) Optional Delivery Phase (Option Vehicles 1-85).) Within 20 days of receipt of a notice from City of its intention to exercise the Option for delivery of additional Vehicles, the Contractor shall furnish to City either a separate labor and materials bond or a Letter of Credit in the amount of 25 percent of the cost of the additional Vehicles to be purchased, to guarantee performance of all Contract obligations with respect to such Optional Vehicles. Provisions for releasing or reducing the amount of the bond or Letter of Credit shall apply in the same manner as described above. Any such bond shall also be retained by the City.

15.2.4. Warranty Bond. Once all Vehicles have been Accepted or Conditionally Accepted f for Phase 1, Phase 2, or for Option Delivery, Contractor may replace the performance bond for that phase, or request that the City authorize the release of a Letter of Credit provided in lieu of a performance bond by obtaining a warranty or guaranty bond or an additional Letter of Credit in the amount of 10 percent of the Contract amount for that phase or for the Option Vehicles, as appropriate. Where Contractor's performance is secured by a Letter of Credit and Contractor obtains a warranty bond to cover Contractor's warranty obligations for a given phase or the Option Delivery period, Contractor may request that the Letter of Credit be released to reflect that the Contractor's obligations under that delivery phase have otherwise been fulfilled. A bond or Letter of Credit under this paragraph 15.2.4 shall be for the purpose of covering all of Contractor's warranty obligations under the Contract for that phase or for Option delivery, and shall become effective upon release of the performance bond or City's authorization to release the Letter of Credit specified in Subsection 15.2.2 above. At the end of each year of warranty coverage, the Contractor may request a reduction of coverage, which may be approved at the discretion of SFMTA and the City's Risk Manager.

15.2.5. Requirements for Letter of Credit.

(a) General Requirements. Any Letter of Credit submitted as required security under this Agreement shall be a confirmed, clean, irrevocable Letter of Credit in favor of the City and County of San Francisco, a municipal corporation. It must have an original term of one year, with automatic renewals of the full amount (subject to modification as otherwise provided in this Section 15.2 to reflect the adjustments set forth above) throughout the term of the Agreement and throughout the performance of Contractor's obligations under the Agreement. If Contractor fails to deliver the Letter of Credit as required, City will be entitled to cancel this Agreement. The Letter of Credit must provide that payment of its entire face amount, or any portion thereof, will be made to City upon presentation of a written demand to the bank signed by the Director of Transportation on behalf of the City.

(b) Financial Institution. The Letter of Credit must be issued on a form and issued by a financial institution acceptable to the City in its sole discretion, which financial institution must (a) be a bank or trust company doing business and having an office in the City and County of San Francisco, (b) have a combined capital and surplus of at least \$25,000,000, and (c) be subject to supervision or examination by federal or state authority and with at least a Moody's A rating. Should the financial institution fail to maintain such rating, Contractor shall replace the Letter of Credit within 30 days with a Letter of Credit from a financial institution with such a rating.

Demand on Letter of Credit. The Letter of Credit will (c) constitute a security deposit guaranteeing faithful performance by Contractor of all terms, covenants, and conditions of this Agreement, including all monetary obligations set forth herein. If Contractor defaults with respect to any provision of this Agreement, SFMTA may make a demand under the Letter of Credit for all or any portion thereof to compensate City for any loss or damage that they may have incurred by reason of Contractor's default, negligence, breach or dishonesty. Such loss or damage may include without limitation any damage to or restoration of City property or property that is required to be constructed. maintained or repaired pursuant to this Agreement, payments to City, and claims for liquidated damages; provided, however, that City will present its written demand to said bank for payment under said Letter of Credit only after City first has made its demand for payment directly to Contractor, and five full Working Days have elapsed without Contractor having made payment to City. Should the City terminate this Agreement due to a breach by Contractor, the City shall have the right to draw from the Letter of Credit those amounts necessary to pay any fees or other financial obligations under the Agreement and perform the Work described in this Agreement until such time as the City procures another contractor and the agreement between the City and that contractor becomes effective. City need not terminate this Agreement in order to receive compensation for its damages. If any portion of the Letter of Credit is so used or applied by City, Contractor, within 10 Working Days after written demand by City, shall reinstate the Letter of Credit to its original amount; Contractor's failure to do so will be a material breach of this Agreement.

(d) Expiration or Termination. The Letter of Credit must provide for 60 Days notice to City in the event of non-extension of the Letter of Credit; in that event, Contractor shall replace the Letter of Credit at least 10 Working Days prior to its expiration. In the event the City receives notice from the issuer of the Letter of Credit that the Letter of Credit will be terminated, not renewed or will otherwise be allowed to expire for any reason during the period from the commencement of the term of this Agreement to 90 Days after the expiration or termination of this Agreement, or the conclusion of all of Contractor's obligations under the Agreement, whichever occurs last, and Contractor fails to provide the City with a replacement Letter of Credit (in a form and issued by a financial institution acceptable to the City) within 10 Working Days following the City's receipt of such notice, such occurrence shall be an event of default, and, in addition to any other remedies the City may have due to such default (including the right to terminate this Agreement), the City shall be entitled to draw down the entire amount of the Letter of Credit (or any portion thereof) and hold such funds in an account with the City Treasurer in the form of cash guarantying Contractor's obligations under this Agreement. In such event, the cash shall accrue interest to the Contractor at a rate equal to the average yield of Treasury Notes with one-year maturity, as determined by the Treasurer. In the event the Letter of Credit is converted into cash pursuant to this paragraph, upon termination of this Agreement, Contractor shall be entitled to a full refund of the cash (less any demands made thereon by the City) within 90 Days of the termination date, including interest accrued through the termination date.

(e) Return of Letter of Credit. The Letter of Credit will be returned within 90 Days after the end of the term of this Agreement, provided that Contractor has faithfully performed throughout the life of the Agreement, Contractor has completed its obligations under the Agreement, there are no pending claims involving Contractor's performance under the Agreement and no outstanding disagreement about any material aspect of the provisions of this Agreement. In the event this Agreement is assigned, as provided for in Section 30, City will return or release the Letter of Credit not later than the effective date of the assignment, provided that the assignee has delivered to the City an equivalent Letter of Credit, as determined by City.

(f) Excessive Demand. If City receives any payments from the aforementioned bank under the Letter of Credit by reason of having made a wrongful or excessive demand for payment, City will return to Contractor the amount by which City's total receipts from Contractor and from the bank under the Letter of Credit exceeds the amount to which City is rightfully entitled, together with interest thereon at the legal rate of interest, but City will not otherwise be liable to Contractor for any damages or penalties.

15.2.6. Requirements for Bonds.

(a) Bonding entities on the above bonds must be legally authorized to engage in the business of furnishing performance bonds in the State of California. All bonding entities must be satisfactory to SFMTA and to the Controller and Risk Manager of the City.

During the period covered by the Agreement, if any of the (b) sureties upon the bond shall have an AM Best rating that falls below A-, VIII, or become insolvent and unable to pay promptly the amount of such bond to the extent to which the surety might be liable, Contractor, within 30 days after notice given by SFMTA to Contractor, shall by supplemental bond or otherwise, substitute another and sufficient surety approved by SFMTA in place of the surety becoming insolvent or unable to pay. If Contractor fails within such 30-day period to substitute another and sufficient surety, Contractor, if SFMTA so elects, shall be deemed to be in default in the performance of its obligations hereunder and upon the said bond. The City, in addition to any and all other remedies, may terminate the Agreement or bring any proper suit or proceeding against moneys then due or which thereafter may become due Contractor under the Agreement. The amount for which the surety shall have justified on the bond and the moneys so deducted shall be held by City as collateral for the performance of the conditions of the bond.

15.2.7. Parent Company Guarantee If a Parent Company Guarantee is used, the City reserves the right to review the financials of the Parent Company at agreed intervals; Contractor's agreement for such review shall not be unreasonably withheld.

16. Indemnification

16.1. General. Contractor shall indemnify and save harmless City and its officers, agents and employees from, and, if requested, shall defend them against any and all loss, cost, damage, injury, liability, and claims thereof for injury to or death of a person, including employees of Contractor or loss of or damage to property, arising directly or indirectly from Contractor's performance of this Agreement, including, but not limited to, Contractor's use of facilities or equipment provided by City or others, regardless of the negligence of, and regardless of whether liability without fault is imposed or sought to be imposed on City, except to the extent that such indemnity is void or otherwise unenforceable under applicable law in effect on or validly retroactive to the date of this Agreement, and except where such loss, damage, injury, liability or claim is the result of the active negligence or willful misconduct of City and is not contributed to by any act of, or by any omission to perform some duty imposed by law or agreement on Contractor, its subcontractors or either's agent or employee. The foregoing indemnity shall include, without limitation, reasonable fees of attorneys, consultants and experts and related costs and City's costs of investigating any claims against the City.

16.2. Duty to Defend. In addition to Contractor's obligation to indemnify City, Contractor specifically acknowledges and agrees that it has an immediate and independent obligation to defend City from any claim which actually or potentially falls within this indemnification provision, even if the allegations are or may be groundless, false or fraudulent, which obligation arises at the time such claim is tendered to Contractor by City and continues at all times thereafter.

16.3. Intellectual Property. Contractor shall indemnify and hold City harmless from all loss and liability, including attorneys' fees, court costs and all other litigation expenses for any infringement of the patent rights, copyright, trade secret or any other proprietary right or trademark, and all other intellectual property claims of any person or persons in consequence of the use by City, or any of its officers or agents, of articles or Work to be supplied in the performance of this Agreement.

16.4. Limitation of Liability. Except as provided herein, Contractor's aggregate liability to the City under this Agreement shall be limited to the Contract amount stated in Section 5.1, as that amount may be modified by a properly approved and executed Contract Modification. Said limitation on liability shall not apply to:

16.4.1. damages and other liability caused by Contractor's willful, intentional acts or omissions;

16.4.2. liability arising under or for violation of any applicable statute, City ordinance, regulation, or other laws;

16.4.3. damages and other liability arising under claims by third parties, including indemnity or contribution for claims brought by a third party (see Paragraph 16.1);

16.4.4. damages and other liability for infringement of any intellectual property right as provided in Section 16.3.

16.5. Notice of Claim; Tender of Defense. The City shall use its best efforts to give prompt written notice to Contractor of any claim for which it requires indemnification from Contractor and will not admit liability or fault as to the allegations of the claim. Provided Contractor accepts the City's tender of defense without reservations, City agrees to grant Contractor sole control over the defense and

settlement of the claim and provide timely assistance to Contractor in the defense of the claim.

17. Incidental and Consequential Damages.

Except for liquidated damages, Contractor shall not be responsible for indirect, incidental and consequential damages resulting from Contractor's acts or omissions, including but not limited to, lost profits or revenue and business interruption. Nothing in this Agreement shall constitute a waiver or limitation of any rights that City may have under applicable law.

18. Liability of City

CITY'S PAYMENT OBLIGATIONS UNDER THIS AGREEMENT SHALL BE LIMITED TO THE PAYMENT OF THE COMPENSATION PROVIDED FOR IN SECTION 5 OF THIS AGREEMENT. NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, IN NO EVENT SHALL CITY BE LIABLE, REGARDLESS OF WHETHER ANY CLAIM IS BASED ON CONTRACT OR TORT, FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT OR INCIDENTAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOST PROFITS, ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT OR THE SERVICES OR WORK PERFORMED IN CONNECTION WITH THIS AGREEMENT.

19. Liquidated Damages/ Weight Incentives

19.1. Liquidated Damages

By entering into this Agreement, the Contractor agrees that in the event the Work, as provided under Section 4, is delayed beyond the scheduled milestones and timelines as provided in the Project Delivery Schedule in Exhibit 3 of this Agreement, as may be revised by Contract Modifications, City will suffer damages that will be impracticable or extremely difficult to determine; further, Contractor agrees that the amounts listed below for each day of delay beyond scheduled milestones and timelines are not a penalty, but are a reasonable estimate of the loss that City will incur based on the delay, established in light of the circumstances existing at the time this contract was awarded. Except where the delay is the result of an Unavoidable Delay, City may deduct a sum representing the liquidated damages from any money due to Contractor. Such deductions shall not be considered a penalty, but rather agreed monetary damages sustained by City because of Contractor's failure to deliver to City within the time fixed or such extensions of time permitted in writing by SFMTA.

Milestone	Amount per Day
Delivery of first 2 Vehicles	\$2000 per Vehicle
Delivery of Vehicles 3 - 260	\$1000 per Vehicle
Completion of training program	\$500
Completion of delivery of Phase 1 spare parts	\$500
Completion of delivery of Phase 2 spare parts	\$500
Conditional Acceptance of manuals (operation, maintenance	\$500
and parts manuals)	
Delivery of diagnostic test equipment and special tools	\$500
Failure to provide a plan for correction of fleet defects	\$500 per Vehicle
Failure to fully correct fleet defects according to approved plan	\$500 per Vehicle

Liquidated Damages imposed under this Agreement shall be in addition to any other damages which are recoverable by the City specified elsewhere in the Contract. The total amount of liquidated damages shall not exceed 10 percent of the total amount of the Contract, as stated in Section 5.1of this Agreement, as that amount may be amended by Contract Modification(s).

19.2. Weight Limits and Incentives

The nominal Vehicle weight shall be 78,770 pounds at AW0. Vehicles shall be weighed prior to delivery, and, for each pound in excess of the nominal weight, the City will deduct \$10 per pound per Vehicle from the Contractor's invoice. For each pound below the nominal weight, the City will pay an incentive payment of \$10 per pound per Vehicle. To allow for manufacturing variations, neither penalties nor incentives will be assessed on the first one percent excess or under weight. SFMTA shall reject Vehicles weighing in excess of 80,000 pounds at AW0 and shall not be required to pay for rejected Vehicles.

20. Default; Remedies

20.1. Event of Default. Each of the following shall constitute an event of default ("Event of Default") under this Agreement:

20.1.1. Contractor fails or refuses to perform or observe any term, covenant or condition contained in any of the following Sections of this Agreement: 8, 10, 15, 24, 30, 36, 51, or 55.

20.1.2. Contractor fails or refuses to perform or observe any other term, covenant or condition contained in this Agreement, and such default continues for a period of 15 Days after written notice thereof from City to Contractor.

20.1.3. San Francisco Municipal Transportation Agency Contractor (i) is generally not paying its debts as they become due, (ii) files, or consents by answer or otherwise to the filing against it of, a petition for relief or reorganization or arrangement or any other petition in bankruptcy or for liquidation or to take advantage of any bankruptcy, insolvency or other debtors' relief law of any jurisdiction, (iii) makes an assignment for the benefit of its creditors, (iv) consents to the appointment of a custodian, receiver, trustee or other officer with similar powers of Contractor or of any substantial part of Contractor's property or (v) takes action for the purpose of any of the foregoing.

20.1.4. A court or government authority enters an order (i) appointing a custodian, receiver, trustee or other officer with similar powers with respect to Contractor or with respect to any substantial part of Contractor's property, (ii) constituting an order for relief or approving a petition for relief or reorganization or arrangement or any other petition in bankruptcy or for liquidation or to take advantage of any bankruptcy, insolvency or other debtors' relief law of any jurisdiction or (iii) ordering the dissolution, winding-up or liquidation of Contractor.

20.2. Remedies. On and after any Event of Default, City shall have the right to exercise its legal and equitable remedies, including, without limitation, the right to terminate this Agreement or to seek specific performance of all or any part of this Agreement. In addition, City shall have the right (but no obligation) to cure (or cause to be cured) on behalf of Contractor any Event of Default; Contractor shall pay to City on demand all costs and expenses incurred by City in effecting such cure, with interest thereon from the date of incurrence at the maximum rate then permitted by law. City shall have the right to offset from any amounts due to Contractor under this Agreement or any other agreement between City and Contractor all damages, losses, costs or expenses incurred by City as a result of such Event of Default and any liquidated damages due from Contractor pursuant to the terms of this Agreement or any other agreement. All remedies provided for in this Agreement may be exercised individually

or in combination with any other remedy available hereunder or under applicable laws, rules and regulations. The exercise of any remedy shall not preclude or in any way be deemed to waive any other remedy.

21. Termination for Convenience

21.1. Exercise of Option. City shall have the option, in its sole discretion, to terminate this Agreement, at any time during the term hereof, for convenience and without cause. City shall exercise this option by giving Contractor written notice of termination. The notice shall specify the date on which termination shall become effective.

21.2. Contractor Actions. Upon receipt of the notice, Contractor shall commence and perform, with diligence, all actions necessary on the part of Contractor to effect the termination of this Agreement on the date specified by City and to minimize the liability of Contractor and City to third parties as a result of termination. All such actions shall be subject to the prior approval of City. Such actions shall include, without limitation:

21.2.1. Halting the performance of all services and Work under this Agreement on the date(s) and in the manner specified by City.

21.2.2. Not placing any further orders or subcontracts for materials, services, equipment or other items.

21.2.3. Terminating all existing orders and subcontracts.

21.2.4. At City's direction, assigning to City any or all of Contractor's right, title, and interest under the orders and subcontracts terminated. Upon such assignment, City shall have the right, in its sole discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts.

21.2.5. Subject to City's approval, settling all outstanding liabilities and all claims arising out of the termination of orders and subcontracts.

21.2.6. Completing performance of any services or Work that City designates to be completed prior to the date of termination specified by City.

21.2.7. Taking such action as may be necessary, or as the City may direct, for the protection and preservation of any property related to this Agreement which is in the possession of Contractor and in which City has or may acquire an interest.

21.3. Contractor Invoice. Within 30 Days after the specified termination date, Contractor shall submit to City an invoice, which shall set forth each of the following as a separate line item:

21.3.1. The reasonable cost to Contractor, without profit, for all services and Work City directed Contractor to perform prior to the specified termination date, for which services or Work City has not already tendered payment. Reasonable costs may include a reasonable allowance for actual overhead, not to exceed a total of 10 percent of Contractor's direct costs for services or other Work. Any overhead allowance shall be separately itemized. Contractor may also recover the reasonable cost of preparing the invoice.

21.3.2. A reasonable allowance for profit on the cost of the services and Work described in the immediately preceding subsection 21.3.1, provided that the Contractor can establish, to the satisfaction of City, that Contractor would have made a profit has all services and Work under this Agreement been completed, and provided further, that the profit allowed shall in no event exceed five percent of such cost.

21.3.3. The reasonable cost to Contractor of handling material or equipment returned to the vendor, delivered to the City or otherwise disposed of as directed by the City.

21.3.4. A deduction for the cost of materials to be retained by Contractor, amounts realized from the sale of materials and not otherwise recovered by or credited to City, and any other appropriate credits to City against the cost of the services or other work.

21.4. Non-Recoverable Costs. In no event shall City be liable for costs incurred by Contractor or any of its Subcontractors after the termination date specified by City, except for those costs specifically enumerated and described in the immediately preceding subsection 21.3. Such non-recoverable costs include, but are not limited to, anticipated profits on this Agreement, post-termination employee salaries, post-termination administrative expenses, post-termination overhead or unabsorbed overhead, attorneys' fees or other costs relating to the prosecution of a claim or lawsuit, prejudgment interest, or any other expense which is not reasonable or authorized under such subsection 21.3.

21.5. Deductions. In arriving at the amount due to Contractor under this Section, City may deduct: (a) all payments previously made by City for Work or services covered by Contractor's final invoice; (b) any claim which City may have against Contractor in connection with this Agreement; (c) any invoiced costs or expenses excluded pursuant to the immediately preceding subsection 21.4; and (d) in instances in which, in the opinion of the City, the cost of any service or other work performed under this Agreement is excessively high due to costs incurred to remedy or replace defective or rejected services or Work, the difference between the invoiced amount and City's estimate of the reasonable cost of performing the invoiced services or Work in compliance with the requirements of this Agreement.

21.6. Survival. City's payment obligation under this Section shall survive termination of this Agreement.

22. Rights and Duties Upon Termination or Expiration

22.1. Survival of Sections. This Section and the following Sections of this Agreement shall survive termination or expiration of this Agreement: 8 through 11, 13 through 18, 24, 26, 28, 46 through 50, 54, 55, 61, 62 and 67.

22.2. Contractor Duties. Subject to the immediately preceding subsection 22.1, upon termination of this Agreement prior to expiration of the term specified in Section 2, this Agreement shall terminate and be of no further force or effect. Contractor shall transfer title to City, and deliver in the manner, at the times, and to the extent, if any, directed by City, any work in progress, completed work, supplies, equipment, and other materials produced as a part of, or acquired in connection with the performance of this Agreement, and any completed or partially completed work which, if this Agreement had been completed, would have been required to be furnished to City. This subsection shall survive termination of this Agreement.

23. Conflict of Interest

Through its execution of this Agreement, Contractor acknowledges that it is familiar with the provisions of section 15.103 of the City's Charter, Article III, Chapter 2 of the City's Campaign and Governmental Conduct Code and sections 87100 et seq. and sections 1090 et seq. of the Government Code of the State of California, and certifies that it does not know of any facts which constitute a violation of said provision and agrees that if it becomes aware of any such fact during the term of this Agreement it shall immediately notify the City.
24. Proprietary or Confidential Information of City

Contractor understands and agrees that, in the performance of the Work or services under this Agreement or in contemplation thereof, Contractor may have access to private or confidential information, which may be owned or controlled by City, and that such information may contain proprietary or confidential details, the disclosure of which to third parties may be damaging to City. Contractor agrees that all information disclosed by City to Contractor shall be held in confidence and used only in performance of the Agreement. Contractor shall exercise the same standard of care to protect such information as a reasonably prudent contractor would use to protect its own proprietary data.

25. Notices to the Parties

Unless otherwise indicated elsewhere in this Agreement, all written communications sent by the parties may be by U.S. mail or e-mail, and shall be addressed as follows:

To City:

San Francisco Municipal Transportation Agency Transit Division, 1 South Van Ness Avenue, 7th Floor, San Francisco, CA 94103 Attention: Ms. Trinh Nguyen P.E. Senior Program Manager Irv4@sfmta.com

To Contractor:

Siemens Industry, Inc. Infrastructure & Cities Sector 7464 French Road Sacramento, CA 95828 Attention: Mr. Viorel Aninoiu viorel.aninoiu@siemens.com

Any notice of default must be sent by registered mail.

26. Intellectual Property

26.1. Works for Hire; Ownership of Results. Any interest of Contractor or its Subcontractors, in drawings, plans, specifications, blueprints, studies, reports, memoranda, computation sheets, computer files and media or other documents prepared by Contractor or its subcontractors solely for the City in connection with services or Work to be performed under this Agreement, shall become the property of and will be transmitted to City. However, Contractor may retain and use copies for reference and as documentation of its experience and capabilities. If, in connection with services or Work performed under this Agreement, Contractor or its subcontractors create artwork, copy, posters, billboards, photographs, videotapes, audiotapes, systems designs, software, reports, diagrams, surveys, blueprints, source codes or any other original works of authorship, such works of authorship shall be works for hire as defined under Title 17 of the United States Code, and all copyrights in such works are the property of the City if prepared solely for the City and for no other customer or application. These shall include: City route specific information (e.g. public address system information, destination information), City specific propulsion and brake software code; and Contract-specific manuals, artwork, copy, posters, billboards, photographs, videotapes and audiotapes. If it is ever determined that any works created by Contractor or its subcontractors under this Agreement are not works for hire under U.S. law, Contractor hereby assigns all copyrights to such works to the City, and agrees to

provide any material and execute any documents necessary to effectuate such assignment. With the approval of the City, Contractor may retain and use copies of such works for reference and as documentation of its experience and capabilities.

26.2. Licenses Granted

26.2.1. Computerized Software and Systems. To the extent that that the Contractor is providing its proprietary software, firmware, systems designs, computerized manuals, training modules, or other such deliverables that are not designed specifically for City's purposes in connection with the Agreement, Contractor grants City a perpetual, non-exclusive, non-transferable, license at all locations owned or controlled by City to use all such deliverables, or portions thereof. City shall also be authorized to modify or prepare derivative works of the deliverables and make copies of such deliverables for internal use only. Any such modifications shall become the property of the City unless such modifications are not used exclusively for internal purposes. City agrees not to remove or destroy any proprietary markings or proprietary legends placed upon or contained within the deliverable(s) or any related materials or documentation. Contractor hereby warrants that it has title to and/or the authority to grant a license of such deliverables to the City. Upon request, Contractor shall provide to City a copy of the source code, which corresponds to the most current version of the deliverable, as well as any and all applicable proprietary materials that are otherwise not furnished under this Agreement, but may become necessary for the long-term maintenance and operation of the Vehicles. Alternatively, prior to Notice to Proceed, City and Contractor shall negotiate and enter into an escrow agreement whereby the applicable source codes for software that is proprietary to Contractor or its suppliers or subcontractors, including periodic updates of said source codes, and other proprietary materials, are placed in escrow. The source codes placed in escrow shall be on electronic media and shall be accompanied by detailed software documentation, including a list of applicable software development tools. The Director of Transportation shall execute said escrow agreement on behalf of City.

26.2.2. Other Deliverables. Contractor grants City a perpetual, nonexclusive, non-transferable license to use, retain, and reproduce at all locations controlled by SFMTA, for internal use only, all copies (whether in hard copy or electronic format) of drawings, plans, specifications, schematics, studies, reports, memoranda, computation sheets and all other documents that are (i) prepared by Contractor or its subcontractors or suppliers (but not exclusively for City); and (ii) required to be provided to City in connection with this Agreement. Contractor hereby warrants that it has title to and/or the authority to grant a license of such deliverables to the City.

26.2.3. Proprietary Materials. To the extent that the Contractor considers any document or deliverable to be a trade secret or otherwise proprietary, Contractor shall so mark them. SFMTA shall require individuals using such proprietary documents to maintain the confidentiality of the documents, and if necessary, sign a confidentiality agreement regarding use of highly sensitive documents. Alternatively, at SFMTA's request, documents shall be placed in escrow, along with source codes, as described in subsection 26.2.1 above. Contractor shall hold the City harmless from and defend the City against all claims, suits or other proceedings instituted against the City for copyright infringement, misuse or misappropriation of a trade secret, or for access to the documents or deliverables under the City's Sunshine Ordinance or the California Public Records Act. Contractor will pay the costs and damages awarded in any such action or proceeding, or the cost of settling such action or proceeding, provided that Contractor shall have sole control of the defense of any such action and all negotiations or its settlement or compromise. If notified promptly in writing of any informal claim (other than a judicial action) brought against City based on an allegation that City's use of the buses, spare parts, documents or deliverables constitutes infringement, Contractor will pay the costs associated with resolving such claim and will pay the

settlement amount (if any), provided that Contractor shall have sole control of the resolution of any such claim and all negotiations for its settlement.

27. Exhibits

All exhibits are incorporated by reference and made a part of this Agreement as though fully set forth.

28. Audits and Inspection of Records

Contractor agrees to maintain and make available to the City, during regular business hours, accurate books and accounting records relating to its work under this Agreement. Contractor will permit City to audit, examine and make excerpts and transcripts from such books and records, and to make audits of all invoices, materials, payrolls, records or personnel and other data related to all other matters covered by this Agreement, whether funded in whole or in part under this Agreement. Contractor shall maintain such data and records in an accessible location and condition for a period of not less than five years after final payment under this Agreement or until after final audit has been resolved, whichever is later. The State of California or any federal agency having an interest in the subject matter of this Agreement shall have the same rights conferred upon City by this Section.

29. Subcontracting

Contractor may subcontract portions of the Work only upon prior written approval of City. Contractor is responsible for its subcontractors throughout the course of the performance of the Work. City's execution of this Agreement constitutes its approval of the major subcontractors/suppliers listed below. Neither party shall, on the basis of this Agreement, contract on behalf of or in the name of the other party. Any agreement made in violation of this provision shall be null and void.

	Commodity	Supplier
1	APC	INIT
2	ATCS	Thales
3	CCTV	Kratos
4	Event Recorder	Hasler Rail
5	HVAC	Thermo King
6	Radio	Harris

30. Assignment

The Work to be performed by Contractor are personal in character and neither this Agreement nor any duties or obligations hereunder may be assigned or delegated by the Contractor unless first approved by City by written instrument executed and approved in the same manner as this Agreement.

31. Non-Waiver of Rights

The omission by either party at any time to enforce any default or right reserved to it, or to require performance of any of the terms, covenants, or provisions hereof by the other party at the time designated, shall not be a waiver of any such default or right to which the party is entitled, nor shall it in any way affect the right of the party to enforce such provisions thereafter.

32. Reserved

33. Reserved

34. Nondiscrimination; Penalties

34.1. Contractor Shall Not Discriminate. In the performance of this Agreement, Contractor agrees not to discriminate against any employee, City and

County employee working with such contractor or subcontractor, applicant for employment with such contractor or subcontractor, or against any person seeking accommodations, advantages, facilities, privileges, services, or membership in all business, social, or other establishments or organizations, on the basis of the fact or perception of a person's race, color, creed, religion, national origin, ancestry, age, height, weight, sex, sexual orientation, gender identity, domestic partner status, marital status, disability or Acquired Immune Deficiency Syndrome or HIV status (AIDS/HIV status), or association with members of such protected classes, or in retaliation for opposition to discrimination against such classes.

34.2. Subcontracts. Contractor shall incorporate by reference in all subcontracts the provisions of §§12B.2(a), 12B.2(c)-(k), and 12C.3 of the San Francisco Administrative Code (copies of which are available from SFMTA) and shall require all subcontractors to comply with such provisions. Contractor's failure to comply with the obligations in this subsection shall constitute a material breach of this Agreement.

34.3. Nondiscrimination in Benefits. Contractor does not as of the date of this Agreement and will not during the term of this Agreement, in any of its operations in San Francisco, on real property owned by San Francisco, or where work is being performed for the City elsewhere in the United States, discriminate in the provision of bereavement leave, family medical leave, health benefits, membership or membership discounts, moving expenses, pension and retirement benefits or travel benefits, as well as any benefits other than the benefits specified above, between employees with domestic partners and employees with spouses, and/or between the domestic partners and spouses of such employees, where the domestic partnership has been registered with a governmental entity pursuant to state or local law authorizing such registration, subject to the conditions set forth in §12B.2(b) of the San Francisco Administrative Code.. As a condition to this Agreement, Contractor shall execute the "Chapter 12B Declaration: Nondiscrimination in Contracts and Benefits" form (form HRC-12B-101) with supporting documentation and secure the approval of the form by the San Francisco Human Rights Commission.

34.4. Incorporation of Administrative Code Provisions by Reference, The provisions of Chapters 12B and 12C of the San Francisco Administrative Code are incorporated in this Section by reference and made a part of this Agreement as though fully set forth herein. Contractor shall comply fully with and be bound by all of the provisions that apply to this Agreement under such Chapters, including but not limited to the remedies provided in such Chapters. Without limiting the foregoing, Contractor understands that pursuant to §12B.2(h) of the San Francisco Administrative Code, a penalty of \$50 for each person for each calendar day during which such person was discriminated against in violation of the provisions of this Agreement may be assessed against Contractor and/or deducted from any payments due Contractor.

35. Tropical Hardwoods and Virgin Redwood Ban

Pursuant to §804(b) of the San Francisco Environment Code, the City and County of San Francisco urges contractors not to import, purchase, obtain, or use for any purpose, any tropical hardwood, tropical hardwood wood product, virgin redwood or virgin redwood wood product.

36. Drug-Free Workplace Policy

Contractor acknowledges that pursuant to the Federal Drug-Free Workplace Act of 1989, the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited on City premises. Contractor agrees that any violation of this prohibition by Contractor, its employees, agents or assigns will be deemed a material breach of this Agreement.

37. Resource Conservation.

Chapter 5 of the San Francisco Environment Code ("Resource Conservation") is incorporated herein by reference. Failure by Contractor to comply with any of the applicable requirements of Chapter 5 will be deemed a material breach of contract.

38. Compliance with Americans with Disabilities Act

Contractor acknowledges that, pursuant to the Americans with Disabilities Act (ADA), programs, services and other activities provided by a public entity to the public, whether directly or through a contractor, must be accessible to the disabled public. Contractor shall provide the Work specified in this Agreement in a manner that complies with the ADA and any and all other applicable federal, state and local disability rights legislation. Contractor agrees not to discriminate against disabled persons in the provision of services or Work, benefits or activities provided under this Agreement and further agrees that any violation of this prohibition on the part of Contractor, its employees, agents or assigns will constitute a material breach of this Agreement.

39. Sunshine Ordinance

In accordance with San Francisco Administrative Code §67.24(e), contracts, contractors' bids, responses to solicitations and all other records of communications between City and persons or firms seeking contracts, shall be open to inspection immediately after a contract has been awarded. Nothing in this provision requires the disclosure of a private person or organization's net worth or other proprietary financial data submitted for qualification for a contract or other benefit until and unless that person or organization is awarded the contract or benefit. Information provided which is covered by this paragraph will be made available to the public upon request.

40. Public Access to Meetings and Records.

If the Contractor receives a cumulative total per year of at least \$250,000 in City funds or City-administered funds and is a non-profit organization as defined in Chapter 12L of the San Francisco Administrative Code, Contractor shall comply with and be bound by all the applicable provisions of that Chapter. By executing this Agreement, the Contractor agrees to open its meetings and records to the public in the manner set forth in §§12L.4 and 12L.5 of the Administrative Code. Contractor further agrees to make-good faith efforts to promote community membership on its Board of Directors in the manner set forth in §12L.6 of the Administrative Code. The Contractor acknowledges that its material failure to comply with any of the provisions of this paragraph shall constitute a material breach of this Agreement. The Contractor further acknowledges that such material breach of the Agreement shall be grounds for the City to terminate and/or not renew the Agreement, partially or in its entirety.

41. Notification of Limitations on Contributions.

Through execution of this Agreement, Contractor acknowledges that it is familiar with section 1.126 of the City's Campaign and Governmental Conduct Code, which prohibits any person who contracts with the City for the rendition of personal services, for the furnishing of any material, supplies or equipment, for the sale or lease of any land or building, or for a grant, loan or loan guarantee, from making any campaign contribution to (1) an individual holding a City elective office if the contract must be approved by the individual, a board on which that individual serves, or a board on which an appointee of that individual serves, (2) a candidate for the office held by such individual, or (3) a committee controlled by such individual, at any time from the commencement of negotiations for the contract until the later of either the termination of negotiations for such contract or six months after the date the contract is approved. Contractor acknowledges that the foregoing restriction applies only if the contract or a combination or series of contracts approved by the same individual or board in a fiscal year have a total anticipated or actual value of \$50,000 or more. Contractor further acknowledges that the prohibition on contributions applies to each prospective party to the contract; each member of Contractor's board of directors; Contractor's chairperson,

chief executive officer, chief financial officer and chief operating officer; any person with an ownership interest of more than 20 percent in Contractor; any subcontractor listed in the bid or contract; and any committee that is sponsored or controlled by Contractor. Additionally, Contractor acknowledges that Contractor must inform each of the persons described in the preceding sentence of the prohibitions contained in Section 1.126.

42. Requiring Minimum Compensation for Covered Employees

Contractor agrees to pay covered employees no less than the minimum compensation required by San Francisco's Minimum Compensation Ordinance (MCO), and shall otherwise comply with the MCO as set forth in San Francisco Administrative Code Chapter 12P (Chapter 12P). The provisions of Chapter 12P, including but not limited to the penalties for noncompliance provided therein, are incorporated herein by this reference, and made part of this Agreement as though fully set forth herein.

43. First Source Hiring Program

Contractor shall comply with all of the provisions of the First Source Hiring Program, Chapter 83 of the San Francisco Administrative Code, that apply to this Agreement, including but not limited to the remedies for noncompliance provided therein. The provisions of Chapter 83 are incorporated herein by this reference, and made part of this Agreement as though fully set forth herein.

44. Prohibition on Political Activity with City Funds

In accordance with San Francisco Administrative Code Chapter 12.G, Contractor may not participate in, support, or attempt to influence any political campaign for a candidate or for a ballot measure (collectively, "Political Activity") in the performance of the services provided under this Agreement. Contractor agrees to comply with San Francisco Administrative Code Chapter 12.G and any implementing rules and regulations promulgated by the City's Controller. The terms and provisions of Chapter 12.G are incorporated herein by this reference. In the event Contractor violates the provisions of this section, the City may, in addition to any other rights or remedies available hereunder, (i) terminate this Agreement, and (ii) prohibit Contractor from bidding on or receiving any new City contract for a period of two (2) years.

45. Preservative-Treated Wood Containing Arsenic

Contractor may not purchase preservative-treated wood products containing arsenic in the performance of this Agreement unless an exemption from the requirements of Chapter 13 of the San Francisco Environment Code is obtained from the Department of the Environment under Section 1304 of the Code. The term "preservative-treated wood containing arsenic" shall mean wood treated with a preservative that contains arsenic, elemental arsenic, or an arsenic copper combination, including, but not limited to, chromate copper arsenate preservative, ammonia cal copper zinc arsenate preservative, or ammonia cal copper arsenate preservative. Contractor may purchase preservative-treated wood products on the list of environmentally preferable alternatives prepared and adopted by the Department of the Environment. This provision does not preclude Contractor from purchasing preservative-treated wood containing arsenic for saltwater immersion. The term "saltwater immersion" shall mean a pressure-treated wood that is used for construction purposes or facilities that are partially or totally immersed in saltwater.

46. Modification of Agreement

This Agreement may not be modified, nor may compliance with any of its terms be waived, except by written instrument executed and approved as required by law.

46.1. City-Ordered Changes

The City may order changes in the Work and may order extra materials and extra work in connection with the performance of the Agreement, and the Contractor shall respond within 30 days to such orders, except that:

If changes ordered in design, workmanship, services, or materials are of such a nature as to increase or decrease the cost or the time required to execute the change in scope of Work, the City shall make a reasonable and proper adjustment in the Contract price, delivery schedule, or both, as agreed upon by the Contractor and the Agency as the reasonable and proper allowance for the increase or decrease required.

No order for any alteration, modification, or extra that will increase or decrease the cost of the Work shall be valid unless the resulting increase or decrease in price shall have been agreed upon in writing and approved by the City in the manner required under City law. No oral statement of any person whomsoever shall in any manner or degree modify or otherwise affect the terms of this Contract, which include the requirements of the Technical Specifications.

46.2. Regulatory Changes

If a price adjustment is necessary to incorporate changes mandated by legislation or regulations that are promulgated or become effective after the Effective Date of the Contract and before Acceptance of the Vehicles, the Agency and the Contractor shall negotiate the price adjustment, which shall be added to the cost of the Vehicle and/or the engineering costs from Item 1.1 of Exhibit 1. Such price adjustments may be audited, where required.

46.3. Schedule Changes

If City-ordered changes have potential impact on the delivery schedule, the Contractor shall submit a schedule change request for City approval.

47. Authority of Project Manager; Claims; Disputes.

47.1. Authority of Project Manager Authority of Project Manager. The Project Manager shall decide all questions which may arise as to the quality or acceptability of materials furnished and work performed and as to the manner of performance and rate of progress of the work; all questions, which may arise as to the acceptable fulfillment of the Contract on the part of the Contractor; and all questions as to compensation. In discharging the responsibilities outlined above, the Project Manager's decisions shall be in accordance with the provisions of Section 47.4 of this Agreement. As with any claim, change, extra or additional work, Contractor shall be paid in accordance with the payment provisions set out in Section 5 of this Contract when the dispute is finally resolved.

Should any questions arise as to the meaning and intent of the Contract, the matter shall be referred to the Project Manager, who, in consultation with other City representatives, as applicable, and with input the Contractor, shall decide the true meaning and intent of the Contract. The Project Manager's decision in this regard shall be administratively final and conclusive.

47.2. Claims for Additional Compensation.

47.2.1. Contractor shall not be entitled to the payment of any additional compensation for any action, or failure to act, by the SFMTA, including failure or refusal to issue a Contract Modification or for the happening of any event, thing, occurrence, or other cause, unless Contractor shall have given the Project Manager due written notice of potential claim.

47.2.2. The written notice of potential claim shall set forth the reasons for which Contractor believes additional compensation will or may be due, the nature of the costs involved, and insofar as possible, the amount of the potential claim. The said notice as above required must have been given to the Project Manager prior to the time that Contractor shall have performed the work giving rise to the potential claim for additional compensation, or in all other cases, within 30 Days after the happening of the event, thing, occurrence, or other cause giving rise to the potential claim.

47.2.3. It is the intention of this Section 47.2 that differences between the Parties arising under and by virtue of the Contract be brought to the attention of the SFMTA at the earliest possible time in order that such matters may be settled, if possible, or other appropriate action promptly be taken. Contractor agrees that it shall have no right to additional compensation for any claim that may be based on any such act, failure to act, event, thing, or occurrence for which no written notice of potential claim as herein required was filed.

47.3. Other Claims. For any dispute involving a question of fact that does not involve a claim for additional compensation, the aggrieved party shall furnish the other party with a notice of dispute within 15 Days of the determination of the dispute. The party receiving a notice of dispute shall submit a written reply with 15 Days of delivery of the notice. The notice and response shall contain the following: (a) a statement of the party's position and a summary of the arguments supporting that position, and (b) any evidence supporting the party's position.

47.4. Resolution of Disputes. Disputes arising in the performance of this Agreement that are not resolved by negotiation between the parties shall be decided in writing by the SFMTA Project Manager. The Project Manager's decision shall be administratively final and conclusive unless within 10 Working Days from the date of such decision, the Contractor mails or otherwise furnishes a written appeal to the Director of Transit, or his/her designee. In connection with such an appeal, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of its position. The decision of the Director of Transit shall be administratively final and conclusive. This section applies to all disputes unless a specific provision of this Agreement provides that the Project Manager's decision as to a particular dispute is final.

47.5. No Cessation of Work. Pending final resolution of a dispute hereunder, the Contractor shall proceed diligently with the performance of its obligations under this Agreement in accordance with the written directions of the Project Manager.

47.6. Alternative Dispute Resolution. If agreed to by both parties, disputes may be resolved by a mutually agreed to alternative dispute resolution process.

47.7. Disputes Among Contractor's Partners. The resolution of any contractual disputes related to Contractor's Joint Venture or Association partners (if any) shall be the sole responsibility of the Contractor. Each party of the Joint Venture or Association shall resolve all such disputes within 30 calendar days of when the dispute first surfaced so as not to impact the performance of the contract with the City. Any such disputes which impact the Project and which are left unresolved for more than one month shall be cause for the City to withhold and/or reduce invoice payments to the Contractor's Joint Venture or Association firms until the dispute is resolved.

48. Agreement Made in California; Venue

The formation, interpretation and performance of this Agreement shall be governed by the laws of the State of California. Venue for all litigation relative to the formation, interpretation and performance of this Agreement shall be in San Francisco.

49. Construction

All paragraph captions are for reference only and shall not be considered in construing this Agreement.

50. Entire Agreement

This Contract sets forth the entire Agreement between the parties, and supersedes all other oral or written provisions. This Contract may be modified only as provided in Section 46.

51. Compliance with Laws

Contractor shall keep itself fully informed of the City's Charter, codes, ordinances and regulations of the City and of all state, and federal laws in any manner affecting the performance of this Agreement, and must at all times comply with such local codes, ordinances, and regulations and all applicable laws as they may be amended from time to time.

52. Services Provided by Attorneys

Any services to be provided by a law firm or attorney must be reviewed and approved in writing in advance by the City Attorney. No invoices for services provided by law firms or attorneys, including, without limitation, as Subcontractors of Contractor, will be paid unless the provider received advance written approval from the City Attorney.

53. Reserved

54. Severability

Should the application of any provision of this Agreement to any particular facts or circumstances be found by a court of competent jurisdiction to be invalid or unenforceable, then (a) the validity of other provisions of this Agreement shall not be affected or impaired, and (b) such provision shall be enforced to the maximum extent possible so as to effect the intent of the parties and shall be reformed without further action by the parties to the extent necessary to make such provision valid and enforceable.

55. Protection of Private Information

Contractor has read and agrees to the terms set forth in San Francisco Administrative Code Sections 12M.2, "Nondisclosure of Private Information," and 12M.3, "Enforcement" of Administrative Code Chapter 12M, "Protection of Private Information," which are incorporated herein as if fully set forth. Contractor agrees that any failure of Contactor to comply with the requirements of Section 12M.2 of this Chapter shall be a material breach of the Contract. In such an event, in addition to any other remedies available to it under equity or law, the City may terminate the Contract, bring a false claim action against the Contractor pursuant to Chapter 6 or Chapter 21 of the Administrative Code, or debar the Contractor.

56. Time of Essence

Time is of the essence in this Agreement.

57. Technical Specifications

57.1. Fabrication. The Vehicles shall be designed, fabricated, and tested in accordance with the requirements in Volume 2 (Technical Specifications).

57.2. Omission. Notwithstanding the Technical Specifications or other data provided by the Project Manager, the Contractor shall have the responsibility of supplying all parts and details required to make these Vehicles complete and ready for

service even though such details may not be specifically mentioned in the Specifications. Items that are installed by SFMTA shall not be the responsibility of the Contractor unless they are included in this Contract or should have been installed by the Contractor.

58. Project Management Plan.

The Project shall be managed, planned and controlled in accordance with the requirements of Section 20 of the Technical Specifications (Program Management and Quality Assurance).

59. Reserved

60. FTA Requirements

The provisions contained in "FTA Requirements for Procurement Contracts," attached as Exhibit 4. If there is any conflict between the FTA terms and conditions and any other terms and conditions of this Agreement, the FTA terms and conditions shall take precedence.

61. Cooperative Drafting

This Agreement has been drafted through a cooperative effort of both parties, and both parties have had an opportunity to have the Agreement reviewed and revised by legal counsel. No party shall be considered the drafter of this Agreement, and no presumption or rule that an ambiguity shall be construed against the party drafting the clause shall apply to the interpretation or enforcement of this Agreement.

62. Warranty

Contractor shall provide warranties of Vehicles, training, parts and special tools as described in Exhibit 5 (Warranty Provision).

63. Title

Adequate documents for securing the title of the Vehicle shall be provided to the Project Manager at the time the Vehicle is delivered. Upon Acceptance or ,in the case of a Vehicle being Conditionally Accepted, upon Conditional Acceptance of each Vehicle, the Contractor warrants that the title shall pass to the SFMTA free and clear of all liens, mortgages and encumbrances, financing statements, security agreements, claims and demands of any character. Title to the spare parts to be delivered under this Contract shall vest in the SFMTA immediately upon Acceptance by the SFMTA.

64. Option Vehicles, Equipment and Spare Parts

All items purchased under the Options shall be identical in every way to those purchased under the Base Order portion of the Contract. All conditions, Technical Specifications, and requirements set forth for the Base Order purchases shall apply to the items purchased under Option unless otherwise specified in this Section.

64.1. Option for New Light Rail Vehicles. At the option of the City, the Contractor shall provide additional Vehicles in quantities indicated in the Schedule of Prices. The Option for 1 to 85 Vehicles (Item 7 on Exhibit 2 -- Payment Schedule) may be executed any time within seven years after NTP. The price of Option Vehicles will be adjusted in accordance with Section 7.5 of this Agreement.

64.2. Option for Additional Spare Parts. At the option of the City, Contractor shall provide additional spare parts (Item 8 on the Payment Schedule, Exhibit 2). Prices shall remain firm for 24 months after NTP. The price of Option for additional spare parts will be adjusted in accordance with Section 7.5 of this Agreement.

64.3. Spare Parts For Options. At the option of the City, Contractor shall provide spare parts for Option Vehicles (Item 9 on the Exhibit 2 Payment Schedule).

The price of spare parts for Option Vehicles will be adjusted in accordance with Section 7.5 of this Agreement.

64.4. Optional Train Simulator. At the option of the City, Contractor shall provide optional train simulator (Item 10 on the Exhibit 2 Payment Schedule). The price of optional train simulator will be adjusted in accordance with Section 7.5 of this Agreement.

64.5. Financing of Option Vehicles. At the sole election of the SFMTA, the parties shall negotiate vendor financing of approximately 40 Option Vehicles to be delivered between 2018 and 2021. Any financing agreement shall be subject to approval by the SFMTA Board of Directors.

65. Precedence of Contract Documents

Any inconsistency in requirements of the Contract shall be resolved by giving precedence in the following order:

- (a) Agreement (including all exhibits and Contract Modifications)
- (b) Technical Specifications (conformed with Addenda)
- (c) Contractor's Proposal (incorporated with Clarifications)

Wording shall take precedence over conceptual drawings and renderings. Any discrepancy shall be decided in the sole discretion of the SFMTA.

66. Deliveries

66.1. Predelivery Tests and Inspections. Pre-delivery tests and inspections shall be performed prior to shipment to SFMTA. Such tests and inspections shall be performed in accordance with the procedures defined in Verification Section 21.3 of the Technical Specifications, and they may be witnessed by the SFMTA Resident Inspector. When a Vehicle passes these tests and inspections, the Resident Inspector shall authorize release of the Vehicle for shipment. Such authorization does not imply Acceptance of the Vehicle by SFMTA.

66.2. Delivery Procedure. Delivery shall be determined by signed receipt of the SFMTA Engineer at the point of delivery and may be preceded by a cursory inspection of the Vehicle. The point of delivery shall be:

San Francisco Municipal Transportation Agency Transit Division Muni Metro East Facility 601 – 25th Street San Francisco, CA 94107

Contractor shall deliver Vehicles during weekday working hours at a time mutually agreeable to SFMTA and Contractor, or as otherwise specified in writing by SFMTA. Contractor shall provide at least five Working Days notice to SFMTA prior to delivery. Delivery of the Vehicles shall be F.O.B. point of delivery, freight pre-paid and allowed. Contractor shall ensure that all Vehicles are fully operable when they are delivered.

66.3. Spare Parts Delivery Procedure. Contractor shall deliver Contract spare parts in two shipments or smaller lots provided that all spare parts shipments are delivered in accordance with Exhibit 3. Composition of spare parts in each lot is subject to SFMTA approval. Contractor shall provide SFMTA with one-weeks advance notice before shipment of each lot of spare parts. Such notice shall include a packing list clearly identifying all parts and their quantity in the shipment.

Delivery shall be determined by signed receipt of the SFMTA representative at the point of delivery and may be preceded by a cursory inspection of the parts. Within

20 Days of delivery, SFMTA will issue a notification of acceptance, non-acceptance or Conditional Acceptance of the spare parts. The point of delivery shall be:

San Francisco Municipal Transportation Agency Transit Division Muni Metro East Facility 601 – 25th Street San Francisco, CA 94107

67. Acceptance Of Vehicles

67.1. Procedure. After arrival at the designated point of delivery, each Vehicle will undergo pre-Acceptance and Acceptance tests by SFMTA as defined in the Verification Section 21.3 of the Technical Specifications. When a Vehicle passes all tests, SFMTA will provide written Acceptance of the Vehicle to the Contractor. Contractor shall transfer title to the Vehicle to the City on the day of Acceptance, or Conditional Acceptance, if the Vehicle is not fully Accepted. Acceptance of one Vehicle does not imply Acceptance of any other delivered Vehicles.

If a Vehicle fails the Acceptance tests, the Vehicle shall not be Accepted until the repair procedures defined in Section 68, of this Agreement have been carried out and the Vehicle has been retested and passes all applicable tests. All deliveries of Vehicles shall be halted whenever five or more Vehicles have failed or have not been Accepted or Conditionally Accepted and are awaiting repairs or corrections.

After completion of post-delivery testing, SFMTA will issue a notification of Acceptance, non-Acceptance or Conditional Acceptance.

67.2. Conditional Acceptance. If a Vehicle does not meet all requirements for Acceptance, SFMTA may, at its exclusive option, "conditionally accept" the Vehicle and place it into revenue service, pending receipt of Contractor-furnished materials and/or labor necessary to effectuate corrective action for Acceptance. For any Conditionally Accepted Vehicle, payments shall be made as provided in Section 7 above.

67.3. Assumption of Risk of Loss. Prior to delivery as described in Section 66 of this Agreement, and regardless whether Title has passed to the City, the Contractor shall bear risk of loss of the Vehicle, including any damage sustained during transportation to the delivery site. Risk of loss will pass to the SFMTA upon delivery of each LRV, except that loss or damage to the Vehicle resulting from acts or omissions of the Contractor shall be the responsibility of the Contractor until Acceptance of said Vehicle.

68. Repairs Prior To Acceptance.

The SFMTA Project Manager may require the Contractor, or its designated representative, to perform repairs after non-Acceptance or conditional Acceptance, or the Contractor may request that the work be done by SFMTA personnel with reimbursement by the Contractor. Contractor shall inform SFMTA in advance of any modifications made to the Vehicle during the Acceptance period.

68.1. Repairs by Contractor. If the SFMTA Project Manager requires the Contractor to perform repairs after non-Acceptance of the Vehicle, the Contractor's representative must begin the repair within five Days after receiving notification from the SFMTA Project Manager of failure of Acceptance tests.

The Contractor shall provide, at its own expense, all spare parts, tools, and labor required to complete the repairs. At the SFMTA Project Manager option, the Contractor may be required to remove the Vehicle from SFMTA property while repairs are being effected. The Contractor shall then provide a space to complete the repairs, shall

diligently pursue the repairs, and shall assume risk of loss while the Vehicle is under its control.

68.2. Repairs by SFMTA. If the SFMTA Project Manager agrees to a request by the Contractor for SFMTA to perform repairs on a Contractor-owned Vehicle prior to SFMTA Acceptance, SFMTA shall correct or repair the defect using parts supplied by the Contractor specifically for this repair. Monthly, or at a period to be mutually agreed upon, reports of all repairs covered by this procedure shall be submitted by the SFMTA Project Manager to the Contractor for actual cost reimbursement of parts. The Contractor shall provide forms for these reports.

If the Contractor supplies parts for repairs being performed by SFMTA before Acceptance of the Vehicle, Contractor shall ship these parts prepaid to SFMTA within ten working days after receipt of the request for the parts. The Contractor may request that defective components covered by this provision be returned to the manufacturing plant. Contractor shall bear all expenses for supplying such parts and for any associated costs.

Contractor shall reimburse SFMTA for all costs of labor and materials (including taxes) for repairs made or caused to be made by SFMTA. If SFMTA performs the repairs itself, the amount shall be determined by multiplying the number of man-hours actually required to correct the defect by the current technician's hourly overtime wage rate, which includes fringe benefits and overhead, plus the cost of towing the Vehicle if such action was necessary. If SFMTA requires the service of an outside repair facility, Contractor shall reimburse SFMTA for all such repair invoices. Contractor shall also reimburse SFMTA for administrative costs incurred in performing the repairs. The use of SFMTA labor will not relieve the Contractor from the responsibility to ensure that repairs are carried out in accordance with proper procedures.

SFMTA may deduct the cost of repairs from any monies due or that may become due to the Contractor under the Agreement, or if such monies are insufficient, the Contractor or its surety shall pay to the SFMTA any deficiency.

69. Unavoidable Delays

69.1. Definition. An Unavoidable Delay is an interruption of the work beyond the control of the Contractor, which the Contractor could not have avoided by the exercise of care, prudence, foresight, and diligence. Such delays include and are limited to acts of God; floods; windstorms; tornadoes; wars; riots; insurrections; epidemics; quarantine restrictions; strikes and lockouts; freight embargoes; acts of a governmental agency; priorities or privileges established for the manufacture, assembly, or allotment of materials by order, decree, or otherwise of the United States or by any department, bureau, commission, committee, agent, or administrator of any legally constituted public authority; changes in the work ordered by the City insofar as they necessarily require additional time in which to complete the entire work; the prevention by the City of the Contractor's commencing or prosecuting the work. The duration of said Unavoidable Delays shall be limited to the extent that the commencement, prosecution, and completion of the work are delayed thereby, as determined by the City.

69.2. Notification of Delay. The Contractor shall notify SFMTA as soon as the Contractor has, or should have, knowledge that an event has occurred that will delay deliveries. Within five calendar days, the Contractor shall confirm such notice in writing, furnishing as much detail as is available.

69.3. Request for Extension. The Contractor agrees to supply, as soon as such data are available, any reasonable proof that is required by SFMTA to make a decision on any request for extension. SFMTA shall examine the request and any documents supplied by the Contractor and shall determine if the Contractor is entitled to

an extension and the duration of such extension. SFMTA shall notify the Contractor of its decision in writing.

The granting of an extension of time because of Unavoidable Delays shall in no way operate as a waiver on the part of the City of the right to collect liquidated damages for other delays or of any other rights to which the City is entitled.

70. MacBride Principles—Northern Ireland

Pursuant to San Francisco Administrative Code §12F.5, the City and County of San Francisco urges companies doing business in Northern Ireland to move towards resolving employment inequities, and encourages such companies to abide by the MacBride Principles. The City and County of San Francisco urges San Francisco companies to do business with corporations that abide by the MacBride Principles. By signing below, the person executing this agreement on behalf of Contractor acknowledges and agrees that he or she has read and understood this section. IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day first mentioned above.

CITY

CONTRACTOR

San Francisco Municipal Transportation Agency

> Edward D. Reiskin Director of Transportation

Approved as to Form:

Dennis J. Herrera City Attorney

By _____ Robin M. Reitzes Deputy City Attorney

San Francisco Municipal Transportation Agency Board of Directors

Resolution No.	
Dated:	

Attest:

Secretary

Board of Supervisors	
Resolution No	
Dated:	
Attest:	

Clerk

Michael Cahill President Rail Systems Division Siemens Industry, Inc. Infrastructure & Cities Sector 7464 French Road Sacramento, CA 95828

Christopher Halleus Vice President, Finance & Business Administration Rail Systems Division Siemens Industry, Inc. Infrastructure & Cities Sector 7464 French Road Sacramento, CA 95828

> City vendor number: 50009 Federal Taxpayer ID No.13-2762488

EXHIBIT 1 A. Schedule of Prices

BASE EXTENDED ITEM DESCRIPTION UNIT PRICE QUANTITY PRICE Engineering Design, **Project Management** Item 1 Lump Sum x 1 \$37,541,102 and Design Qualification Testing Allowance for regulatory mandated changes, requested passenger enhancements and Item 1.1 Lump Sum x 1 \$10,000,000 system modifications resulting from changes to project interfaces Vehicle Price for Base Item 2 \$3,327,250 x 175 cars \$582,268,750 Order Operating, Maintenance Item 3 Lump Sum x 1 \$809,478 and Parts Manuals Item 4.1 Lump Sum x 1 \$361,557 Training Train Simulator (1) (In accordance with Item 4.2 Lump Sum x 1 \$1,704,650 Section 22.2.8 of **Technical Specifications)** Spare Parts Item 5 Lump Sum x 1 \$14,153,840 (Total of Exhibit 1.B) Special Tools, Test and Diagnostic Equipment Item 6 Lump Sum \$1,792,624 x 1 (Total of Exhibit 1.D) **Total Base:** \$648,632,001 Items 1 – 6

OPTIONS

ITEM	DESCRIPTION	UNIT PRICE	QUANTITY	EXTENDED PRICE
Item 7	Option for 1 to 85 Additional New Light Rail Vehicles	\$3,329,011	x 85 cars	\$282,965,935
Item 8	Additional Spare Parts (Total of Exhibit 1.C)	Lump Sum	x 1	\$11,269,527
Item 9	Spare Parts for Options	Lump Sum	x 1	\$15,000,000
Item 10	Train Simulator (2) (In accordance with Section 22.2.8 of Technical Specifications)	Lump Sum	x 1	\$1,704,650
Total Options: Items 7 – 10				\$310,940,112

Note: The Prices do not include escalation. Escalation will be applied in accordance with Agreement Section 7.5.

B. Nominal Spare Parts

Total Price \$14,153,840

Carb	ody and Inte					
No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	1 car set	5 car sets	6 car sets	Windshield	\$12,798	\$76,789
2	0 car sets	2 car sets	2 car sets	Articulation section, complete	\$25,737	\$51,475
3	1 car set	4 car sets	5 car sets	Passenger seat assemblies, complete (frame, inserts, hinges, mounting hardware, etc)	\$28,103	\$140,516
4	1 car set	3 car sets	4 car sets	Destination sign, complete (side and ends)	\$25,326	\$101,305
5	1 car set	1 car set	2 car sets	Passenger side window glass	\$10,481	\$20,962
6	1 car set	1 car set	2 car sets	Glass - all (except windshield and passenger side window)	\$3,484	\$6,969

Coupler and Draft Gear

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	1 car set	4 car sets	5 car sets	Coupler & draft gear assembly, complete	\$150,880	\$754,402

Cab and Train Control

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	2 units	18 units	20 units	Master Controller assembly	\$4,181	\$83,625
2	1 cab set	1 cab set	2 cab sets	Cab control panel, complete (excluding master controller)	\$50,860	\$101,720

Doors and Door Control

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	1 car set	4 car sets	5 car sets	Door actuator unit, including linkages and gear drives or actuators	\$71,325	\$356,626
2	1 car set	4 car sets	5 car sets	Door Leafs	\$45,750	\$228,749
3	2 doorway sets of each type	6 doorway sets of each type	8 sets	Door control board or module, complete	\$3,005	\$24,042

Air Comfort System

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	1 car set	4 car sets	5 car sets	Air conditioner units	\$93,730	\$468,648
2	1 car set	1 car set	2 car sets	Air conditioning blower motors	\$10,244	\$20,488
3	1 unit	5 units	6 units	Air conditioning compressor motors	\$0	\$0
4	1 units	5 units	6 units	Air conditioning compressors	\$5,200	\$31,203

Power Supply and Auxiliary Electric

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	2 units	8 units	10 units	Pantograph assembly, complete	\$15,941	\$159,410
2	1 car set	1 car set	2 car sets	Battery	\$10,833	\$21,666
3	1 unit	3 units	4 units	Auxiliary Inverter	\$76,947	\$307,789

Propulsion

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	2 units	6 units	8 units	Traction motor, complete with coupling	\$44,393	\$355,141
2	1 car set	1 car set	2 car sets	Propulsion/brake dynamic resistors assembly, complete	\$20,121	\$40,241
3	1 car set	1 car set	2 car sets	Traction power contactors (motor circuit configuration contactors, reverser, et al., except line switch or main breaker)	\$5,464	\$10,927
4	2 units	3 units	5 units	Line switch	\$1,192	\$5,958
5	1 car set	1 car set	2 car sets	Control relays and sensors, all (except speed sensors or tach generators)	\$4,575	\$9,150
6	1 car set	3 car sets	4 car sets	Speed sensors or tach generators (if required)	\$20,573	\$82,292
7	1 car set	4 car sets	5 car sets	Electronic control unit, complete	\$49,401	\$247,005
8	1 car set	3 car sets	4 car sets	Printed circuit boards, logic	\$64,515	\$258,060
9	1 car set	2 car sets	3 car sets	Propulsion inverters	\$225,725	\$677,174

Truck Assembly and Suspension

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	1 car set	4 car sets	5 car sets	Trucks, complete (ready to install)	\$1,239,478	\$6,197,389
2	2 truck sets	3 truck sets	5 truck sets	Motor truck axle assembly, complete (including gear box, brake disc, ground bearings, primary suspension if needed)	\$229,134	\$1,145,672
3	2 truck sets	3 truck sets	5 truck sets	Trailer truck wheel/axle assembly, complete	\$172,792	\$863,961

Friction Brakes

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	1 car set	3 car sets	4 car sets	All friction brake equipment (except air compressor, connecting hoses, fittings, inter-unit wiring and electronic control unit)	\$276,600	\$1,106,401
2	2 units	5 units	7 units	Compressor assembly (if required)	\$0	\$0

Communications

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	1 car set	3 car sets	4 car sets	PA, Communication systems, complete	\$45,170	\$180,678

Miscellaneous

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	1 car set	1 car set	2 car sets	AC and DC motors, other (except traction motors)	\$8,704	\$17,408

C. Optional Spare Parts

Total Price \$ 11,269,527

Carb	ody and Inte	rior		<u>-</u>		1,200,021
No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	1 car set	1 car set	2 car sets	Rubber window glazing, all	\$0	\$0
2	1 car set	1 car set	2 car sets	Windscreen, complete	\$0	\$0
3	1 car set	1 car set	2 car sets	Access covers of all underfloor equipment boxes	\$2,439	\$4,878
4	0 car sets	2 car sets	2 car sets	Stanchions	\$6,969	\$13,938
5	2 car sets	0 car sets	2 car sets	Graphics and decals	\$6,098	\$12,196

Coupler and Draft Gear

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	1 car set	4 car sets	5 car sets	Electrical head, complete	\$52,266	\$261,330
2	200 units	200 units	400 units	Electrical contacts	\$232	\$92,800
3	4 units	6 units	10 units	Electrical head cover	\$5,192	\$51,920
4	2 car sets	3 car sets	5 car sets	Coupler attenuation tubes	\$7,317	\$36,585

Cab and Train Control

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	1 cab set	3 cab sets	4 cab sets	Cab door, complete with hardware	\$784	\$3,136
2	2 units	8 units	10 units	CCTV system (for outside rear view)	\$47,039	\$470,390
3	2 cab sets	6 cab sets	8 cab sets	Wiper motor	\$1,394	\$11,152
4	4 units	36 units	40 units	Wiper arms	\$348	\$13,920
5	2 car sets	2 car sets	4 car sets	Horn assembly	\$12,753	\$51,012
6	2 car sets	2 car sets	4 car sets	Gong assembly	\$0	\$0
7	1 cab set	3 cab sets	4 cab sets	Switches, pushbuttons, console displays, meters, gauges, indicating lamps, LEDs, lenses, all	\$16,432	\$65,728
8	4 car sets	0 car sets	4 car sets	Inside sunvisors and mirrors	\$742	\$2,968
9	250 units	0 units	250 units	Wiper blades	\$87	\$21,750
10	2 car sets	2 car sets	4 car sets	Operator's sash	\$3,680	\$14,720
11	1 units	1 unit	2 units	Operator's seat	\$4,007	\$8,014
12	2 cab sets	8 cab sets	10 cab sets	Cab seat cushions (seat and back)	\$0	\$0

Doors and Door Control

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	2 doorway sets	8 doorway sets	10 sets	Door panel set, complete with glazing, suspension, and edges	\$6,063	\$60,630
2	20 doorway sets	0 doorway sets	20 sets	Sensitive edges	\$638	\$12,760
3	3 car sets	0 car sets	3 car sets	Stop request switches	\$0	\$0
4	2 car sets	8 car sets	10 car sets	Limit switches, all	\$6,901	\$69,010
5	1 car set	4 car sets	5 car sets	Passenger door pushbutton switches (interior and exterior)	\$6,969	\$34,845
6	1 car set	2 car sets	3 car sets	Stop request light lenses	\$0	\$0
7	1 car set	3 car sets	4 car sets	Step assembly, complete	\$155,244	\$620,976

Air Comfort System

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	1 car set	1 car set	2 car sets	All heating elements (passenger compartment and cab)	\$2,526	\$5,052
2	1 car set	1 car set	2 car sets	Temperature control relays	\$0	\$0
3	1 car set	1 car set	2 car sets	Air conditioning valves, complete	\$505	\$1,010
4	1 car set	1 car set	2 car sets	Air flow switches, all	\$0	\$0
5	1 car set	2 car set	3 car sets	Thermostats, all	\$235	\$705
6	1 car set	3 car set	4 car sets	Air conditioning pressure switches	\$491	\$1,964
7	1 car set	3 car set	4 car sets	Flexible ducting	\$0	\$0
8	24 car sets	76 car set	100 car sets	Disposable air filters	\$160	\$16,000

Lighting

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	0 car sets	1 car set	1 car set	Fixtures for all interior lights, complete	\$20,783	\$20,783
2	2 car sets	0 car sets	2 car sets	Fixtures for all exterior lights, complete	\$30,154	\$60,308
3	1 unit of each type	1 unit of each type	2 units	Light fixtures complete (sockets, lens, etc.)	\$1,497	\$2,994
4	1 car set	0 car sets	1 car set	Light sockets	\$0	\$0
5	2 car sets	0 car sets	2 car sets	Lights (except head lights)	\$0	\$0
6	10 units	40 units	50 units	Head Lights	\$3,310	\$165,500
7	1 car set	1 car set	2 car sets	Lenses for all lights, interior and exterior (except cab console)	\$3,920	\$7,840
8	1 car set	0 car sets	1 car sets	Lenses for Light fixtures	\$8,432	\$8,432

Power Supply and Auxiliary Electric

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	5 units	15 units	20 units	Pantograph head, complete	\$5,923	\$118,460
2	2 car sets	2 car sets	4 car sets	Pantograph raise and lower actuator assembly	\$4,683	\$18,732
3	2 car sets	3 car sets	5 car sets	Lightning or surge arrestor	\$1,742	\$8,710
4	1 car set	1 car set	2 car sets	Battery rack assembly	\$35	\$70
5	1 car set	1 car set	2 car sets	Relays, all	\$27,744	\$55,488
6	2 car sets	3 car sets	5 car sets	Inverter printed circuit boards	\$31,514	\$157,570
7	2 car sets	4 car sets	6 car sets	Battery charger/ low voltage supply	\$46,203	\$277,218
8	2 car sets	2 car sets	4 car sets	Printed circuit boards for battery charger / low voltage DC supply	\$0	\$0
9	5 units	0 units	5 units	Shop power plug, complete (male, car mounted)	\$871	\$4,355
10	2 units	2 units	4 units	High speed circuit breaker	\$10,342	\$41,368
11	50 car sets	150 car sets	200 car sets	Pantograph shoe carbon inserts (complete with retainer socket)	\$3,275	\$655,000
12	1 car sets	1 car sets	2 car sets	Pantograph insulators	\$1,673	\$3,346
13	20 car sets	0 car sets	20 car sets	Pantograph shunts	\$8,502	\$170,040

	ulsion Phase1	Phase2	Total		Unit	Total
No.	Qty.	Qty.	Qty.	Description of Item	Price	Price
1	1 car set	4 car sets	5 car sets	Filter Capacitor	\$188	\$940
2	1 car set	1 car set	2 car sets	Line reactor	\$14,185	\$28,370
3	1 car set	1 car set	2 car sets	Motor reactor	\$19,422	\$38,844
4	2 car sets	3 car sets	5 car sets	Motor cable connecting lugs	\$871	\$4,355
5	10 car sets	10 car sets	20 car sets	Contactor tips (traction power contactors)	\$15,157	\$303,140
6	10 car sets	10 car sets	20 car sets	Contactor tips, all other	\$12,157	\$243,140
7	2 car sets	2 car sets	4 car sets	Arc chutes, all	\$184	\$736
8	0 sets	50 sets	50 sets	Tractor motor bearings	\$6,620	\$331,000

Truck Assembly and Suspension

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	1 car set	4 car sets	5 car sets	Primary springs	\$9,296	\$46,480
2	1 car set	4 car sets	5 car sets	Secondary springs	\$8,366	\$41,830
3	4 units	4 units	8 units	Gear box with axle & motor couplings	\$41,200	\$329,600
4	1 car set	1 car set	2 car sets	Load sensing device	\$0	\$0
5	5 car sets	0 car sets	5 car sets	Shock absorber	\$441	\$2,205
6	5 car sets	0 car sets	5 car sets	Motor truck pivot replacement liner / bearings	\$0	\$0
7	5 car sets	0 car sets	5 car sets	Trailer truck pivot replacement liner / bearings	\$0	\$0
8	3 car sets	2 car sets	5 car sets	Ball bearing slew rings for trailer truck	\$52,527	\$262,635
9	4 car sets	0 car sets	4 car sets	Ground brush holders	\$13,893	\$55,572
10	4 car sets	0 car sets	4 car sets	Journal bearing	\$39,722	\$158,888
11	6 car sets	18 car sets	24 car sets	Wheel assembly, complete	\$142,372	\$3,416,928
12	16 car sets	0 car sets	16 car sets	Wheel tire sets	\$52,266	\$836,256
13	40 units	0 units	40 units	Ground brushes	\$544	\$21,760
14	40 units	0 units	40 units	Ground brush springs	\$23	\$920
15	6 units	0 units	6 units	Axles, final machined	\$4,963	\$29,778
16	2 car sets	3 car sets	5 car sets	Bearings, gear assembly	\$0	\$0

Friction Brakes

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	1 car set	1 car set	2 car sets	Electronic control unit, complete (if not included as part of propulsion ECU)	\$35,546	\$71,092
2	2 car sets	3 car sets	5 car sets	Printed circuit boards - brake control (if required)	\$28,746	\$143,730
3	3 truck sets	3 truck sets	6 truck sets	Track brake assembly, complete	\$11,195	\$67,170
4	2 car sets	2 car sets	4 car sets	Sander valves	\$22,837	\$91,348
5	2 units	2 units	4 units	Compressor control unit, complete with contactors	\$0	\$0
6	2 car sets	0 car sets	2 car sets	Brake disc	\$19,187	\$38,374
7	200 car sets	0 car sets	200 car sets	Brake pads	\$2,788	\$557,600
8	4 car sets	0 car sets	4 car sets	Connecting air hoses and fittings, all	\$0	\$0
9	1 car set	2 car sets	3 car sets	Track brake wear plates, complete	\$1,045	\$3,135

Communications

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	1 car set	1 car set	2 car sets	Interior speakers	\$274	\$548
2	2 car sets	0 car sets	2 car sets	Exterior speakers	\$730	\$1,460
3	10 units	0 units	10 units	Radio antenna	\$166	\$1,660
4	10 units	0 units	10 units	Handsets	\$629	\$6,290
5	2 car sets	2 car sets	4 car sets	GPS system	\$0	\$0
6	2 car sets	2 car sets	4 car sets	Infotainment System (Digital route maps, etc)	\$24,009	\$96,036
7	2 car sets	2 car sets	4 car sets	Mobile access router	\$2,307	\$9,228
8	2 car sets	2 car sets	4 car sets	Event Recorder	\$12,857	\$51,428

Miscellaneous

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	10 car sets	14 car sets	24 car sets	Circuit Breakers, all (except propulsion main breaker and auxiliary)	\$9,152	\$219,648
2	1 car set	1 car set	2 car sets	Circuit Breaker holders, all	\$0	\$0
3	25 car sets	25 car sets	50 car sets	Air and pneumatic filter elements, all	\$436	\$21,800
4	10 car sets	10 car sets	20 car sets	Contactor tips (except propulsion)	\$0	\$0

D. Diagnostic Test Equipment/Special Tools

Total Price \$ 1,792,624

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	18 units	18 units	36 units	Laptop (to be able to diagnose equipment below: Propulsion system, Brake and spin/slide systems, Auxiliary inverter, LVPS and battery, Heating and cooling system, Couplers/trainlines, Master controller, Door systems, Communications system)	\$3,190	\$114,835

Portable Test Equipment

Shop Test Equipment

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	1 unit	1 unit	2 units	Propulsion system	\$252,530	\$505,060
2	1 unit	1 unit	2 units	Friction Brake	\$95,820	\$191,641
3	1 unit	1 unit	2 units	Auxiliary inverter	\$216,322	\$432,644
4	1 unit	1 unit	2 units	LVPS and battery	\$28,254	\$56,508
5	1 unit	1 unit	2 units	Air conditioner	\$21,255	\$42,509
6	1 unit	1 unit	2 units	Master controller	\$0	\$0
7	1 unit	1 unit	2 units	Pneumatic/hydraulic controllers	\$60,976	\$121,952

Special Tools (IF REQUIRED)

No.	Phase1 Qty.	Phase2 Qty.	Total Qty.	Description of Item	Unit Price	Total Price
1	1	1	2	Jacking inserts and levelling bars	\$57,736	\$115,472
2	1	1	2	Bogie Press	\$55,506	\$111,012
3	1	1	2	Flushing Cart	\$26,133	\$52,266
4	1	1	2	HVAC lifting fixture and trolley	\$14,007	\$28,014
5	1	1	2	Lifting fixture for APS	\$10,356	\$20,711

Exhibit 2 PAYMENT SCHEDULE

(All Item references are to Exhibit 1.A)

Item 1 - Engineering Design, Project Management and Design Qualification Testing

	Milestone	Percent of Bid Item
A	Submittal and Approval of Test Program, System Safety, Reliability, Maintainability and other plans as negotiated with SFMTA	2%
В	Completion and Approval of Preliminary Design Review	2%
С	Completion and Approval of Final Design Review	35%
D	Completion and Approval of Vehicle Performance Qualification Testing	30%
Е	Completion and Approval of Test Program as specified	26%
F	Completion and Approval of all Contract Requirements (Retention)	5%
Total	for Item 1	100%

Item 2 – Vehicle Price for Base Contract

Item 2A – Vehicle Price for Base Contract (Cars 1 - 24)

	Milestone	Percent of Bid Item
	 Placement of contracts with the following major subcontractors (Cars 1 - 24).* Propulsion Friction Brake 	
А	Air Comfort Deer Operators & Controls	2%
	Door Operators & ControlsCarbody	
	Train Control	
	Coupler	
	Communication	
В	Delivery of complete set of subsystems to site of installation.	20%/Vehicle
С	Vehicle structure complete and ready for shipment to final assembly site	20%/Vehicle
D	SFMTA Acceptance for shipment of Vehicle from final assembly site to SFMTA property	25%/Vehicle
Е	Conditional Acceptance of Vehicle by SFMTA	30%/Vehicle

	Milestone	Percent of Bid Item
F	Completion and Approval of all Contract Requirements for Phase 1 (Retention)	3%
Tota	I for Item 2A	100%

*Payment will be made only to the extent that deposits have been paid to suppliers and up to the amount of the deposits or 2%, whichever is the lesser value; in addition Contractor must provide security for payment under Section 7.3 of the Agreement.

Item 2B – Vehicle Price for Base Contract (Cars 25 - 175)

	Milestone	Percent of Bid Item
A	 Placement of contracts with the following major subcontractors (Cars 25 - 175).* Propulsion Friction Brake Air Comfort Door Operators & Controls Carbody Train Control Coupler Communication 	2%
В	Delivery of complete set of subsystems to site of installation.	20%/Vehicle
С	Vehicle structure complete and ready for shipment to final assembly site	20%/Vehicle
D	SFMTA Acceptance for shipment of Vehicle from final assembly site to SFMTA property	25%/Vehicle
E	Conditional Acceptance of Vehicle by SFMTA	30%/Vehicle
F	Completion and Approval of all Contract Requirements for phase 2 (Retention)	3%
Total	for Item 2B	100%

*Payment will be made only to the extent that deposits have been paid to suppliers and up to the amount of the deposits or 2%, whichever is the lesser value; in addition, Contractor must provide security for the payment, as required under Section 7.3 of the Agreement.

Item 3 - Operating, Maintenance and Parts Manuals

	Milestone	Percent of Bid Item
А	Acceptance of Draft Manuals	5%
В	Delivery and Acceptance of Operating, Maintenance and Parts Manuals	90%
С	Completion and Approval of all Contract Requirements (Retention)	5%
Total	for Item 3	100%

Item 4.1 – Training

/III T . I		
	Milestone	Percent of Bid Item
А	Completion of Training Program and delivery and acceptance of all deliverables	95%
В	Completion and approval of all Contract Requirements (Retention)	5%
Total for Item 4		100%

Item 4.2 – Train Simulator

	Milestone	Percent of Bid Item
А	Delivery and Acceptance of Train Simulator	95%
В	Completion and Acceptance of all Contract Requirements (Retention)	5%
Total for Item 4.2		100%

Item 5 - Spare Parts

	Milestone	Percent of Bid Item
А	Delivery and acceptance of spare parts. Delivery and payment will be on a line-item basis.	95%
В	Completion and approval of all Contract Requirements (Retention)	5%
Total for Item 5		100%

Item 6 – Special Tools, Test and Diagnostic Equipment

	Milestone	Percent of Bid Item
A	Delivery and acceptance of Diagnostic Test Equipment, Special Tools, Bench Test Equipment	95%
В	Completion and approval of all Contract Requirements (Retention)	5%
Total for Item 6		100%

<u>Item 7 - Option for 1 to 85 Additional New Light Rail Vehicles</u> Progress payments will be made in accordance with Item 2B.

Item 8 – Additional Spare Parts

Progress payments will be made in accordance with Item 5.

Item 9 – Spare Parts for Options

Progress payments will be made in accordance with Item 5.

Item 10 – Train Simulator

Progress payments will be made in accordance with Item 4.2.

Exhibit 3: PROJECT DELIVERY SCHEDULE

Item	Calendar Days after Notice to Proceed
Project Plan	60
Delivery of 1st Vehicle to SFMTA	737
Delivery of 2nd Vehicle to SFMTA	810
Training Start	870
Training Complete	990
Special Tools / Diagnostic Test Equipment	870
Delivery of Publications (Manuals, Parts Book, Drawings) - Prelim	870
Delivery of Publications (Manuals, Parts Book, Drawings) - Final	1080
Delivery of Spare Parts (Phase 1)	990
Testing Complete / Acceptance of Vehicle	990
Delivery Rate of Base Phase 1 Vehicles (3-24)	1 Car/ 2 week
Delivery of 24th Vehicle (Phase 1) to SFMTA	1298
Delivery of 1st Vehicle (Phase 2) to SFMTA	May15, 2021
Delivery Rate of Phase 2 Vehicles	1 Car/ 2 week
Delivery of 151st Vehicle (Phase 2) to SFMTA	2114 days after delivery of 1 st Car (Phase 2)
Delivery of 1st Option Vehicle to SFMTA	TBD
Delivery Rate of Option Vehicles	TBD
Delivery of the last Option Vehicle	TBD

EXHIBIT 4

FTA REQUIREMENTS FOR PROCUREMENT CONTRACTS

I. DEFINITIONS

A. Approved Project Budget means the most recent statement, approved by the FTA, of the costs of the Project, the maximum amount of Federal assistance for which the City is currently eligible, the specific tasks (including specified contingencies) covered, and the estimated cost of each task.

B. Contractor means the individual or entity awarded a third party contract financed in whole or in part with Federal assistance originally derived from FTA.

C. Cooperative Agreement means the instrument by which FTA awards Federal assistance to a specific Recipient to support a particular Project or Program, and in which FTA takes an active role or retains substantial control.

D. Federal Transit Administration (FTA) is an operating administration of the U.S. DOT.

E. FTA Directive includes any FTA circular, notice, order or guidance providing information about FTA's programs, application processing procedures, and Project management guidelines. In addition to FTA directives, certain U.S. DOT directives also apply to the Project.

F. Grant Agreement means the instrument by which FTA awards Federal assistance to a specific Recipient to support a particular Project, and in which FTA does not take an active role or retain substantial control, in accordance with 31 U.S.C. § 6304.

G. Government means the United States of America and any executive department or agency thereof.

H. Project means the task or set of tasks listed in the Approved Project Budget, and any modifications stated in the Conditions to the Grant Agreement or Cooperative Agreement applicable to the Project. In the case of the formula assistance program for urbanized areas, for elderly and persons with disabilities, and nonurbanized areas, 49 U.S.C. §§ 5307, 5310, and 5311, respectively, the term "Project" encompasses both "Program" and "each Project within the Program," as the context may require, to effectuate the requirements of the Grant Agreement or Cooperative Agreement.

I. **Recipient** means any entity that receives Federal assistance directly from FTA to accomplish the Project. The term " Recipient" includes each FTA "Grantee" as well as each FTA Recipient of a Cooperative Agreement. For the purpose of this Agreement, Recipient is the City.

J. Secretary means the U.S. DOT Secretary, including his or her duly authorized designee.

K. Third Party Contract means a contract or purchase order awarded by the Recipient to a vendor or contractor, financed in whole or in part with Federal assistance awarded by FTA.

L. Third Party Subcontract means a subcontract at any tier entered into by Contractor or third party subcontractor, financed in whole or in part with Federal assistance originally derived from FTA.

M. U.S. DOT is the acronym for the U.S. Department of Transportation, including its operating administrations.

II. FEDERAL CHANGES

Contractor shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Master Agreement between the City and FTA, as they may be amended or promulgated from time to time during the term of this contract. Contractor's failure to so comply shall constitute a material breach of this contract.

III. ACCESS TO RECORDS

A. The Contractor agrees to provide the City and County of San Francisco, the FTA Administrator, the Comptroller General of the United States or any of their authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to this Agreement for the purposes of making audits, examinations, excerpts and transcriptions.

B. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

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 City, the FTA Administrator, the Comptroller General, or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto. 49 CFR 18.36(i)(11).

IV. DEBARMENT AND SUSPENSION (Contracts over \$25,000)

Grantees and subgrantees must not make any award or permit any award (subgrant or contract) at any tier to any party which is debarred or suspended or is otherwise excluded from or ineligible for participation in Federal assistance programs under Executive Order 12549, "Debarment and Suspension." Therefore, by signing and submitting its bid or proposal, the bidder or proposer certifies as follows:

The certification in this clause is a material representation of fact relied upon by the San Francisco Municipal Transportation Agency ("SFMTA"). If it is later determined that the bidder or proposer knowingly rendered an erroneous certification, in addition to remedies available to the SFMTA, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment. The bidder or proposer agrees to comply with the requirements of 2 CFR Parts 180, Subpart C and 1200, Subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

V. NO FEDERAL GOVERNMENT OBLIGATIONS TO CONTRACTOR

A. The City and Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this contract and shall not be subject to any obligations or liabilities to the City, Contractor, or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying contract.

B. The Contractor agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

VI. CIVIL RIGHTS

A. Nondiscrimination - In accordance with Title VI of the Civil Rights Act, as amended, 42 U.S.C. § 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6102, section 202 of the Americans with Disabilities Act of 1990, 41 U.S.C. § 12132, and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, the Contractor agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.

B. Equal Employment Opportunity - The following equal employment opportunity requirements apply to the underlying contract:

Race, Color, Creed, National Origin, Sex - In accordance with **B.1**. Title VII of the Civil Rights Act, as amended, 42 U.S.C. § 2000e, and Federal transit laws at 49 U.S.C. § 5332, the Contractor agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOT) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 CFR Parts 60 et seq., (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 U.S.C. § 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the Project. The Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, creed, national origin, sex, or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

B.2. Age - In accordance with section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. § 623 and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

B.3. Disabilities - In accordance with section 102 of the Americans with Disabilities Act, as amended, 42 U.S.C. § 12112, the Contractor agrees that it will comply with the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 CFR Part 1630, pertaining to employment of persons with disabilities. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

C. The Contractor also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.
VII. DBE/SBE ASSURANCES

Pursuant to 49 C.F.R. Section 26.13, the Contractor is required to make the following assurance in its agreement with SFMTA and to include this assurance in any agreements it makes with subcontractors in the performance of this contract:

The Contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 C.F.R. Part 26 in the award and administration of DOT-assisted contracts. Failure by the Contractor or subcontractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or subcontract or subcontract appropriate.

VIII. CONTRACT WORK HOURS AND SAFETY STANDARDS (applicable to nonconstruction contracts in excess of \$100,000 that employ laborers or mechanics on a public work)

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

B. Violation; liability for unpaid wages; liquidated damages - In the event of any violation of the clause set forth in paragraph A of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph A of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph A of this section.

C. Withholding for unpaid wages and liquidated damages - The City and County of San Francisco shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

D. Subcontracts - The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs A through D of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs A through D of this section.

IX. ENERGY CONSERVATION REQUIREMENTS

The Contractor agrees to comply with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

X. CLEAN WATER REQUIREMENTS (applicable to all contracts in excess of \$100,000)

A. The Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§ 1251 et seq. Contractor agrees to report each violation of these requirements to the City and understands and agrees that the City will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA regional office.

B. The Contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA.

XI. CLEAN AIR (applicable to all contracts and subcontracts in excess of \$100,000, including indefinite quantities where the amount is expected to exceed \$100,000 in any year.)

A. Contractor agrees to comply with applicable standards, orders, or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. §§ 7401 et seq. The Contractor agrees to report each violation to the City and understands and agrees that the City will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

B. The Contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA.

XII. PRIVACY

If Contractor or its employees administer any system of records on behalf of the Federal Government, Contractor and its employees agree to comply with the information restrictions and other applicable requirements of the Privacy Act of 1974, 5 U.S.C. § 552a (the Privacy Act). Specifically, Contractor agrees to obtain the express consent of the Federal Government before the Contractor or its employees operate a system of records on behalf of the Government. Contractor acknowledges that the requirements of the Privacy Act, including the civil and criminal penalties for violations of the Privacy Act, apply to those individuals involved, and that failure to comply with the terms of the Privacy Act may result in termination of this Agreement. The Contractor also agrees to include these requirements in each subcontract to administer any system of records on behalf of the Federal Government financed in whole or in part with Federal assistance provided by FTA.

XIII. DRUG AND ALCOHOL TESTING

To the extent Contractor, its subcontractors or their employees perform a safety-sensitive function under the Agreement, Contractor agrees to comply with, and assure compliance of its subcontractors, and their employees, with 49 U.S.C. § 5331, and FTA regulations, "Prevention of Alcohol Misuse and Prohibited Drug Use in Transit Operations," 49 CFR Part 655.

XIV. **TERMINATION FOR CONVENIENCE OF CITY** (required for all contracts in excess of \$10,000)

See Agreement Terms and Conditions.

XV. TERMINATION FOR DEFAULT (required for all contracts in excess of \$10,000)

See Agreement Terms and Conditions.

XVI. BUY AMERICA

The Contractor agrees to comply with 49 U.S.C. 5323(j) and 49 CFR Part 661, which provide that Federal funds may not be obligated unless steel, iron, and manufactured products used in FTA-funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 CFR 661.7, and include microcomputer equipment, software, and small purchases (\$100,000 or less) made with capital, operating, or planning funds. Separate requirements for rolling stock are set out at 49 U.S.C. 5323(j)(2)(C) and 49 CFR 661.11. Rolling stock not subject to a general waiver must be manufactured in the United States and have a 60 percent domestic content.

XVII. CARGO PREFERENCE - USE OF UNITED STATES FLAG VESSELS

The Contractor agrees: (a) to use privately owned United States-Flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to the underlying Agreement to the extent such vessels are available at fair and reasonable rates for United States-Flag commercial vessels; (b) to furnish within 20 working days following the date of loading for shipments originating within the United States or within 30 working days following the date of leading for shipments originating outside the United States, a legible copy of a rated, "on-board" commercial ocean bill-of-lading in English for each shipment of cargo described above to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590 and to the FTA recipient (through the Contractor in the case of a subcontractor's bill-of-lading.); and (c) to include these requirements in all subcontracts issued pursuant to this Agreement when the subcontract may involve the transport of equipment, material, or commodities by ocean vessel.

XVIII. RECYCLED PRODUCTS

The Contractor agrees to comply with all the requirements of Section 6002 of the Resource Conservation and Recovery Act (RCRA), as amended (42 U.S.C. 6962), including, but not limited to, the regulatory provisions of 40 CFR Part 247, and Executive Order 12873, as they apply to the procurement of the items designated in Subpart B of 40 CFR Part 247.

XIX. BUS TESTING (applies to contracts for rolling stock)

To the extent applicable, the Contractor (or Manufacturer) agrees to comply with the requirements of 49 U.S.C. § 5323(c) and FTA implementing regulations at 49 CFR Part 665, and shall perform the following:

A. A manufacturer of a new bus model or a bus produced with a major change in components or configuration shall provide a copy of the final test report to the Recipient at a point in the procurement process specified by the Recipient which will be prior to the Recipient's final acceptance of the first vehicle.

B. A manufacturer who releases a report under paragraph 1 above shall provide notice to the operator of the testing facility that the report is available to the public.

C. If the manufacturer represents that the vehicle was previously tested, the vehicle being sold should have the identical configuration and major components as the vehicle in the test report, which must be provided to the Recipient prior to Recipient's final acceptance of the first vehicle. If the configuration or components are not identical, the manufacturer shall provide a description of the change and the manufacturer's basis for concluding that it is not a major change requiring additional testing.

D. If the manufacturer represents that the vehicle is "grandfathered" (has been used in mass transit service in the United States before October 1, 1988, and is currently being produced without a major change in configuration or components), the manufacturer shall provide the name and address of the recipient of such a vehicle and the details of that vehicle's configuration and major components.

XX. PRE-AWARD AND POST-DELIVERY AUDIT REQUIREMENTS

To the extent applicable, Contractor agrees to comply with the requirements of 49 U.S.C. § 5323(I) and FTA implementing regulations at 49 CFR Part 663, and to submit the following certifications:

A. Buy America Requirements: The Contractor shall complete and submit a declaration certifying either compliance or noncompliance with Buy America. If the Bidder/Offeror certifies compliance with Buy America, it shall submit documentation which lists (1) component and subcomponent parts of the rolling stock to be purchased identified by manufacturer of the parts, their country of origin and costs; and (2) the location of the final assembly point for the rolling stock, including a description of the activities that are planned to take place and actually took place at the final assembly point and the cost of final assembly.

B. Solicitation Specification Requirements: The Contractor shall submit evidence that it will be capable of meeting the bid specifications and provide information and access to Recipient and its agents to enable them to conduct post-award and post-delivery audits.

C. Federal Motor Vehicle Safety Standards (FMVSS): The Contractor shall submit (1) manufacturer's FMVSS self-certification sticker information that the vehicle complies with relevant FMVSS or (2) manufacturer's certified statement that the contracted buses will not be subject to FMVSS regulations

XXI. FALSE OR FRAUDULENT STATEMENTS AND CLAIMS

A. The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. §§ 3801 et seq. and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 CFR Part 31, apply to its actions pertaining to this Project. Upon execution of the underlying Agreement, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying contract or the FTA-assisted project for which this contract work is being performed. In addition to other penalties that may be applicable, the Contractor further acknowledges that if it makes, or causes to be made, a flase, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate.

B. The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 U.S.C. § 5307, the Government reserves the right to impose the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § 5307(n)(1) on the Contractor, to the extent the Federal Government deems appropriate.

C. The Contractor agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clauses shall not be modified, except to identify the subcontractor who will be subject to the provisions.

XXII. FLY AMERICA

The Contractor agrees to comply with 49 U.S.C. 40118 (the "Fly America" Act) in accordance with the General Services Administration's regulations at 41 CFR Part 301-10, which provide that recipients and subrecipients of Federal funds and their contractors are required to use U.S. Flag air carriers for U.S Government-financed international air travel and transportation of their personal effects or property, to the extent such service is available, unless travel by foreign air carrier is a matter of necessity, as defined by the Fly America Act. The Contractor shall submit, if a foreign air carrier was used, an appropriate certification or memorandum adequately explaining why service by a U.S. flag air carrier was not available or why it was necessary to use a foreign air carrier and shall, in any event, provide a certificate of compliance with the Fly America requirements. The Contractor agrees to include the requirements of this section in all subcontracts that may involve international air transportation.

XXIII. NATIONAL ITS ARCHITECTURE POLICY (Applicable to contracts for ITS projects)

If providing Intelligent Transportation Systems (ITS) property or services, Contactor shall comply with the National ITS Architecture and standards to the extent required by 23 U.S.C. § 512, FTA Notice, "FTA National ITS Architecture Policy on Transit Projects," 66 FR 1455, et seq., January 8, 2001, and later published policies or implementing directives FTA may issue.

XXIV. INCORPORATION OF FEDERAL TRANSIT ADMINISTRATION (FTA) TERMS

The preceding provisions include, in part, certain Standard Terms and Conditions required by DOT, whether or not expressly set forth in the preceding contract provisions. All contractual provisions required by DOT, as set forth in FTA Circular 4220.1F, are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Agreement. The Contractor shall not perform any act, fail to perform any act, or refuse to comply with any (name of grantee) requests which would cause (name of grantee) to be in violation of the FTA terms and conditions.

XXV. TEXTING WHILE DRIVING; DISTRACTED DRIVING

Consistent with Executive Order 13513 "Federal Leadership on Reducing Text Messaging While Driving", Oct. 1, 2009 (available at <u>http://edocket.access.gpo.gov/2009/E9-24203.htm</u>) and DOT Order 3902.10 "Text Messaging While Driving", Dec. 30, 2009, SFMTA encourages Contractor to promote policies and initiatives for employees and other personnel that adopt and promote safety policies to decrease crashes by distracted drivers, including policies to ban text messaging while driving, and to include this provision in each third party subcontract involving the project.

XXVI. SEAT BELT USE

In compliance with Executive Order 13043 "Increasing Seat Belt Use in the United States", April 16, 1997 23 U.S.C. Section 402 note, the SFMTA encourages Contractor to adopt and promote on-the-job seat belt use policies and programs for its employees and other personnel that operate company owned, rented, or personally operated vehicles, and to include this provision in each third party subcontract involving the project.

EXHIBIT 5: WARRANTY PROVISIONS

1.1 BASIC PROVISIONS

1.1.1 Warranty Requirements

Warranties in this document are in addition to any statutory remedies or warranties imposed on the Contractor. Consistent with this requirement, the Contractor shall warrant and guarantee to SFMTA each complete Vehicle and specific subsystems and components according to the following provisions:

The Contractor shall ensure in its procurement arrangements that the warranty requirements of this Contract are enforceable through and against the Contractor's suppliers, vendors, and subcontractors. Any inconsistency or difference between the warranties extended to SFMTA by the Contractor and those extended to the Contractor by its suppliers, vendors, and subcontractors, shall be at the risk and expense of the Contractor. Such inconsistency or difference will not excuse the Contractor's full compliance with its obligations under the Contract.

Upon request of SFMTA, the Contractor promptly shall provide to the Project Manager complete copies of written warranties or guarantees and of documentation of any other arrangement relating to such warranties or guarantees extended by the Contractor's suppliers, sub suppliers, vendors, and subcontractors covering parts, components, and systems utilized in the Vehicle. If any vendor/supplier to the Contractor offers a warranty on a component that is longer or more comprehensive than the required warranties stated in this Exhibit, the Contractor shall inform SFMTA of this additional warranty and pass it through to SFMTA at no additional cost to SFMTA.

The Contractor shall ensure that such suppliers, sub suppliers, vendors, and subcontractors satisfactorily perform warranty-related work.

1.1.1.1 Complete Vehicle

The Vehicle shall be warranted and guaranteed to be free from Defects for five years, beginning on the date of official Acceptance or Conditional Acceptance of each Vehicle. During this warranty period, the Vehicle shall maintain its structural and functional integrity. The warranty shall be based on regular operation of the Vehicle within the Muni Metro System.

1.1.1.2 Intentionally left blank

1.1.1.3 Subsystem And Components

Primary load carrying members of the Vehicle structure shall be warranted against corrosion failure and/or fatigue failure for a period of 12 years.

1.1.1.4 Additional Warranties

If the customary standard warranties for the Material and/or Equipment, and installation thereof, exceed the period specified in Section 1.1.1.1, such warranties shall run to the SFMTA If separate or additional warranties covering the Material and/or Equipment are furnished by the manufacturer, supplier, or seller of component part or parts of any item of said Material and/or Equipment, the SFMTA shall have the right, but not the duty, to benefit from these separate or additional warranties, along with the primary warranties set forth herein above. The SFMTA shall look only to Contractor for fulfillment of all warranty requirements expressed and implied by the making of the Contract.

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

1.1.2 Voiding Of Warranty

The warranty shall not apply to any part or component of the Vehicle that has failed as a direct result of misuse, negligence, or accident, or that has been repaired or altered in any way so as to affect adversely its performance or reliability, except insofar as such repairs were in accordance with the Contractor's maintenance manuals and the workmanship was in accordance with recognized standards of the industry.

The warranty on any part or component of the Vehicle shall also be void if SFMTA fails to conduct normal inspections and scheduled preventive maintenance procedures on the same part or component substantially as recommended in the Contractor's maintenance manuals, and such failure by SFMTA is the sole cause of the part or component failure.

1.1.3 Exceptions To Warranty

The warranty shall not apply to scheduled maintenance items and items furnished by SFMTA, except insofar as such equipment may be damaged by the failure of a part or component for which the Contractor is responsible.

1.1.4 Detection Of Defects

If SFMTA finds Defects within the warranty period defined in Section 1.1.1.1, it shall notify the Contractor's representative in writing. Within five Working Days after receipt of notification, the Contractor's representative shall either agree that the Defect is in fact covered by warranty, or reserve judgment until the sub-system or component is inspected by the Contractor's representative or is removed and examined at SFMTA property or at the Contractor's plant. At that time, the status of warranty coverage on the subsystem or component shall be mutually resolved between SFMTA and the Contractor. Contractor shall commence all Work necessary to perform inspection or repairs, under the provisions of Section 1.2, Repair Procedures, immediately after receipt of notification by the Contractor from the SFMTA. If within 10 Working Days of notification to Contractor, SFMTA and Contractor are unable to agree whether a Defect is covered by warranty provisions, SFMTA reserves the right to commence repairs and seek reimbursement through Section 1.2 Repair Procedures.

If Contractor independently becomes aware of a Defect in accepted Material and/or Equipment or services, the Contractor shall submit to SFMTA, in writing, within 15 working days a recommendation for corrective actions, together with supporting information in sufficient detail to enable SFMTA to determine what corrective action, if any, shall be taken.

The Contractor shall promptly comply with any timely written direction from the SFMTA to correct or partially correct a Defect, at no cost to the SFMTA. Contractor shall also correct any other systems or components of the Vehicle that have been damaged in any way as a result of the Defect (Collateral Damage).

The Contractor shall also prepare and furnish to the SFMTA data and reports applicable to any correction required under this Section (including revision and updating of all other affected data called for under the Contract) at no cost to the SFMTA.

In the event of timely notice of a decision not to correct, or only to partially correct, the Contractor shall submit a technical and cost proposal within fifteen (15) working days to amend the Contract to permit acceptance of the affected Material and/or Equipment or services in accordance with the revised requirement, and an equitable reduction in the Contract Price shall promptly be negotiated by the parties and be reflected in a Change Order to the Contract.

1.1.5 Intentionally Left Blank

1.1.6 Fleet Defects

A fleet defect is defined as cumulative failures of any kind in the same components in the same or similar application where such items are covered by the warranty and such failures occur within the warranty period in at least ten (10) percent of the Vehicles delivered under the same Phase of this contract. SFMTA shall have final approval of corrections or changes under these conditions.

1.1.6.1 Correction of Fleet Defects

The Contractor shall correct a fleet defect under the procedures specified in Section 1.2, Repair Procedures. Within ten (10) working days of receipt of notification of a fleet defect, unless SFMTA grants an extension, the Contractor shall provide SFMTA with a plan, acceptable to SFMTA, specifying how and when all Vehicles with defects shall be corrected, including correction of Collateral Damage. Said plan is subject to approval by SFMTA. In addition, after correcting such defects, the Contractor shall promptly undertake and complete a work program, acceptable to SFMTA, reasonably designed to prevent the occurrence of the same defect in all other Vehicles and spare parts purchased under this contract. Any proposed changes to a fleet defect work plan or program must be submitted to SFMTA for its approval. If (a) Contractor does not provide a plan for correction within the time specified above (or as extended by SFMTA); or (b) a specific declared fleet defect is not fully corrected within the time specified in the plan; or (c) the remainder of the Vehicles are not corrected in accordance with the Contractor's work program; SFMTA will assess liquidated damages in accordance with Section 19 of the Agreement.

The warranty on parts, components or sub-systems replaced as a result of a fleet defect shall be assigned a new warranty period equal to the original manufacturers or contract part warranty, whichever is longer, effective the replacement date. Any extended warranties shall commence at the conclusion of the new warranty period.

1.1.6.2 Fleet Defect Repairs

When SFMTA requires the Contractor to perform warranty-covered repairs under the Fleet Defect provisions, the Contractor's representative must begin work necessary to effect repairs in a proper and timely manner, within five Working Days after the approval of the retrofit plan/schedule. Whenever the Contractor makes warranty repairs, new parts, subcomponents and subsystems shall be used, unless the repair of original parts is authorized in writing by SFMTA. SFMTA shall make the Car available to complete repairs timely with the Contractor's repair schedule.

The Contractor shall provide, at its own expense, all spare parts, labor, tools and space required to complete repairs. The Contractor shall reimburse SFMTA for all expenses incurred, including labor for moving Cars, or towing charges for Cars transported, between SFMTA's facilities and Contractor's service center or the facilities of its subcontractors or suppliers.

1.1.6.3 Contractor Supplied Parts

The Contractor shall furnish parts for all warranty work performed by the Contractor.

1.1.6.4 Voiding Of Warranty Provisions

The fleet defect provisions shall not apply to Vehicle defects solely caused by noncompliance with the Contractor's recommended normal maintenance practices and procedures or caused solely by abuse of the equipment.

1.1.6.5 Exceptions To Warranty Provisions

Fleet defect warranty provisions shall not apply to damage that is a result of normal wear and tear in service. The provisions shall not apply to SFMTAsupplied items.

1.1.7 Contractor's Representative

The Contractor shall, at its own expense, provide qualified service personnel at the SFMTA facilities in accordance with Section 22.2.7 of Technical Specifications.

1.2 REPAIR PROCEDURES

The Contractor shall be responsible for all warranty-covered repair work. The Contractor or its designated representative shall secure parts and perform all affected warranty repair work. At its discretion, SFMTA may perform such work if it determines it needs to do so based on transit service or other requirements. The Contractor shall be responsible, and shall reimburse SFMTA, for all costs for warranty work performed by SFMTA personnel or by any contractor(s) hired by SFMTA to perform warranty work, as described in Section 1.2.2, Repairs by SFMTA.

1.2.1 Repairs By Contractor

When SFMTA requires the Contractor to perform warranty-covered repairs, the Contractor's representative must begin work necessary to effect repairs in a proper and timely manner, within ten working days after receiving notification of a defect from SFMTA. Whenever the Contractor makes warranty repairs, new parts, subcomponents and subsystems shall be used, unless the repair of original parts is authorized in writing by SFMTA. SFMTA shall make the Vehicle available to complete repairs timely with the Contractor's repair schedule.

The Contractor shall provide, at its own expense, all spare parts, labor, tools and space required to complete repairs. The Contractor shall reimburse SFMTA for all expenses incurred, including labor for driving Vehicles, or towing charges for Vehicles transported, between SFMTA's facilities and Contractor's service center or the facilities of its subcontractors or suppliers. At SFMTA's option, the Contractor shall repair Vehicles at an offsite location, and not on SFMTA's property. If the Vehicle is removed from SFMTA's property, the Contractor's representative shall diligently pursue the acquisition of parts and repair procedures. The schedule and scope of the repairs shall be approved by SFMTA.

1.2.2 Repairs By SFMTA

If SFMTA elects to perform or procure a contractor to perform, the warranty-covered repairs, the following shall apply.

1.2.2.1 Parts Used

SFMTA shall use new parts, subcomponents and subsystems that Contractor shall provide specifically for these repairs. All parts shall be stamped or permanently marked with the OEM part number, and serial number if applicable. Warranties on parts used shall begin once the Car has been repaired. The warranty on parts, components or sub-systems replaced as a result of a standard warranty repair shall be assigned a new warranty period equal to the original manufacturers or contract part warranty, whichever is longer, effective the replacement date. Any extended warranties shall commence at the conclusion of the new warranty period.

SFMTA shall use parts or components available from its own stock only on an emergency basis. Monthly reports, or reports at intervals mutually agreed upon, of all repairs covered by warranty will be submitted by SFMTA to the Contractor for reimbursement or replacement of parts or components. The Contractor shall provide forms for these reports.

1.2.2.2 Contractor-Supplied Parts

The Contractor shall warehouse, at the Contractor's service center in San Francisco, all necessary parts to support its warranty obligations. The Contractor shall furnish parts for all warranty work, whether the warranty labor is performed by the Contractor or by SFMTA. Contractor shall deliver, prepaid, warranty parts for repairs within five calendar days of notification from SFMTA.

1.2.2.3 Defective Parts Return

The Contractor may request that defective parts or components covered by warranty be returned to the manufacturing plant. The Contractor shall pay the total cost for this action. Materials will be returned in accordance with the Contractor's instructions. Contractor shall provide such instructions to the SFMTA Project Manager at the beginning of the project.

The Contractor's representative shall meet with a SFMTA representative on a biweekly basis to determine which parts need to be returned to the manufacturer for evaluation, or which parts may be discarded.

1.2.2.4 Reimbursement For Labor

Contractor shall reimburse SFMTA for all warranty labor incurred by SFMTA. The amount shall be determined by multiplying the number of manhours required to correct the defect by the current top mechanic's or technician's hourly overtime wage rate, which includes fringe benefits, multiplied by the project overhead rate (150% of the wage rate). Additionally, Contractor will be responsible for the cost of towing the Vehicle if such action was necessary and if the Vehicle was in the normal service area.

The wage rate, and therefore, the warranty labor rate, is subject to adjustment each year. Through January 31, 2013, the warranty labor rate shall be based on the technician's wage rate of \$140.00/hour, which includes labor, fringe benefits, and overhead.

In the event SFMTA deems it necessary to contract out for warranty repairs, the Contractor shall reimburse SFMTA for the actual cost of the repair, including charges for any warrantable parts, consequential parts or damages, labor, and towing or transportation.

Contractor shall reimburse SFMTA for warranty claims within 30 days after each claim has been submitted by SFMTA. If SFMTA does not receive payment within 30 Days, SFMTA will deduct the amount of the claim, which includes labor, parts, administrative overhead and towing costs from payments due to Contractor.

1.2.2.5 Reimbursement For Parts; Towing

In the event SFMTA uses its own parts for warranty repairs, the Contractor shall reimburse SFMTA for those parts, including all Defective parts, components, and consequential parts supporting the warranty repair. The reimbursement shall be at the invoice cost of the parts or components at the time of repair and shall include applicable taxes plus a 15% handling fee.

The warranty will include the cost of towing because of the failure of a warranted part. Towing costs consist of the cost any SFMTA labor expended, any parts utilized in the transfer of the Car, and the actual cost of any other transportation costs incurred by SFMTA because of the failure of a warranted part, plus a 15% handling fee.

1.2.3 Warranty After Replacement Or Repairs

The warranty on parts, components or sub-systems replaced as a result of a standard warranty repair shall be as follows: (a) each part or component replaced with a brand new component or part will be assigned a new warranty period equal to the original manufacturer's or contract part warranty, whichever is longer, effective the replacement date, with any extended warranties commencing at the conclusion of the new warranty period; (b) any SFMTA replaced component or part that is a certified rebuilt, certified reconditioned or a certified remanufactured component or part shall be warranted for the remainder of the original warranty period of the component or part, commencing on the replacement date.

1.2.4 Failure Analysis

At SFMTA's request, the Contractor, at its cost, shall conduct a failure analysis of a failed part involved in a fleet defect or that is safety-related or a major component that could affect fleet operation that has been removed from Vehicles under the terms of the warranty. The analysis shall be documented and compiled into a report. The Failure Analysis Reports shall be delivered to SFMTA Project Manager within 60 Days of the receipt of failed parts

EXHIBIT 6 – PARENT COMPANY GUARANTEE