

THIS PRINT COVERS CALENDAR ITEM NO. : 10.7

**SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY**

DIVISION: Transit Services

BRIEF DESCRIPTION:

Authorizing the Director of Transportation to execute Contract Modification No. 4 to SFMTA Contract No. 2013-19: Procurement of New Light Rail Vehicles (LRV4), with Siemens Industry, Inc., to procure four additional light rail vehicles for an amount not to exceed \$15,875,000, with no increase in the total contract price and no increase in the overall term of the contract.

SUMMARY:



- In 2014, the SFMTA Board of Directors approved Contract No. 2013-19 with Siemens Industry, Inc. (Siemens) to provide up to 260 Light Rail Vehicles (LRVs), including two options for expansion LRVs (the contract), all for an amount not to exceed \$1,192,651,577, and a term not to exceed 15 years.
- On March 31, 2015, the SFMTA Board approved Modification No.1 to the contract to exercise Option 1 for 40 additional LRVs, and additional spare parts and equipment.
- The Transportation Service Plan for the Golden State Warriors arena and event center includes the procurement of four LRVs in addition to the base fleet and planned expansions.
- The SFMTA expects to fund the procurement of four LRVs by issuing revenue bonds. Debt service will be covered by the Mission Bay Transportation Improvement Fund
- The four additional LRVs will be delivered in April and May of 2018.

ENCLOSURES:

1. SFMTAB Resolution
2. Contract Modification No. 4
3. <http://sfocii.org/warriors> (Event Center and Mixed Use Development at Mission Bay Blocks 29-32 Final Subsequent Environmental Impact Report)

APPROVALS:

DATE

DIRECTOR	 _____	6/14/2017 _____
SECRETARY	 _____	6/14/2017 _____

ASSIGNED SFMTAB CALENDAR DATE: June 20, 2017

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PURPOSE

The purpose of this item is to obtain authorization for the Director of Transportation to execute Contract Modification No. 4 to SFMTA Contract No. 2013-19: Procurement of New Light Rail Vehicles (LRV4), with Siemens Industry, Inc. to procure four additional LRVs for an amount not to exceed \$15,875,000, with no increase in the total contract price and no increase in the overall term of the contract.

STRATEGIC PLAN GOALS AND TRANSIT FIRST POLICY PRINCIPLES

The goal of this project is to ensure equipment availability to accommodate additional capacity needs that the Golden State Warriors project will create in order to meet the following goals and objectives of 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.

Goal 3: Improve the environment and quality of life in San Francisco

- Objective No. 3.2: Increase the transportation system's positive impact to the economy.

Transit First Policy Principles:

1. To ensure quality of life and economic health in San Francisco, the primary objective of the transportation system must be the safe and efficient movement of people and goods.
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.
8. New transportation investment should be allocated to meet the demand for public transit generated by new public and private commercial and residential developments.
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

Background

The SFMTA requires new LRVs for three purposes:

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- (1) Phase 1 – 24 expansion LRVs for near-term increased service demand for the Central Subway Project and Mission Bay, and system-wide growth along those corridors. These vehicles are scheduled for delivery from 2016 through 2018;
- (2) Phase 2 – The replacement of the existing fleet of 151 LRVs, with deliveries projected to start in 2021 and continue through 2028, and
- (3) Option Vehicles – Up to 85 LRVs to meet additional projected growth in ridership and system capacity expansion needs through 2040.

On July 15, 2014, the SFMTA Board of Directors authorized the Director of Transportation to execute Contract No. 2013-19 with Siemens Industry, Inc. (Siemens) to provide up to 260 LRVs (contract), including the Option Vehicles.

On September 3, 2014, the San Francisco Board of Supervisors authorized the SFMTA to enter into the contract in an amount not to exceed \$1,192,651,577, subject to the condition that the contract provide for two separate options, Option 1 for 40 LRVs and Option 2 for 45 LRVs, and that the SFMTA obtain approval from the Board of Supervisors prior to exercising Option 2.

On March 31, 2015, the City approved Modification No. 1 to the contract to exercise Option 1 for 40 additional LRVs to be delivered after the Phase 1 delivery of 24 vehicles. On October 30, 2015, the Director of Transportation, approved Modification No. 2 to the contract to update the list of approved major suppliers, and clarify contract language. On August 16, 2016, the SFMTA Board approved Modification No. 3, which added design changes to provide enhancements to passengers, enable full systems integration, and reduce the life-cycle costs of the LRVs, in the amount of \$19,596,728, with no increase in the total contract price.

Modification No. 4

The arena and event center proposed by the Golden State Warriors is now under construction on an 11-acre site on Blocks 29-32 within the Mission Bay South Redevelopment Plan Area (Project). Development of the site will significantly increase transportation and other public service needs in the area during events. The developer of the Project, along with stakeholders, produced the Transportation Service Plan (TSP) as part of a strategy to mitigate impacts to residents, medical facilities, and businesses in the area.

The TSP includes elements under the jurisdiction of the SFMTA. These include the procurement of four additional LRVs to provide enhanced service during basketball games and other events. These vehicles are in addition to the replacement of the existing fleet and the planned expansions.

On November 3, 2015, the SFMTA Board adopted Resolution No. 15-154, which approved the elements of the TSP that are under SFMTA jurisdiction pending the availability of funds.

On December 8, 2015, the Board of Supervisors passed an ordinance to establish the Mission Bay Transportation Improvement Fund (Fund). The Fund will provide financing for the procurement of the LRVs, among other projects. Revenue for the Fund will come from a transfer from the General

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Fund of those tax revenues the Office of the Controller determines were generated by the Project. The SFMTA will finance the procurement of the four new LRVs by issuing revenue bonds, and debt service will be paid out of the Fund.

The four LRVs are scheduled for delivery in April and May of 2018, immediately following the completion of the Phase 1 delivery of 24 vehicles. They will not impact the delivery of the 40 Option 1 vehicles, and will be identical to those vehicles currently being delivered. The vehicles will be placed into the overall fleet, and used throughout the system as part of the overall fleet plan.

STAKEHOLDER ENGAGEMENT

The City has engaged extensively with residents, businesses, and other entities that will be impacted by the Project. The Transportation Service Plan resulted from those discussions and incorporates community feedback and agreements that were reached.

ALTERNATIVES CONSIDERED

The alternative considered was to procure the four LRVs by exercising Option 2 of the contract, which allows SFMTA to procure up to 45 additional LRVs. Staff determined that Option 2 did not originally contemplate these four vehicles and that it would therefore be advisable to procure the LRVs through a separate modification to the contract.

FUNDING IMPACT

The total cost of the procurement of the four new LRVs will be \$15,875,000. However, there will be no net fiscal impact to the SFMTA. The LRVs will be purchased using revenue bonds issued by the SFMTA, and debt service will be paid by transfers from the Mission Bay Transportation Improvement Fund. Operational expenses will also be paid by the Fund.

ENVIRONMENTAL REVIEW

The procurement of four new light rail vehicles to provide enhanced Muni service to the Golden State Warriors Event Center Project is subject to the California Environmental Quality Act (CEQA).

The Golden State Warriors Event Center and Mixed Use Development at Mission Bay Blocks 29-32 Final Subsequent Environmental Impact Report (Event Center FSEIR) evaluated the environmental impacts of the Event Center and an associated increase in passenger rail service. Specifically, the Event Center FSEIR identified significant environmental impacts on Muni transit service, and thus incorporated Mitigation Measure M-TR-13 to provide enhanced Muni transit service on the T Third light rail line. Additionally, the FSEIR also included the implementation of a Transportation Management Plan (TMP) and Muni Special Event Transit Service Plan (TSP), which specified the increase in light rail service on the T Third line.

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On November 3, 2015, the San Francisco Commission on Community Investment and Infrastructure certified the Event Center FSEIR, adopted CEQA Findings, a Mitigation Monitoring and Reporting Program, and a Statement of Overriding Considerations as part of Resolution 69-2015 and Resolution 70-2015, and approved the Event Center Project as part of Resolution 71-2015.

On November 3, 2015, the SFMTA Board of Directors, as part of Resolution 15-154, approved elements of the Event Center Project under SFMTA jurisdiction including the TMP and the TSP, accepted responsibility to implement applicable transportation-related mitigation measures, and further adopted the CEQA Findings, a Mitigation Monitoring and Reporting Program, and a Statement of Overriding Considerations.

The SFMTA Board of Directors has subsequently reviewed the Event Center FSEIR and determined that the proposal would not result in new significant effects, nor substantially increase significant effects already identified, nor require new mitigation measures.

OTHER APPROVALS RECEIVED OR STILL REQUIRED

None.

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

RECOMMENDATION

Staff recommends that the SFMTA Board authorizes the Director of Transportation to execute Contract Modification No. 4 to the SFMTA Contract No. 2013-19: Procurement of New Light Rail Vehicles (LRV4) with Siemens Industry, Inc. for an amount not to exceed \$15,875,000, with no increase in the total contract price and no increase in the overall term of the contract.

SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
BOARD OF DIRECTORS

RESOLUTION No. _____

WHEREAS, On September 30, 2014, the City entered into a contract with Siemens Industry, Inc. (Contractor) to procure up to 260 light rail vehicles (LRVs), including options, together with associated equipment and spare parts, all for an amount not to exceed \$1,192,651,577, and a term not to exceed 15 years; and,

WHEREAS, On September 3, 2014, the Board of Supervisors approved the contract, subject to the condition that the contract provide for two separate options, Option 1 for 40 LRVs and Option 2 for 45 LRVs, and that the SFMTA obtain approval from the Board of Supervisors prior to exercising Option 2; and,

WHEREAS, On March 31, 2015, the SFMTA Board approved Modification No. 1 to the contract to exercise Option 1 for 40 additional LRVs to be delivered after the Phase 1 delivery of 24 vehicles; and,

WHEREAS, On October 30, 2015, the Director of Transportation, approved Modification No. 2 to the contract to update the list of approved major suppliers, and clarify contract language; and,

WHEREAS, On August 16, 2016, SFMTA Board approved Modification No. 3 to the contract, which added design changes to provide enhancements to passengers, enable full systems integration, and reduce the life-cycle costs of the LRVs, in the amount of \$19,596,728, with no increase in the total contract price; and,

WHEREAS, The arena and event center for the Golden State Warriors is now under construction on an 11-acre site on Blocks 29-32 within the Mission Bay South Redevelopment Plan Area (the Event Center); development of the site will significantly increase transportation and other public service needs in the area during events; and,

WHEREAS, The developer of the arena and event center, along with stakeholders, developed the Transportation Service Plan (TSP) as part of a strategy to mitigate impacts to residents, medical facilities, and businesses in the area.; the TSP includes elements under the jurisdiction of the SFMTA, including the procurement of four additional LRVs to provide enhanced service during basketball games and other events; and,

WHEREAS, On December 8, 2015, the City established the Mission Bay Transportation Improvement Fund in order to finance public improvements and services related to the Event Center, including the procurement of the four LRVs; and,

WHEREAS, The procurement of four new LRVs to provide enhanced Muni service to the Golden State Warriors Event Center Project is subject to the California Environmental Quality Act (CEQA); and,

WHEREAS, The Golden State Warriors Event Center and Mixed Use Development at Mission Bay Blocks 29-32 Final Subsequent Environmental Impact Report (Event Center FSEIR) evaluated the environmental impacts of the Event Center and an associated increase in passenger rail service; specifically, the Event Center FSEIR identified significant environmental impacts on Muni transit service, and thus incorporated Mitigation Measure M-TR-13 to provide enhanced Muni transit service on the T Third light rail line; additionally, the Event Center project evaluated in the FSEIR also included the implementation of a Transportation Management Plan (TMP) and the TSP which specified the increase in light rail service on the T Third line; and,

WHEREAS, On November 3, 2015, the San Francisco Commission on Community Investment and Infrastructure (OCII) certified the Event Center FSEIR, and adopted CEQA Findings, a Mitigation Monitoring and Reporting Program, and a Statement of Overriding Considerations as part of Resolution 69-2015 and Resolution 70-2015, and approved the Event Center Project as part of Resolution 71-2015; and,

WHEREAS, On November 3, 2015, the SFMTA Board of Directors, as part of Resolution 15-154, approved elements of the Event Center Project under SFMTA jurisdiction, including the TMP and the TSP, accepted responsibility to implement applicable transportation-related mitigation measures, and further adopted the CEQA Findings, a Mitigation Monitoring and Reporting Program, and a Statement of Overriding Considerations; and,

WHEREAS, Copies of the CEQA determinations, Resolutions, and CEQA Findings are on file with the Secretary to the SFMTA Board of Directors, may be found in the records of OCII at One South Van Ness Avenue, 5th Floor, in San Francisco, and are incorporated herein by reference; and

WHEREAS, The SFMTA now wishes to modify the contract to procure the four additional LRVs; now, therefore, be it

RESOLVED, That the SFMTA Board of Directors has subsequently reviewed the Event Center FSEIR and finds that since the certification of the FSEIR, no changes have occurred in the proposed project or in the circumstances under which the project would be implemented that would cause new significant impacts or a substantial increase in the severity of impacts identified and analyzed in the FSEIR, and that no new information has emerged that would materially change the analysis or conclusions set forth in the FSEIR; the actions approved herein would not necessitate implementation of additional or considerably different mitigation measures that those identified in the FSEIR; and be it further

RESOLVED, That the SFMTA Board of Directors authorizes the Director of Transportation to execute Modification No. 4 to SFMTA Contract No. 2013-19: Procurement of New Light Rail Vehicles (LRV4), with Siemens Industry, Inc., to provide four additional LRV4 vehicles for an amount not to exceed \$15,875,000, with no increase in the total contract price and no increase in the overall term of the contract.

I certify that the foregoing resolution was adopted by the San Francisco Municipal Transportation Agency Board of Directors at its meeting of June 20, 2017.

Secretary to the Board of Directors
San Francisco Municipal Transportation Agency

**CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
ONE SOUTH VAN NESS AVE, 7TH FLOOR
SAN FRANCISCO, CA 94103**

**MODIFICATION NO. 4 TO
AGREEMENT BETWEEN SIEMENS INDUSTRY, INC.
AND
THE CITY AND COUNTY OF SAN FRANCISCO FOR
PROCUREMENT OF NEW LIGHT RAIL VEHICLES (LRV4)
(SFMTA No. 2013-19)**

This Modification No. 4 to Agreement is made and entered into this ____ day of _____, 2017, by and between Siemens Industry, Inc. (Contractor), and the City and County of San Francisco, a municipal corporation (City), acting by and through its Municipal Transportation Agency (SFMTA).

RECITALS

- A. On September 30, 2014, the City entered into an agreement with Contractor (Agreement) to provide 175 light rail vehicles (LRVs), together with associated equipment and spare parts, as well as Options for additional LRVs and parts.
- B. On March 31, 2015, the City approved Modification No. 1 to the Agreement, to exercise Option 1 in accordance with Section 64.1 of the Agreement for 40 additional LRVs to be delivered after the Phase 1 delivery of 24 vehicles, and to exercise Options for additional spare parts and equipment, in accordance with Sections 64.2, 64.3 and 64.4 of the Agreement.
- C. On October 30, 2015, the City approved Modification No. 2 to the Agreement, to update the list of approved major suppliers listed in Section 29, clarify the purpose of Item 1.1 (Allowance) in Exhibit 2 of Volume I, and specify the payment structure for changes to the LRVs paid under Item 1.1.
- D. On August 16, 2016, the City approved Modification No. 3 to the Agreement, to update the list of approved major suppliers; modify radio/CAD/AVL systems on the Vehicles, including related price and payment schedules; provide extra time for delivery of the vehicles and other project submittals; add a new parent guarantee; and make miscellaneous changes to the Technical Specifications.

- E. The SFMTA now wishes to modify the Agreement to procure four additional LRVs to be delivered after the 24th production LRV, which Vehicles shall be part of the production fleet, conform to all requirements of the Technical Specifications, and all prior design approvals and Buy America audits will include these four Vehicles.

Now, therefore, the parties agree that the Agreement shall be amended as follows:

1. *The Definitions section is amended to modify the term "Base Order" and to add a new definition for "Phase W" to read as follows:*

* * *

Base Order: Work referenced as Items 1-6 in Exhibit 1A.

* * *

Phase W: Work related to the acquisition of four Vehicles to supplement the existing fleet.

2. *Section 15.2.1 (General) is modified in its entirety to read as follows:*

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 bonds or other security 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 Exhibits 6, 6.1, 6.2 (modified on August 26, 2016 as Exhibit 6.3), and 6.4. The City has accepted the Parent Company Guarantees as substitution for the required bonds or other security.

3. *Section 15.2.2 (Security) is modified by adding a new subsection (d) to read as follows:*

(d) Phase W (4 Vehicles) Contractor shall furnish to the City a performance bond or Letter of Credit in the amount of 25% of the total price for Phase W within 20 Days of Contractor's receipt of a notice of award from City to modify the Contract for Phase W. 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 five percent of the original amount upon Acceptance or Conditional Acceptance of the last Phase W 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 Phase W 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 Phase W 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.

4. *Section 15.2.3 (Labor and Material Bond) is modified by adding after subsection c a new subsection (d) to read as follows :*

(d) Phase W (4 Vehicles). Within 20 days of receipt of a notice of award from the City to modify the Contract for delivery of four Phase W Vehicles, the Contractor shall furnish to the City either a separate labor and materials bond or a Letter of Credit in the amount of 25 percent of the total cost for Phase W, to guarantee performance of all Contract obligations with respect to Phase W. Provisions for releasing or reducing the amount of the bond or Letter of Credit shall apply in the same manner as described above in Section 15.2.2(d). The original bond shall also be retained by the City.

5. *Section 15.2.4 (Warranty Bond) is modified in its entirety to read as follows :*

15.2.4 Warranty Bond. Once all Vehicles have been Accepted or Conditionally Accepted for Phase 1, Phase 2, Phase W, 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.

6. *Section 19.1 (Liquidated Damages) is modified in its entirety to read as follows :*

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 the SFMTA.

<u>Milestone</u>	<u>Amount per Day</u>
Delivery of first 2 Vehicles	\$2000 per Vehicle
Delivery of Vehicles 3 – 260	\$1000 per Vehicle
Delivery of 4 Phase W Vehicles	\$1000 per Vehicle
Completion of training program	\$500
Completion of delivery of Phase I spare parts	\$500
Completion of delivery of Phase II spare parts	\$500
Conditional Acceptance of manuals (operation, maintenance and parts manuals)	\$500
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.

7. *A new Exhibit 1A.2 (Schedule of Prices-Modification No. 4) is added to the Agreement and is attached to this Modification.*
8. *A new Exhibit 2.2 (Payment Schedule-Modification No. 4) is added to the Agreement and is attached to this Modification.*

9. *Exhibit 3B (Vehicle Delivery Schedule) is replaced with a new Exhibit 3B (Vehicle Delivery Schedule), which is attached to this Modification.*
10. *Exhibit 5 (Warranty Provisions), subsection 1.1.6, is modified in its entirety to read as follows*

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 10 percent of the Vehicles delivered under the same phase of this Contract. For the purposes of this Section only:

(a) The first phase of this Contract consists of Phase 1 (24 Vehicles), Option 1 (40 Vehicles), and Phase W (4 Vehicles), for a total of 68 Vehicles. For the first phase, the Contractor shall begin root cause failure investigations when the number of failures reach 3.5 percent (3 Vehicles). The full fleet defect criteria will be reached when the failure rate occurs in 10 percent of the Vehicles delivered in this phase (7 Vehicles).

(b) The second phase of this Contract consists of Phase 2 (151 Vehicles) and Option 2 (up to 45 Vehicles, to the extent the Option is exercised), for a total of up to 196 Vehicles. For the second phase, the Contractor shall begin root cause failure investigations when the number of Vehicle failures reach 8.0 percent. The full fleet defect criteria will be reached when the failure rate occurs in 10% of the Vehicles delivered in this phase. The SFMTA shall have final approval of corrections or changes under these conditions.

11. *Exhibit 6 is modified by adding after Exhibit 6.3 a new Exhibit 6.4, which is attached to this Modification.*
12. **Release.** Contractor acknowledges and agrees that the amounts agreed for the work described in Modification Nos. 1-3 and this Modification No. 4 shall be full accord and satisfaction for all past, current and prospective costs incurred in connection with Contractor's performance of all work for all executed Modifications up to and including the work covered under this Modification No. 4, without limitation, including any and all markups and overhead. If this modification involves the granting of an extension of time, with or without cost, Contractor releases the City from all claims and costs associated with such extension of time. Said costs may include, but are not limited to, costs for labor, materials, equipment, disruption, lost productivity, escalation, delay, extended overhead, administration and extended performance time. Contractor releases the City from all claims for which full accord and satisfaction is made, as set forth above. Notwithstanding the foregoing, this Release does not apply to any work associated with change orders that are currently under discussion between Contractor and the City at the time of this Modification. This paragraph replaces the release paragraphs in Modification Nos. 1, 2, and 3.

13. ***Effective Date.*** Each of the amendments set forth above shall be effective on and after all parties have signed the Amendment.

14. ***Legal Effect.*** Except as expressly modified by this Modification No. 4, all other terms and conditions of the Contract remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the parties hereto have entered into and executed this Modification No. 4 on the date set forth on page 1 above.

CITY

CONTRACTOR

San Francisco Municipal Transportation Agency

Edward D. Reiskin
Director of Transportation

San Francisco Municipal Transportation Agency
Board of Directors

Resolution No. _____

Dated: _____

Attest:

Secretary

Approved as to Form:

Dennis J. Herrera
City Attorney

By _____
Robin M. Reitzes
Deputy City Attorney

Michael Cahill
President
Mobility Division
Siemens Industry, Inc.
7464 French Road
Sacramento, CA 95828

Christopher Halleus
Vice President, FBA
Mobility Division
Siemens Industry, Inc.
7464 French Road
Sacramento, CA 95828

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

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Attachments

- Exhibit 1A.2 – Schedule of Prices – Modification No. 4 Work
- Exhibit 2.2 – Payment Schedule
- Exhibit 3.B – Vehicle Delivery Schedules
- Exhibit 6.4 – Parent Company Guarantee

EXHIBIT 1A.2
Schedule of Prices – Modification No. 4 Work

ITEM	DESCRIPTION	UNIT PRICE	QUANTITY	EXTENDED PRICE
Item 14	Modification No. 4 (Vehicle Price for Phase W)	\$3,968,750	x 4 cars	\$15,875,000
MOD 4 TOTAL Item 14				\$15,875,000

Exhibit 2.2
PAYMENT SCHEDULE
 (All Item references are to Exhibit 1A.2)

Item 14 - Modification No. 4 (Vehicle Price for Phase W)

Progress payments will be made in accordance with Item 2B of Exhibit 2.

	Milestone	Percent of Bid Item
A	Placement of contracts with the following major subcontractors (Cars 25, 27, 29, and 31).* <ul style="list-style-type: none"> • Propulsion • Friction Brake • Air Comfort • Door Operators & Controls • Carbody • Train Control • Coupler • Communication 	2%
B	Delivery of complete set of subsystems to site of installation.	20%/Vehicle
C	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 W (Retention)	3%
Total for Item 14		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 payments under Section 7.3 of the Agreement.

**EXHIBIT 3
PROJECT AND VEHICLE DELIVERY SCHEDULES**

B. Vehicle Delivery Schedule

Item	Vehicle Delivery Date	Completion of Acceptance Testing
Notice To Proceed	9/30/2014	
Delivery of 1st Vehicle (Phase 1) to SFMTA (LRV 2001)	1/13/2017	8/15/2017
LRV 2002	2/28/2017	9/21/2017
LRV 2003	5/2/2017	9/28/2017
LRV 2004	8/17/2017	10/27/2017
LRV 2005	8/31/2017	11/3/2017
LRV 2006	9/15/2017	11/13/2017
LRV 2007	10/3/2017	11/30/2017
LRV 2008	10/13/2017	12/12/2017
LRV 2009	10/27/2017	12/27/2017
LRV 2010	11/7/2017	1/5/2018
LRV 2011	11/16/2017	1/22/2018
LRV 2012	12/4/2017	1/31/2018
LRV 2013	12/13/2017	2/9/2018
LRV 2014	12/22/2017	2/27/2018
LRV 2015	1/10/2018	3/7/2018
LRV 2016	1/19/2018	3/16/2018
LRV 2017	1/30/2018	3/27/2018
LRV 2018	2/8/2018	4/5/2018
LRV 2019	2/20/2018	4/13/2018
LRV 2020	2/27/2018	4/23/2018
LRV 2021	3/6/2018	4/30/2018
LRV 2022	3/13/2018	5/7/2018
LRV 2023	3/20/2018	5/14/2018
LRV 2024	3/27/2018	5/21/2018
LRV 2025 (Delivery of 1 st Phase W Vehicle to SFMTA)	4/3/2018	5/28/2018
LRV 2026 (Delivery of 1st Option 1 Vehicle to SFMTA)	4/10/2018	6/4/2018
LRV 2027 (Delivery of 2 nd Phase W Vehicle to SFMTA)	4/17/2018	6/11/2018
LRV 2028	4/24/2018	6/18/2018
LRV 2029 (Delivery of 3 rd Phase W Vehicle to SFMTA)	5/1/2018	6/25/2018
LRV 2030	5/8/2018	7/2/2018

Item	Vehicle Delivery Date	Completion of Acceptance Testing
LRV 2031(Delivery of 4 th Phase W Vehicle to SFMTA)	5/15/2018	7/9/2018
LRV 2032	5/22/2018	7/16/2018
LRV 2033	6/5/2018	7/30/2018
LRV 2034	6/19/2018	8/13/2018
LRV 2035	7/3/2018	8/27/2018
LRV 2036	7/17/2018	9/10/2018
LRV 2037	7/31/2018	9/24/2018
LRV 2038	8/14/2018	10/8/2018
LRV 2039	8/28/2018	10/22/2018
LRV 2040	9/11/2018	11/5/2018
LRV 2041	9/25/2018	11/19/2018
LRV 2042	10/9/2018	12/3/2018
LRV 2043	10/23/2018	12/17/2018
LRV 2044	11/6/2018	12/31/2018
LRV 2045	11/20/2018	1/14/2019
LRV 2046	12/4/2018	1/28/2019
LRV 2047	12/18/2018	2/11/2019
LRV 2048	1/1/2019	2/25/2019
LRV 2049	1/15/2019	3/11/2019
LRV 2050	1/29/2019	3/25/2019
LRV 2051	2/12/2019	4/8/2019
LRV 2052	2/26/2019	4/22/2019
LRV 2053	3/12/2019	5/6/2019
LRV 2054	3/26/2019	5/20/2019
LRV 2055	4/9/2019	6/3/2019
LRV 2056	4/23/2019	6/17/2019
LRV 2057	5/7/2019	7/1/2019
LRV 2058	5/21/2019	7/15/2019
LRV 2059	6/4/2019	7/29/2019
LRV 2060	6/18/2019	8/12/2019
LRV 2061	7/2/2019	8/26/2019
LRV 2062	7/16/2019	9/9/2019
LRV 2063	7/30/2019	9/23/2019
LRV 2064	8/13/2019	10/7/2019
LRV 2065	8/27/2019	10/21/2019
LRV 2066	9/10/2019	11/4/2019
LRV 2067	9/24/2019	11/18/2019
LRV 2068	10/8/2019	12/2/2019
Delivery of 1st vehicle (Phase 2) to SFMTA	5/15/2021	TBD

Item	Vehicle Delivery Date	Completion of Acceptance Testing
Delivery Rate of Phase 2 Vehicles	1 car / 2 week	
Delivery of 151th vehicle (Phase 2) to SFMTA	2/27/2027	TBD
Delivery of 1st Option 2 Vehicle to SFMTA	TBD	TBD
Delivery Rate of Option 2 Vehicles	TBD	TBD
Delivery of the last Option 2 Vehicle	TBD	TBD



EXHIBIT 6.4 – PARENT COMPANY GUARANTEE

June ..., 2017

RE: Procurement of New Light Rail Vehicles (LRV4) Contract No. SFMTA-2013-19 between Siemens Industry Inc. (“Obligor”) and the City and County of San Francisco (“City”), through its Municipal Transportation Agency (“Beneficiary”) dated September 29, 2014 (“Contract”).

The Contract requires that Obligor provide a performance bond, labor and materials bond, warranty bond (the “bonds”), letters of credit or other security, as approved by the City’s Risk Manager, to secure Obligor’s performance, warranty and other obligations under the Contract. Siemens Corporation (“Guarantor”), the parent company of Obligor, offers to provide Beneficiary with the following guarantee in lieu of the bonds or letters of credit required under the Contract for Phase W, as defined in Modification No. 4 of the Contract.

For value received, Guarantor, a corporation duly organized and validly existing under the laws of the state of Delaware, unconditionally guaranties to Beneficiary the prompt and complete payment when due, whether by acceleration or otherwise, of all amounts owing by Obligor under Phase W of the Contract (including any liquidated damages). If at any time Obligor fails, neglects or refuses to timely or fully pay any sum due under Phase W of the Contract, and if within 15 calendar days after the written notice of such failure from the Beneficiary and the expiration of any grace period applicable with respect thereto under the Contract, Obligor has not made such payment in full, then upon receipt of written notice from Beneficiary specifying such default, Guarantor shall promptly make such payment in immediately available funds to the order of the Beneficiary. This guaranty is one of payment and not of collection. If more expeditious and appropriate than a direct payment to SFMTA (and if agreed to by SFMTA and Guarantor), in the event of any default on the part of the Obligor regarding its obligations under Phase W of the Contract, Guarantor agrees to perform all such obligations under the Contract that are necessary to cure the default and complete performance of all such work under the Contract.

Guarantor waives notice of acceptance of this Guarantee and notice of any liability to which it may apply, and waives presentment, demand for payment, protest, and notice of dishonor or non-payment of any kind.

Beneficiary may at any time and from time to time without notice to or consent of the Guarantor and without impairing or releasing the obligations of the Guarantor hereunder: (1) agree to any change in the terms of any obligation or liability of the Obligor to Beneficiary under the Contract, (2) grant any waivers to Obligor, (3) take or fail to take any action of any kind in respect of Phase W of the Contract, or (4) exercise or refrain from exercising any rights against Obligor under the Contract. In addition, Guarantor agrees that its obligations hereunder shall not be impaired in any manner whatsoever by any bankruptcy, extensions, moratoria or other relief granted to Obligor. Notwithstanding anything contained in this Guarantee to the contrary, Guarantor’s liability under this Guarantee shall not exceed Fourteen Million, Six Hundred Five Thousand Dollars (\$14,605,000),

which is the sum of Seven Million, Nine Hundred Thirty-Seven Thousand, Five Hundred Dollars (\$7,937,500) US (the "Stated Amount") plus (2) the "Additional Amount" of Six Million, Six Hundred Sixty-Seven Thousand, Five Hundred Dollars (\$6,667,500), which covers providing additional security for progress payments made by the Beneficiary for such Phase W Vehicles (see Section 7.3 of the Contract). For the Phase W Vehicles, the Payment Milestones comprising the Additional Amount are Milestones A, B, and C of Item 14 (Exhibit 2.2 to Modification No. 4). Together, the Stated Amount and the Additional Amount covers all Phase W obligations. Once all Phase W Vehicles have been accepted (as these terms are defined in the Contract), the Additional Amount may be released from the Guarantee for Phase W. Upon Acceptance or Conditional Acceptance of all Phase W Vehicles, the Stated Amount will be reduced to five percent of the total price for Phase W in accordance with Section 15.2.2(d) of the Contract.

With respect to any claim, action or proceeding against Guarantor in connection with this Guarantee, Guarantor shall be entitled to assert those defenses which Obligor would be able to assert if such claim, action or proceeding were to be asserted or instituted against Obligor based upon the Contract. By its acceptance hereof, reliance hereon, Beneficiary affirms to Guarantor any and all representations, warranties, and covenants made by the Beneficiary to the Obligor under the Contract.

This Guarantee shall continue in full force and effect until Guarantor gives Beneficiary notice of termination of this Guarantee, except that, notwithstanding any such termination, this Guarantee shall continue in full force and effect with respect to all obligations and/or liabilities incurred prior to such termination. Notwithstanding the foregoing, however, this Guarantee shall terminate and cease to be of further effect on the earlier of: (a) --- (b) the Acceptance or Conditional Acceptance of the last Vehicle of Phase W, provided that the Contractor has furnished a separate Parent Company Guarantee or other security for the warranty provisions that meets the requirements of section 15.2.4. of the Contract; (c) end of the agreed warranty period of the Phase W Vehicles; (d) the date of any permitted assignment of Obligor's interest in the Contract; or (e) the date that (i) the Guarantor no longer owns or controls, directly or indirectly, more than 50 percent of the ownership interests of the Obligor, and (ii) the Beneficiary has been provided with a replacement guaranty, letter of credit, or other financial accommodation from a party with a credit rating equal to or better than that of Guarantor as of the date of this Guarantee, which financial accommodation provides Beneficiary with no less protection than that which is contained in this Guarantee (the acceptance of such replacement guarantee being within the sole and reasonable discretion of the Beneficiary). Guarantor shall, as of such date (the "Expiration Date"), have no further obligations or liability under this Guarantee, whether or not the Guarantee is returned to the Guarantor. To the extent feasible, Beneficiary will return the original of this Guarantee to the Guarantor after the Expiration Date.

Nothing contained herein shall be construed as conferring any rights upon persons or entities other than the Beneficiary.

This Guarantee shall be governed and construed in accordance with the laws of the State of California without giving effect to principles of conflicts of law. Guarantor submits, and by its acceptance hereof Beneficiary hereby submits, to the jurisdiction of the courts of the state of California and to federal courts located within the city of San Francisco. Neither Guarantor nor Beneficiary may assign its rights or delegate its duties without the written consent of the other party.

Any amendments to this Guarantee must be in writing. This Guarantee may be executed in counterparts, each of which, when taken together, shall be deemed to be one and the same instrument.

This Guarantee has been duly executed by authorized representatives of the Guarantor as follows:

SIEMENS CORPORATION

By: _____

*Name: Kirk Nesbeitt

Title: Vice President of Siemens Financial Services, Inc.

By: _____

*Name: Robert Donza

Title: Vice President of Siemens Financial Services, Inc.

*[Under Power of Attorney from Siemens Corporation]

Accepted:

Municipal Transportation Agency

By _____

Edward D. Reiskin
Director of Transportation

Approved as to Form:

Dennis J. Herrera, City Attorney

By _____

Robin M. Reitzes
Deputy City At