## THIS PRINT COVERS CALENDAR ITEM NO.: 12

## SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY

**DIVISION:** Transit Services

## **BRIEF DESCRIPTION**

Requesting authorization for the Director of Transportation to execute Amendment No. 2 to Contract No. CPT 632 with New Flyer of America Inc., to exercise an option to purchase an additional 185 40-foot low floor electric trolley buses and associated spare parts, training, manuals and special tools, for an additional amount of \$244,618,583, and a total contract amount not to exceed \$395,067,312, with no change to the term of the contract, and commending Amendment No. 2 to the Board of Supervisors for approval.

## **SUMMARY**

- SFMTA has modernized its procurement program with the goal of stabilizing the average fleet age, continuing to support San Francisco's environmental policies and anticipate and accommodate vehicle expansion and fleet mix needs.
- The 40-foot electric trolley bus procurement is the last significant piece of this five-year procurement strategy, replacing the oldest and SFMTA's most unreliable subfleet.
- On December 6, 2013, the City entered into a Bus Options Assignment Agreement with King County, Washington and New Flyer of America (Assignment Agreement), under which King County assigned to the City the right to purchase from New Flyer up to 240 40-foot electric trolley buses and 93 60-foot electric trolley buses.
- On February 26, 2014, the City entered into Contract No. CPT 632 (Agreement) with New Flyer to purchase 60 60-foot electric trolley buses and associated spare parts, training, manuals, and special tools in an amount not to exceed \$94,950,444.
- On August 31, 2016, the City issued Contract Amendment No. 1 to purchase an additional 33 60-foot electric trolley buses and associated spare parts, training, manuals and special tools from New Flyer.

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## **ENCLOSURES:**

- 1. SFMTA Board Resolution
- 2. Amendment No. 2

APPROVALS:	- 2	DATE
DIRECTOR	THER	4/12/17
SECRETARY	R. Boomer	<u>4/12/17</u>

ASSIGNED SFMTAB CALENDAR DATE: April 18, 2017

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#### **PURPOSE**

The purpose of this calendar item is to authorize the Director of Transportation to execute Amendment No. 2 to Contract No. CPT 632 with New Flyer of America Inc., to purchase an additional 185 40-foot low floor electric trolley buses and associated spare parts, training, manuals and special tools, for an additional amount of \$244,618,583, and a total contract amount not to exceed \$395,067,312, with no change to the term of the contract and to commend Amendment No. 2 to the Board of Supervisors for approval.

## STRATEGIC PLAN GOALS AND TRANSIT FIRST POLICY PRINCIPLES

Goal 2: Make transit, walking, bicycling, taxi, ridesharing and carsharing the preferred means of travel.

Objective No. 2.2: Improve transit performance

This action supports the following SFMTA Transit First Policy Principles:

- 2. Public transit, including taxis and vanpools, is an economically and environmentally sound alternative to transportation by individual automobiles. Within San Francisco, travel by public transit, by bicycle and on foot must be an attractive alternative to travel by private automobile.
- 9. The ability of the City and County to reduce traffic congestion depends on the adequacy of regional public transportation. The City and County shall promote the use of regional mass transit and the continued development of an integrated, reliable, regional public transportation system.

## **DESCRIPTION**

SFMTA has modernized its procurement program over the past five years with the goal of stabilizing the average age of the bus fleet, continuing to support San Francisco's environmental policies and anticipate and accommodate vehicle expansion and fleet mix needs. The 40-foot electric trolley bus procurement is the last significant piece of this five-year procurement strategy, replacing the SFMTA's oldest and most unreliable subfleet.

The existing 40-foot electric trolley buses manufactured by Electric Transit, Inc (ETI) are up to 17 years of age, with over half of the subfleet already exceeding its useful life. ETI is no longer in business and the Agency has struggled to obtain replacement parts for the aging coaches. The ETI coaches consume a disproportionate amount of bus maintenance resources and make up over 40 percent of mechanical related service delays.

The procurement of New Flyer 40-foot electric trolley coaches will help improve service reliability to approximately 200,000 daily passengers that rely on the 40-foot electric trolley buses. The fifteen trolley routes serve neighborhoods with the City's steepest hills with historically high transit ridership.

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In 2013, the SFMTA exercised its authority under the San Francisco Administrative Code to utilize the competitive procurement processes of another public agency to purchase commodities where the SFMTA determines that the other agency's procurement process is competitive and use of the other agency's procurement process would be in the City's best interests.

On December 6, 2013, the City entered into a Bus Options Assignment Agreement (Agreement) with King County, Washington and New Flyer, under which King County assigned to the City the right to purchase from New Flyer up to a total of 240 40-foot electric trolley buses and 93 60-foot electric trolley buses from the options available under King County's Bus Procurement Contract with New Flyer.

After negotiating minor changes to the buses specific to the needs of the SFMTA, the City entered into Contract No. CPT 632 with New Flyer (Contract) to purchase 60 60-foot electric trolley buses and associated spare parts, training, manuals, and special tools on February 26, 2014. On August 31, 2016 the City issued Contract Amendment No. 1 to purchase an additional 33 60-foot electric trolley buses and associated spare parts, training, manuals, and special tools.

The SFMTA now seeks to exercise an option under the Contract to purchase an additional 185 40-foot electric trolley buses and associated spare parts, training, manuals and special tools.

## STAKEHOLDER ENGAGEMENT

SFMTA conducted extensive public outreach to inform the vehicle design. Within the SFMTA, Fleet Engineering staff worked with Transit Operators and Union Leadership, Vehicle Maintenance Personnel, Accessible Services, and Transit Planning. Fleet Engineering staff also partnered with the Muni Accessible Advisory Committee. Positive public feedback included satisfaction with electric air conditioning and spacious seating configuration. In addition, contour seats, ADA compliant wheelchair ramp, turn signal mirrors for bicyclist safety and advanced surveillance camera system for driver and patron's safety are some of the features included in the new trolley coaches.

## **ALTERNATIVES CONSIDERED**

The alternative to exercising this option would be to rehabilitate the existing fleet to extend the life of these buses. However, extending the life of the existing buses would be extremely difficult given that many of the parts on the vehicles are obsolete and not readily available. Additionally, this approach would mean that the majority of SFMTA's electric trolley fleet will continue to be high floor design and will not be able to take advantage of the low floor design which improves the passenger flow and speeds up boarding and alight time. Also, patrons would not be able to avail themselves of features such as the newly configured wheelchair securement and new stroller storage space which the older fleet does not have.

The other alternative to exercising this option would be to look into procuring all-electric battery buses. The all-electric battery bus technology is improving every day, however the available technology is not yet ready to meet the performance requirements of the trolley routes. The SFMTA's trolley routes include some of the steepest hills in the system and include routes with very high ridership. The all-electric buses are being tested throughout the country, however their reliability and feasibility is yet to be measured in a difficult operating environment such as ours. In addition, the infrastructure required to accommodate electric buses would have significant

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cost and time impacts as the SFMTA does not have suitable facilities to maintain an all-electric fleet at this time.

In view of the above, the best alternative available to the SFMTA is to purchase additional new electric trolley buses to continue replacement of its fleet of old trolley buses.

#### **FUNDING IMPACT**

The purchase of the option vehicles under this Amendment will be funded through grants from the Federal Transit Administration and additional General Fund appropriation authorized under Proposition B, which was approved by the voters in November 2014.

A budget of \$265,623,242 has been allocated to fund this procurement, and sources for the funds have all been identified. The budget includes the cost of the buses, capital spares, training, manuals, special tools, and taxes, project engineering, maintenance support and consultant support.

This Amendment will increase the contract amount by \$244,618,583, for a total contract amount of \$395,067,312. Following is the detailed project budget:

New Flyer Amendment No. 2	Cost
Vehicles (185 40-ft electric trolley buses)	\$ 213,204,915
Spare Parts	\$ 6,000,000
Special Tools & Diagnostics	\$ 2,000,000
Training & Manuals	\$ 2,250,000
Training Simulator	\$ 2,000,000
Tax (8.50%)	\$ 19,163,668
Subtotal New Flyer Contract Amendment No. 2	\$ 244,618,583

Other Associated Cost Items Amendment No. 2	Cost
Warranty support	\$ 1,239,625
Project support (SFMTA staff, Other Direct Cost)	\$ 16,246,544
Consultant Support and Vehicle Inspection at Plant	\$ 3,518,490
Subtotal Other Associated Cost Items Amendment No. 2	\$ 21,004,659
Total Cost Amendment No. 2	\$ 265,623,242

<b>Total Project Cost Summary</b>	Cost
Base Order Plus Amendment 1 Amount	\$ 150,448,729
Base Order Plus Amendment 1 Other Associated Cost Items	\$ 12,895,177
Amendment No. 2 Contract Amount	\$ 244,618,583
Amendment No. 2 Other Associated Cost Item	\$ 21,004,659
Total Project Amount	\$ 428,967,148

Amendment No. 2 will be funded by FTA Section 5307 funds and Proposition K Sales Taxes as detailed below.

#### **Financial Plan**

Project Funding Source	Amount
Federal Grant – FY15 5337	\$ 20,000,000
Federal Grant – FY17 5337	\$ 95,660,612
Federal Grant – FY18 5337	\$ 96,867,982
Proposition K Sales Tax	\$ 53,124,648
<b>Total Funding for Amendment No. 2</b>	\$ 265,623,242

## **ENVIRONMENTAL REVIEW**

On March 28, 2017, the SFMTA, under authority delegated by the Planning Department, determined that Amendment No. 2 to Contract No. CPT 632 is not defined as a "project" under the California Environmental Quality Act (CEQA) pursuant Title 14 of the California Code of Regulations Sections 15060(c) and 15378(b) because the actions would not result in a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.

A copy of the CEQA determination is on file with the Secretary to the SFMTA Board of Directors and is incorporated herein by reference.

## OTHER APPROVALS RECEIVED OR STILL REQUIRED

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

The contract amendment will also require approval from the Board of Supervisors.

## RECOMMENDATION

Staff recommends that the SFMTA Board authorize the Director of Transportation to execute Amendment No. 2 to Contract No. CPT 632 with New Flyer of America Inc., to exercise an option to purchase an additional 185 40-foot low floor electric trolley buses and associated spare parts, training, manuals and special tools, for an additional amount of \$244,618,583, and a total contract amount not to exceed \$395,067,312, with no change to the term of the contract, and commend Amendment No. 2 to the Board of Supervisors for approval.

## SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY BOARD OF DIRECTORS

RESOLUTION No

WHEREAS, The SFMTA's fleet of electric trolley buses includes 60 foot articulated trolley buses that have been in service since 1994, well past their useful life of 15 years; and,

WHEREAS, Under Administrative Code Section 21.16, the SFMTA is authorized to utilize the competitive procurement process of another public agency to make purchase of commodities for the use of the City under the terms established in that agency's competitive procurement process and as agreed upon by the City and the procuring agency; and

WHEREAS, On December 6, 2013, the City entered into a Bus Options Assignment Agreement with King County, Washington and New Flyer of America (Assignment Agreement), under which King County assigned to the City the right to purchase from New Flyer up to 240 40-foot electric trolley buses and 93 60-foot electric trolley buses from options available under a bus procurement contract that King County had previously entered into with New Flyer; and,

WHEREAS, On February 26, 2014, the City entered into Contract No. CPT 632 with New Flyer to purchase 60 60-foot electric trolley buses and associated spare parts, training, manuals, and special tools under the terms and conditions of the Agreement; and,

WHEREAS, On August 31, 2016, the City issued Contract Amendment No. 1 to New Flyer to purchase an additional 33 60-foot electric trolley buses and associated spare parts, training, manuals and special tools; and,

WHEREAS, The Agreement includes options to purchase up to an additional 240 40-foot electric trolleys buses over the next six years should funding be identified; and,

WHEREAS, The SFMTA now wishes to amend the Agreement to exercise the option to purchase 185 40-foot electric trolley buses and associated spare parts, training, manuals and special tools; and

WHEREAS, This Amendment No.2 will be funded by a combination of federal formula funds and local matching funds; and

WHEREAS, On March 28, 2017, the SFMTA, under authority delegated by the Planning Department, determined that Amendment No. 2 to Contract No. CPT 632 is not defined as a "project" under the California Environmental Quality Act (CEQA) pursuant Title 14 of the California Code of Regulations Sections 15060(c) and 15378(b) because the actions would not result in a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment; and,

WHEREAS, A copy of the CEQA determination is on file with the Secretary to the SFMTA Board of Directors and is incorporated herein by reference; now therefore, be it

RESOLVED, That the SFMTA Board of Directors authorizes the Director of Transportation to execute Amendment No. 2 to Contract No. CPT 632 with New Flyer of America Inc., to exercise the option to purchase an additional 185 40-foot low floor electric trolley buses and associated spare parts, training, manuals and special tools, for an additional amount of \$244,618,583, and a total contract amount not to exceed \$395,067,312, with no change to the term of the contract; and be it

FURTHER RESOLVED, That the SFMTA Board of Directors commends Amendment No. 2 to the Board of Supervisors for approval.

I certify that the foregoing resolution was adopted by the Municipal Transportation Agency Board of Directors at its meeting of April 18, 201.

Secretary to the Board of Directors San Francisco Municipal Transportation Agency

## Amendment No. 2

#### to the

## Agreement between

## the City and County of San Francisco

and

**New Flyer of America Inc.** 

## for the Procurement of Trolley Buses through Assignment from King County, Washington

Contract No. CPT 632

CCO No. 12-1206

This Amendment No. 2 is made and effective this \_\_\_\_\_\_\_ day of \_\_\_\_\_\_, 2017, in the City and County of San Francisco, State of California, by and between: New Flyer of America Inc., a North Dakota corporation, 711 Kernaghan Avenue, Winnipeg, Manitoba, Canada R2C 3T4 ("Contractor" or "New Flyer"), and the City and County of San Francisco, a municipal corporation ("City"), acting by and through its San Francisco Municipal Transportation Agency ("SFMTA").

## **Recitals**

- **A**. King County, a home rule charter county and political subdivision of the State of Washington, by and through its Department of Transportation, Metro Transit Division, entered into a contract with New Flyer, identified as ETB 12-1 ("Manufacture and Delivery of 40 Foot and 60 Foot Articulated Heavy Duty Low Floor Electric Trolley Buses"), for the procurement of electric trolley buses (the "Bus Procurement Contract").
- **B.** Section Al .01 of the Bus Procurement Contract established a base quantity of up to 500 buses to be potentially purchased by King County over a five-year period and an option quantity of up to an additional 200 buses. Section B2.19 of the Bus Procurement Contract authorizes King County to assign to another transit property or governmental entity part or all of the option quantity of buses.
- C. Under the authority of Administrative Code Section 21.16, on December 6, 2013, the City entered into a Bus Options Assignment Agreement with King County and New Flyer (Assignment Agreement), under which King County assigned to the City the right to purchase from New Flyer up to 240 40-foot electric trolley buses and 93 60-foot electric trolley buses from the options available under the Bus Procurement Contract.
- **D.** On February 26, 2014, the City entered into Contract No. CPT 632 with New Flyer (the Agreement) to purchase 60 60-foot electric trolley buses and associated spare parts, training, manuals, and special tools under the terms and conditions of the Agreement.
- **E** On August 31, 2016, the City issued Contract Amendment No. 1 to purchase 33 60-foot electric trolley buses and associated spare parts, training, manuals and special tools from New Flyer.

- **F** The Agreement allows the City to acquire up to 240 additional 40-foot electric trolleys buses at various points during life of the Bus Procurement Contract, subject to securing adequate funding.
- **G,** City now wishes to exercise the option to purchase 185 40-foot electric trolley buses and associated spare parts, training, manuals and special tools from New Flyer under the terms set forth in this Amendment.

Now, THEREFORE, the parties agree as follows:

- **1. Definitions.** The following definitions shall apply to this Amendment:
- **1a. Agreement.** The term "Agreement" shall mean the Agreement dated February 26, 2014, between Contractor and City, as amended by:

Contract Amendment 1, dated August 31, 2016.

- **1b. Other Terms.** Terms used and not defined in this Amendment shall have the meanings assigned to such terms in the Agreement.
- **2. Modifications to the Agreement.** The Agreement is modified as follows:
  - **2a. Section 1.Q. B7.02.01** (Agreement) is replaced in its entirety to read as follows:

## B7.02.01 Agreement.

Under this Agreement, Contractor agrees to sell, and the City agrees to purchase, 60 new articulated low floor trolley buses, associated spare parts, training, manuals, and special tools, as itemized in Exhibit B-1 (Schedule of Prices) for the base Contract, 33 new articulated low floor trolley buses, associated spare parts, training, manuals, and special tools, as itemized in Exhibit B-2 (Schedule of Prices) for Contract Amendment 1, and 185 new 40-foot electric trolley buses, associated spare parts, training, manuals, and special tools, as itemized in Exhibit B-3 (Schedule of Prices) for Contract Amendment 2, according to the terms and conditions set forth in this Agreement. Exhibit A sets forth the changes from the Contractor's Proposal to King County and the respective price differentials of those changes.

**2b. Section 1.Q. B7.02.02.01** (Amount) is replaced in its entirety to read as follows: **B7.02.02.01** Amount.

The City agrees to pay an amount not to exceed Three Hundred Ninety Five Million, Sixty Seven Thousand, Three Hundred Twelve Dollars (\$395,067,312) (the "Total Contract Amount"), as summarized in Exhibit B (Schedule of Prices), and in accordance with the terms and conditions of this Agreement. The Total Contract Amount includes an allowance of \$9,000,000 for spare parts. The parties will amend this Agreement to include a final list of spare parts to be supplied under the 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 and has not remedied such default within a reasonable period of time. In no event shall City be liable for interest or late charges for any late payments.

**2c. Section 1, Q. B7.02.02.02** (Invoices) is replaced in its entirety to read as follows: **B7.02.02.02 Invoices** 

San Francisco Municipal Transportation Agency Fleet Engineering Section Attn: Gary Chang, P.E. Project Manager 700 Pennsylvania Avenue San Francisco, CA 94107

#### Each invoice shall include:

- Relevant milestones
- Contract order number;
- Quantity of items;
- Description of items;
- Unit price;
- Total invoice amount;
- Sales Tax (separately itemized)
- Due date based on contract payment terms

Within thirty (30) days after receipt of an approved invoice, the City will pay the Contractor pursuant to its invoice as adjusted according to additions the Payment Schedule below and to charges by the City under the Contract. Funds withheld and processed pursuant to these provisions shall not give rise to any rights in the Contractor for additional payments because funds were not received within thirty (30) days after Acceptance of each bus. Amounts withheld from earlier payments that become releasable according to the Contract Documents will be paid within thirty (30) days after the date the amounts become releasable.

**2d. Section 1, Q. B7.02.02.03** (Payment Terms): The Payment Schedule at the end of this subsection is deleted and replaced in its entirety to read as follows:

## **Payment Schedule:**

Milestones	Percentage of unit or lump sum price		
Pilot Coach			
(a) Acceptance of shipment of the pilot coach	60% of unit price		
by SFMTA inspector from the			
contractor's facility.			
(b) Conditional acceptance of the pilot coach,	36% of unit price		
including all modifications required to			
match the production coaches, at the			
designated delivery location.			
(c) Full acceptance of pilot coach by SFMTA	3% of unit Price		
(d) All contract deliverables with the	1% of unit Price		
exception of training have been received			
and accepted as satisfactory.			
<b>Production Coach</b>			
(a) Acceptance of shipment of production	60 % of unit price		
coaches by SFMTA inspector from the			
contractor's facility.			
(b) Conditional acceptance of production	36% of unit price		
coaches at the designated delivery location			

(c) Full acceptance of each vehicle by	3% of unit price
SFMTA	
(d) All contract deliverables with the	1% of unit price
exception of training have been received	_
and accepted as satisfactory.	
Delivery and acceptance of spare parts	as invoiced
Completion of first 50% of hours of training	as invoiced
Completion of final 50% of hours of training	as invoiced
Delivery and Acceptance of operating,	as invoiced
maintenance and parts manuals	
Delivery and acceptance of special tools	as invoiced

## **2e. Section 1, Q. B7.02.02.04** (Final Payment) is replaced in its entirety to read as follows:

**B7.02.02.04 Final Payment.** The City will make a final payment to release all retained funds within forty-five (45) calendar days after receipt of a final proper invoice and completion of all of the following:

- a. Acceptance of all Contract deliverables, including spare parts, special tools, manuals and other documentation.
- b. Receipt from Contractor of all certifications as required by law and/or regulations.
- c. Completion of post-delivery audits required under the Contract and under federal regulations.
- d. Final Acceptance by the Director of the Transportation.
- e. All items not included in the bus price, such as spare parts, will be billed separately, paid for at the time of delivery, net 30 days = 100% of the Unit Price of the Deliverable. Retainage and hold backs shall not apply to items that are not included in the bus price.
- **2f.** Exhibit B is deleted and replaced with a new Exhibit B, attached to this Amendment and incorporated by reference as though fully set forth.
- **2g.** Exhibit B-3, attached to this Amendment is added and incorporated by reference as though fully set forth.
- **2h.** Exhibit C is deleted and replaced with a new Exhibit C, attached to this Amendment and incorporated by reference as though fully set forth.
- **3. Effective Date.** Each of the modifications set forth in Section 2 shall be effective on and after the date of this Amendment.
- **4. Legal Effect**. Except as expressly modified by this Amendment, all of the terms and conditions of the Agreement shall remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day first mentioned above.

CITY	CONTRACTOR
San Francisco Municipal Transportation Agency	New Flyer of America Inc.
Edward D. Reiskin Director of Transportation	Paul Smith Executive Vice President, Sales and Marketing
San Francisco Municipal Transportation Agency	
Board of Directors	
Resolution No	David White Executive Vice President, Supply Management
Dated:	Executive vice i resident, Supply Management
Attest:	
Secretary, SFMTA Board of Directors	711 Kernaghan Avenue
Approved as to Form:	Winnipeg, Manitoba, Canada R2C 3T4
Dennis J. Herrera City Attorney	City vendor number: 49642
By	
Board of Supervisors	
Resolution No	
Dated:	
Attest:	
Clerk of the Board	
Exhibits:	
Exhibit B, B-3, C	

## **EXHIBIT B**

## **SCHEDULE OF PRICES**

Description		Contract Amount
CPT-632 Base Contract		\$94,950,444
Reference Exhibit B-1		
CPT-632 Amendment 1		\$55,498,285
Reference Exhibit B-2		. , ,
CPT-632 Amendment 2		
Reference Exhibit B-3		\$244,618,583
	Total	\$395,067,312
	1 Otal	φ393,007,312

## EXHIBIT B-3 SCHEDULE OF PRICES FOR AMENDMENT 2

Line No.	Description	Parts & Labor	Sales Tax	Total	Quantity	Extended Price (See Note 1)
1.	Low Floor 40-Ft Trolley Coaches	\$1,152,459	\$97,959	\$1,250,418	185	\$231,327,333
2.	NOT USED	N/A	N/A	N/A	N/A	N/A
3.	Spare Parts	\$6,000,000	\$510,0000	\$6,510,000	Lump Sum	\$6,510,000
4.	Training	\$2,000,000	\$170,000	\$2,170,000	Lump Sum	\$2,170,000
5.	Operating, Maintenance and Parts Manuals	\$250,000	\$21,250	\$271,250	Lump Sum	\$271,250
6.	Special Tools	\$2,000,000	\$170,000	\$2,170,000	Lump Sum	\$2,170,000
7.	NOT USED	N/A	N/A	N/A	N/A	N/A
8.	Training Simulator	\$2,000,000	\$170,000	\$2,170,000	Lump Sum	\$2,170,000

Note 1: Extended Prices are rounded off to the nearest dollar.

TOTAL	\$244,618,583
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# EXHIBIT C DELIVERY SCHEDULE

Contractor shall complete the items indicated below before the time periods listed have elapsed.

Item		Calendar Days after Notice-to- Proceed
1	Submittal of Baseline Schedule and Management Work Plan	175
2	Submittal of vehicle drawings and test plans	259
3	Submittal of training program (including lesson plans)	350
4	Delivery of prototype coach <sup>1</sup>	428
5	Submittal of draft operations, maintenance, parts manuals, recommended spare parts	428
6	Approval of Prototype Coach (estimated)	518

Item		Calendar Days after Approval of Prototype
7	Delivery of 1 <sup>st</sup> production coach <sup>2</sup> (Lot1) <sup>3</sup>	107
8	Delivery of first half of spare parts (Lot 1)	100
9	Delivery of second half of spare parts (Lot 2)	200
10	Completion of training program	300
11	Delivery of final operations, maintenance, and parts manual	100
12	Delivery of special tools	100
13	Delivery of Last Production Coach (Lot1) <sup>3</sup>	220
14	Delivery of 1st Production Coach (Lot 2) <sup>4</sup>	240
15	Delivery of Last Production Coach (Lot 2) <sup>4</sup>	360
16	Delivery of Last Production Coach (Lot3) <sup>5</sup>	991
17	Delivery of Last Production Coach (Lot 4) <sup>6</sup>	1721

Approval to deliver prototype will not be granted until after receipt and approval of all vehicle drawings, control and test plans.

Approval to deliver production vehicles will not be granted until after submittal of a satisfactory training plan; draft operations, maintenance and parts manuals, and recommended spare parts lists.

<sup>&</sup>lt;sup>3</sup> Lot 1 shall include production coach numbers 1 through 30.

Lot 2 shall include production coach numbers 31 through 60.

<sup>&</sup>lt;sup>5</sup> Lot 3 shall include production coach numbers 61 through 93.

Lot 4 shall include production numbers 94 through 278