



SOUTHERN CALIFORNIA  
RAPID TRANSIT DISTRICT

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John A. Dyer  
General Manager

ADDENDUM

... covering ...

CHANGE IN SPECIFICATIONS AND/OR PLANS

Date Issued June 13, 1986 Addendum No. 1

Date Effective June 13, 1986

Bid No. CA-90-X120-R

Contract 30 Methanol and 120 Diesel 40-Foot Transit Coaches

INTENT

1. This addendum is issued prior to receipt of bids to provide for modifications in plans and specifications. Acknowledgment of this addendum shall be made and cost of work included in bidder's proposal.

2. Section 1.12 PRE-BID CONFERENCE

A. Re-Schedule pre-bid conference date to July 25, 1986. Time and location will remain the same.

B. Bidder's questions are due no later than July 18, 1986.

3. A subsequent addendum will be issued to revise other due dates.

*TMC  
Buses*

Issued by: *M. J. Walters* (S)



**SOUTHERN CALIFORNIA  
RAPID TRANSIT DISTRICT**

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John A. Dyer  
General Manager

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## ADDENDUM

covering

### CHANGE IN SPECIFICATIONS AND/OR PLANS

Date Issued June 30, 1986 Addendum No. 2  
 Date Effective June 30, 1986  
 Bid No. CA-90-X120-R  
 Contract 30 Methanol and 120 Diesel 40-Foot Transit Coaches

#### INTENT

1. This addendum is issued prior to receipt of bids to provide for modifications in plans and specifications. Acknowledgment of this addendum shall be made and cost of work included in bidder's proposal.

#### Page I-4, Section 1.5, BID REQUIREMENTS

- (1) Revise LCC Technical Submittal due date to read: October 30, 1986.
- (2) Revise Bid Opening Date to read: November 11, 1986.

#### 3. Page I-6, Section 1.12, PRE-BID CONFERENCE

- (1) Revise Pre-Bid Conference date to read: August 27, 1986.
- (2) Revise 2nd paragraph, 2nd sentence to read: Written questions should be submitted to the Office of Contracts, Procurement and Material on or before August 20, 1986.
- (3) Revise last paragraph, 2nd sentence to read: The District will issue the response to all questions no later than September 19, 1986.

#### 4. Page I-6, Section 1.13, BIDDER REVIEW PROCEDURES

Revise 1st paragraph, 3rd sentence to read: Protests or appeals of District decisions regarding any other issue relative to this procurement shall be filed in writing on or before October 8, 1986.

#### 5. Page I-7, Section 1.13, BIDDER REVIEW PROCEDURES

Revise 9th paragraph to read: The District shall respond in writing to a letter of protest on or before October 17, 1986.

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1986  
.S64  
Addendum

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Issued by: M. Z. Watten

6. Page I-4, Section 1.8 DELIVERY SCHEDULE

Add the following statement: ALL coaches are to be delivered within 52 weeks; however, contractor is to prioritize the schedule to deliver the 120 diesel coaches first.

7. All other terms and conditions remain the same.



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RAPID TRANSIT DISTRICT

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John A. Dyer  
General Manager

ADDENDUM

covering

CHANGE IN SPECIFICATIONS AND/OR PLANS

Date Issued August 19, 1986 Addendum No. 3  
Date Effective August 19, 1986  
Bid No. CA-90-X120-R  
Contract 30 Methanol and 120 Diesel 40-Foot Transit Coaches

INTENT

1. This addendum is issued prior to receipt of bids to provide for modifications in plans and specifications. Acknowledgment of this addendum shall be made and cost of work included in bidder's proposal.
2. Page I-3, Section 1.5, BID REQUIREMENTS  
Increase quantity of diesel powered buses from 120 each to 237 each. Any reference in the specification to the quantity of 120 diesel buses should be revised to read 237 diesel buses.
3. Page I-4, Section 1.8, DELIVERY SCHEDULE  
Revise paragraph to read: Delivery of all 267 coaches shall be completed within 66 weeks after delivery of the executed contract.
4. Page I-13, BID FORM  
Enclosed is a revised bid form for 237 diesel buses.
5. Page I-17, OPTION PRICING  
Enclosed is a revised bid form for the option pricing with revised quantities.
6. Page II-48, Section 2.6.6, WHEELCHAIR PASSENGERS  
Revise Section 2.6.6.1 "Accommodations" to read: space and body structural provisions shall be provided at either the front or rear entrance of the coach to accommodate a wheelchair loading system.
7. Part I, Attachment 8  
Enclosed is a revised "Bid Bond" form reflecting change in quantity to a total of 267 40 Foot Heavy Duty Transit Coaches.

-CONTINUE ON PAGE 2-

Issued by: M. J. Walters



8. Part I, Attachment 9

Enclosed is a revised "Faithful Performance Bond" form reflecting change in quantity to a total of 267 40-Foot Heavy Duty Transit Coaches.

9. All other terms and condition remain the same.



# SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT

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John A. Dyer  
General Manager

## ADDENDUM

covering

### CHANGE IN SPECIFICATIONS AND/OR PLANS

Date Issued October 3, 1986 Addendum No. 4  
 Date Effective October 3, 1986  
 Bid No. CA-90-X120-R  
 Contract 30 Methanol and 237 Diesel 40-Foot Transit Coaches

#### INTENT

1. This addendum is issued prior to receipt of bids to provide for modifications in plans and specifications. Acknowledgment of this addendum shall be made and cost of work included in bidder's proposal.
2. Page I-1, Section 1.2, SCOPE  
 Delete the 1st paragraph and insert the following: The contract awarded here under shall be for the manufacture and delivery of two (2) axle transit coaches/spare parts in accordance with the terms and conditions set forth. The contract shall be a firm-fixed price contract.
3. Page I-3, Section 1.5, BID REQUIREMENTS  
 Revise sealed Bid Packages Due Date to read: December 5, 1986.
4. Page I-4, Section 1.5, BID REQUIREMENTS
  - (1) Revise LCC Technical Submittal due date to read: December 5, 1986.
  - (2) Revise sealed priced Bid Opening Date to read: December 16, 1986.
5. Page I-6, Section 1.12, PRE-BID CONFERENCE
  - (1) Revise Pre-Bid Conference date to read: November 5, 1986.
  - (2) Revise 2nd paragraph, 2nd sentence to read: Written questions should be submitted to the Office of Contracts, Procurement and Material on or before November 5, 1986.

Issued by: M. J. Callahan

(3) Revise last paragraph, 2nd sentence to read: The District will issue the response to all questions no later than November 14, 1986. These questions and requests for clarification supercede all questions previously submitted. District will respond only to questions submitted in response to this Addendum No. 4.

6. Page I-6, Section 1.13, BIDDER REVIEW PROCEDURES

Revise 1st paragraph, 3rd sentence to read: Protests or appeals of District decisions regarding any other issue relative to this procurement shall be filed in writing on or before November 24, 1986.

7. Page I-7, Section 1.13, BIDDER REVIEW PROCEDURES

Revise 9th paragraph to read: The District shall respond in writing to a letter of protest on or before November 28, 1986.

8. Page 2 to 6, Section I, ATTACHMENT I

Section C, Life Cycle Cost Factor #3 - Passenger Capacity:  
Edit reference to 8880 positions in 1st paragraph, 2nd paragraph and lower case "a" to read: 7920 Positions.

9. Page II-8, Section 1.5.2.1, WEIGHT

Delete the 1st paragraph and insert the following: The successful bidder shall deliver a bus as light in weight as possible without degradation of safety, appearance, comfort, structural integrity or performance.

10. All other terms and conditions remain the same.



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John A. Dyer  
General Manager

**ADDENDUM**

covering

**CHANGE IN SPECIFICATIONS AND/OR PLANS**

Date Issued November 14, 1986 Addendum No. 5

Date Effective November 14, 1986

Bid No. CA-90-X120-R

Contract 30 METHANOL AND 237 Diesel 40-FOOT TRANSIT COACHES

INTENT

1. This addendum is issued prior to receipt of bids to provide for modifications in plans and specifications. Acknowledgment of this addendum shall be made and cost of work included in bidder's proposal.
2. PAGE I-6, SECTION 1.12 PRE-BID CONFERENCE  
Revise last paragraph, 2nd sentence to read:  
The District will issue the response to all questions no later than November 28, 1986.
3. Other dates affected by this change will be provided under a separate addendum.
4. All other terms and conditions remain the same.

Issued by: *M. J. Walters*



**SOUTHERN CALIFORNIA  
RAPID TRANSIT DISTRICT**

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John A. Dyer  
General Manager

**ADDENDUM**

covering

**CHANGE IN SPECIFICATIONS AND/OR PLANS**

Date Issued December 9, 1986 Addendum No. 6  
 Date Effective December 9, 1986  
 Bid No. CA-90-X120-R  
 Contract 30 Methanol and 237 Diesel 40-Foot Transit Coaches

**INTENT**

1. This addendum is issued prior to receipt of bids to provide for modifications in plans and specifications. Acknowledgment of this addendum shall be made and cost of work included in bidder's proposal.

2. Page ii, NOTICE INVITING BIDS

Delete page in its entirety. Insert revised Page ii, attached.

Page I-3, Section 1.5, BID REQUIREMENT

- (1) Line 2: change "August 6, 1986" to read "January 6, 1987".
- (2) Line 3: change "120 diesel powered" to "237 diesel powered".
- (3) Continued on Page I-4: change line 3 from "120 diesel buses" to "237 diesel buses".
- (4) Line 4: change "August 6, 1986" to "January 6, 1987".
- (5) Line 5: change "August 15, 1986" to "January 20, 1987".

4. Page I-5, Section 1.10, PAYMENT SCHEDULE

Delete the paragraph in its entirety and insert the following:

Issued by:

The District shall make payment by check for 99% of the contract price within 30 days after final acceptance of each coach. The remaining 1% will be paid in the form of a one year note to bear interest at the prevailing tax free rate at date of note.

The amount of the note will be withheld from the last payment and the note executed at that time. This action will permit the District to participate in the benefits of a safe harbor lease.

Contractor's invoices for coaches, spare parts, and/or equipment shall be submitted to the procuring Agency 30 calendar days prior to each delivery.

The Contractor shall invoice in maximum lots of five coaches. Each invoice shall include:

- Contract Number
- Line item number invoiced
- Number of spare parts/equipment invoiced,  
if applicable
- Model and serial number of coach invoiced,  
if applicable
- Unit or total prices by line item number
- Total invoice amount

5. Page I-6, Section 1.13, BIDDER REVIEW PROCEDURE

Revise this section to read as follows:

"All decisions of the District covered under this addendum and all prior transmittals are final and not subject to appeal. The District has no obligation to provide the bidder any further review of those decisions."

"Any complaint to the Urban Mass Transportation Administration shall be made not less than three business days prior to the opening of bids."

6. Page I-8, Section 1.19, ROLLING STOCK REQUIRMENTS

Item 2 change the last line to read, "Within three business days".

7. Page I-13, Section 1.23-.24, OFFER  
Delete page in its entirety. Insert revised Page I-13, attached.
8. Page I-14, Section 1.23-.24, OFFER (CONTINUED)  
Delete page in its entirety. Insert revised page I-14, attached.
9. Page I-15, Section 1.23-.25, OFFER (CONTINUED)  
Delete page in its entirety. insert revised Page I-15, attached.
10. Page I-16, Section 1.23-.25 OFFER  
Delete page in its entirety. Insert revised Page I-16, attached.
11. Page I-17, Section 1.23.6 OPTION PRICING  
Delete page in its entirety. Insert revised page I-17, attached.
12. Page I-18 and I-19, Section 1.23.6 OPTION PRICING (CONT'D)  
Delete pages in their entirety. Insert revised Page I-18 and I-19, attached.
13. Page I-21, Section 1.23.8, OFFER  
Delete page in its entirety. Insert revised Page I-21, attached.
14. Page I-23, Section 2.4, MOTOR VEHICLE POLLUTION REQUIREMENT  
Revise Subparagraph 1: "Engine shall meet Federal and California pollution standards.
15. Page I-26, Section 2.18, MAINTENANCE, PARTS AND OPERATORS' MANUALS  
Add a third paragraph:

"The District will accept preliminary maintenance, parts and operators' manuals with the delivery of the first bus for both the diesel driven and methanol driven units. Quantities of each preliminary manual shall be 20% of the quantity stated in the specification. Within 30 days after delivery of the first bus, contractor must deliver current manuals as specified. If the contractor fails to deliver the manuals within the

30 days as stated above, the District will withhold from payment \$2,500 for each bus delivered after that date until such time as the manuals are delivered and approved by the District."

16. Page I-27, Section 2.20, UNAVOIDABLE DELAYS

Edit the word "avoidably" to read "unavoidably".

17. Page I-29, Section 2.29, TITLE

Add a new paragraph:

"The District will accept the Manufacturer's Certificate of Origin at time of delivery of buses. However, the District will then require a minimum of an additional ten working days to release payment."

18. Page I-34, Section 2.44, FLEET DEFECTS

Add a sentence at the end of the paragraph: "The District will allow the contractor 30 days to verify that a fleet defect exists. However, if a fleet defect is determined, the contractor will be billed for each day the bus(es) is not available for revenue service."

19. Part I, Attachment 1, LCC CALCULATION WORKSHEET

The six pages have been revised to reflect the District's purchase of 237 diesel powered buses. Please insert the attached.

20. Part I, Attachment 5, SYSTEM COMPONENTS

Delete this page in its entirety. Insert the revised list of system components.

21. Part I, Attachment 8, BID BOND

Delete this page in its entirety. Insert the attached Bid Bond form.

22. Part I, Attachment 9, FAITHFUL PERFORMANCE BOND

Delete this page in its entirety. Insert the attached Performance Bond form.



23. Page II-5, Section 1.5.1.1, PHYSICAL SIZE

Item 3, Height Dimensions, revise to read: "10' 4" maximum".

24. Page II-12, Section 2.1.1.3, FINISH AND COLOR

Dupont Imron polyurethane paint is an approved equal.

25. Page II-17, Section 2.1.3.5, RUBRAILS

- (1) In the second sentence change "2.5 inches" to "2 inches".
- (2) After the second sentence add "rearward of the rear wheelhousing. The center line of the rubrail shall not exceed 37 inches."

26. Page II-18, Section 2.1.5.1, HEIGHT

Continue the second sentence as follows: "from the entrance to the exit door." At the end of the second sentence add a new sentence: "From the exit door to the rear of the coach, the incline shall not exceed the nominal 4° (nominal is defined as 'plus or minus 5%')." "

27. Page II-35, Section 2.3.2.1, ARRANGEMENTS

In the second paragraph, first sentence, revise the quantity from "46" to "43".

28. Page II-39, Section 2.3.3.1 DIMENSIONS

Change first sentence, second line from "5th percentile female" to "50th percentile female".

29. Page II-47, Section 2.6.4.1, ELECTRONIC DESTINATION SIGNS

Delete the electronic destination sign section in its entirety.

30. Page II-47, Section 2.6.5, FARE COLLECTION

- (1) The first paragraph on Page II-48, the second line: delete the words "Cubic Western Data".
- (2) Add to the end of the first sentence: "which requires a 12 inch square area".

31. Page II-48, Section 2.6.6.3, LOADING SYSTEM

Revise the first sentence to read as follows: "A loading system shall provide safe ingress and egress, quickly, and comfortably for passenger with limited mobility, and in a forward direction for a passenger in a wheelchair from the street level or curb."

32. Page II-49

(1) The fifth paragraph, last sentence, revise as follows: "The platform shall be fitted with barriers to prevent any powered or nonpowered wheelchair with a total load of 600 pounds from rolling or being driven off the ends or sides during the loading or unloading process."

(2) Revise the ninth sentence to read as follows: "Any portion of the loading system used as steps shall be covered with 5/16 inch nonskid ribbed rubber, composition material RCA, Flexco or equal and shall be black in color."

33. Page II-52, Section 3.1.1.1, POWER REQUIREMENTS

(1) Revise the first sentence to read as follows: "A U.S. manufactured or approved propulsion system and drive train shall provide power to enable the coach to meet the defined acceleration, top speed and gradability requirements."

(2) Add the following paragraph: "The power train, as manufactured by M.A.N., the Cummings L10 engine, the Voith and Renk transmissions are approved propulsion system components."

34. Page II-52, Section 3.1.1.3, GRADABILITY

Revise the last sentence to read: "... 44 mph at a 2.3% rate and 7 mph on a 13.1% rate."

35. Page II-52, Section 3.1.1.4, ACCELERATION

Revise elapsed time: "30 mph - 21.5 seconds; 40 mph - 37.7 seconds".

36. Page II-55, Section 3.1.3.2, Cooling System

On the first sentence of the third paragraph continue the sentence: "... or shall meet an air to boil temperature of 135°F or greater, based on S.A.E. standard #JA189."

37. Page II-59, Section 3.4.3, TURNING EFFORT

Add the following sentence at the beginning of the first paragraph: "The steering wheel shall be tilt and telescopic (raise and lower approximately 2 inches). The steering column shall be Douglas model 909 or equal."

38. Page II-63, Section 3.6.1.1, WHEELS

Revise the last sentence of the paragraph to read as follows: "Wheels shall be powder-dipped, gloss-black, heat-set, polyurethane paint."

39. Page II-63, Section 3.6.2.1, FUEL TANK

Add at the end of the first sentence in the second paragraph: "(comma) or have a minimum range of 400 miles per fill up in heavy duty District revenue service."

40. Page II-64, Section 3.6.2.2, FUEL FILLER

After the first sentence add the following: "The fuel filler door must be equipped with a device that precludes the engine from starting when the fuel filler door is in the open position."

41. ATTACHMENT, ANTISLIP SAFETY WALK MATERIAL SPECIFICATIONS  
No. EE 85-04

Delete this attachment in its entirety.

METHANOL POWER PLANT

42. II-3, Section 1.2 DEFINITION

(18) Neat Methanol: Delete definition. Insert: "Bus grade methanol fuel"; see Attachment D.

43. Page II-52, Section 3.1.1.3, GRADABILITY

The design goal for the methanol propulsion system shall be to meet the specified requirements.

44. Page II-52, Section 3.1.1.4, ACCELERATION

The design goal for the methanol propulsion system shall be to meet specified requirements.

45. Page II-54, Section 3.1.3.1, ENGINE

- (1) At the beginning of Paragraph 2, add the following sentence:  
"The design goal of the methanol engine shall be to meet the specified requirements."
- (2) Third Paragraph, revise the first sentence as follows: "The engine shall meet all requirements of Part II: technical specifications when operating on bus grade methanol fuel (see Attachment D)."

46. Page II-56, Section 3.1.3.2, COOLING SYSTEM

At the end of the first sentence of the second paragraph, add the following, "or shall be able to meet an air to boil temperature of 135°F or greater based on the S.A.E. J819 procedure."

47. Page II-63, Section 3.6.2.1, FUEL TANK

Second paragraph, second sentence make the following changes:  
Delete the words "filler neck and".

48. Page II-63, Section 3.6.2.2, FUEL FILLER

After the first sentence add the following: "The fuel filler door must be equipped with a device that precludes the engine from starting when the fuel filler door is in the open position."

49. Page II-67, Section 3.6.5.4, FIRE DETECTORS

Delete the second paragraph, insert the following: "The sensors shall turn off methanol fuel supply to the engine compartment and activate the fire extinguishment system."

50. Page IV-2, Section 1.1, WARRANTY REQUIREMENTS, SUBSECTION 1.1.2, SUBSYSTEMS AND COMPONENTS

Add the following sentence at the beginning of the paragraph:  
"Subsystems and components required by or for the methanol propulsion systems shall be designed (best effort) to meet the specification requirements."

NOTICE INVITING BIDS

Sealed bid packages (technical proposal and sealed bid prices) will be received by the Southern California Rapid Transit District (hereinafter called District) at its offices at 124 West 4th Street, Los Angeles, California 90013 until 10:00 a.m. on January 6, 1987 for 30 Methanol and 237 Diesel 40-Foot Heavy Duty Advance Design Transit Coaches, option. At that time, the Technical Proposal for the 237 Diesel Powered buses only will be opened. The Pricing portion of the bid will be held and opened on January 20, 1987 as defined under Section 1.5 Bid Requirements. Bids received after the date/time specified above shall be considered late bids and therefore, shall not be opened and/or considered for award.

This bid includes provisions for a multi year agreement for the purchase of additional buses for five consecutive years subject to availability of funding.

Solicitation documents and further information may be obtained from the District's Director of Purchasing at 124 West 4th Street, Los Angeles, California 90013.

All bidders must certify that they are not on the Comptroller General's list of ineligible contractors.

The award to be let under this solicitation is subject to a financial assistance contract between the District and the U. S. Department of Transportation, Urban Mass Transportation Administration (UMTA).

Successful bidder will be required to comply with all applicable Equal Employment Opportunity laws and regulations.



Maynard Z. Walters  
Director  
Office of Contracts,  
Procurement & Materiel

Southern California  
Rapid Transit District

Date: May 16, 1986

ADDENDUM NO. 6  
REVISED

BID NO. CA-90-X120-R

237 DIESEL 40-FOOT HEAVY DUTY TRANSIT COACH

SOLICITATION, OFFER & AWARD

1.23.4 OFFER

By execution below bidder hereby offers to furnish equipment and services as indicated herein:

PRICING

ITEM	ITEM DESCRIPTION	NO. OF UNITS	UNIT PRICE	TOTAL
1	237 Heavy Duty Transit Buses.	237	\$ _____	\$ _____
	6-1/2% State Sales Tax*			\$ _____
	Delivery Charge			\$ _____
	Import Duties			\$ _____
	Ocean Freight			\$ _____

Total 237 Diesel Buses

A \$   
To Be Used In  
Life Cycle Costing.

\* Bidder shall indicate below the cost of equipment per bus which is exempt from sales tax under California law regarding equipment modified for the benefit of the physically handicapped, Part I, Attachment 6. State sales tax amount entered above shall be computed considering the exemption on accessibility equipment.

Cost of Equipment per bus  
Modified for Benefit of  
Physically Handicapped

ADDENDUM NO. 6  
REVISED

BID NO. CA-90-X120-R

237 DIESEL 40-FOOT HEAVY DUTY TRANSIT COACH

SOLICITATION, OFFER & AWARD

1.23.4 OFFER (Con't.)

ITEM	ITEM DESCRIPTION	NO. OF UNITS	UNIT PRICE	TOTAL
1	Power/Plant Assemblies with all accessories mounted on the engine and/or on a cradle if applicable ready for installation*.	2	\$ _____	\$ _____
2	Transmission ready for installation.	2	\$ _____	\$ _____
3	Freon compressors and compressor drive components.	2	\$ _____	\$ _____
	Sub Total Spare Parts and Equipment			\$ _____
	6-1/2% Sales Tax			\$ _____
	Delivery Charges			\$ _____
	Import Duties			\$ _____
	Ocean Freight			\$ _____

Total Spare Parts - Items 1, 2, 3  
for 237 Diesel Buses

B \$   
To Be Used In Life  
Cycle Costing

\* See Part I Attachment 7 for the minimum components to be included under this item. Any assembly or component not mounted on the engine or cradle must be supplied with all accessories or components, ready for installation and operation.

ADDENDUM NO. 6  
REVISED

BID NO. CA-90-X120-R

30 METHANOL 40-FOOT HEAVY DUTY TRANSIT COACHES

SOLICITATION, OFFER & AWARD

1.23.5 OFFER

By execution below bidder hereby offers to furnish equipment and services as indicated herein:

PRICING

ITEM	ITEM DESCRIPTION	NO. OF UNITS	UNIT PRICE	TOTAL
1	40-Foot Heavy Duty Methanol Transit Buses	30	\$ _____	\$ _____
	6-1/2% State Sales Tax*			\$ _____
	Import Duties			\$ _____
	Ocean Freight			\$ _____
	Delivery Charges			\$ _____
	Total 30 Methanol Buses		\$	
				<u>TO BE ADDED TO LCC ADJUSTED PRICE FOR 237 DIESEL BUSES</u>

\* Bidder shall indicate below the cost of equipment per bus which is exempt from sales tax under California law regarding equipment modified for the benefit of the physically handicapped, Part I, Attachment 6. State sales tax amount entered above shall be computed considering the exemption on accessibility equipment.

\_\_\_\_\_  
Cost of Equipment  
Modified for Benefit of  
Physically Handicapped



ADDENDUM NO. 6  
REVISED

BID NO. CA-90-X120-R

METHANOL 40-FOOT HEAVY DUTY TRANSIT COACHES

SOLICITATION, OFFER & AWARD

1.23.5 OFFER (Con't.)

PRICING

ITEM	ITEM DESCRIPTION	NO. OF UNITS	UNIT PRICE	TOTAL
1	Power/Plant Assemblies with all accessories mounted on the engine and/or on a cradle if applicable ready for installation*	2	\$ _____	\$ _____
2	Transmission ready for installation	2	\$ _____	\$ _____
3	Freon compressors and compressor drive components	2	\$ _____	\$ _____
	Sub Total Spare Parts and Equipment			\$ _____
	6-1/2% State Sales Tax*			\$ _____
	Delivery Charges			\$ _____
	Import Duties			\$ _____
	Ocean Freight			\$ _____
	Total Spare Parts. Item 1, 2, & 3 for 30 Methanol Buses		\$	

TO BE ADDED TO LCC  
ADJUSTED PRICE FOR  
237 DIESEL BUSES.

\* See Part I, Attachment 7 for the minimum components to be included under this item. Any assembly or component not mounted on the engine or cradle must be supplied with all accessories or components ready for installation and operation.



ADDENDUM NO. 6  
REVISED

BID NO. CA-90-X120-R

SOLICITATION OFFER & AWARD

OPTION PRICING CON'T  
1.23.6

Delivery for any option quantity shall be the same as that offered under the base contract. This delivery period shall begin on the date the District exercises this option. This option will not be used in evaluating the base bid.

1-30

Unit Price	\$ _____
6-1/2% Sales Tax	\$ _____
Delivery Charges	\$ _____
Import Duties	\$ _____
Ocean Freight	\$ _____
TOTAL	\$ _____

NOT TO BE CONSIDERED IN CONTRACT AWARD.

OPTION E - LONG TERM PURCHASE OF ADDITIONAL BUSES (Mandatory)

At the election of the District and subject to availability of funds, District will purchase additional buses in increments of 25 units from a minimum of 75 to a maximum of 225 per year for a five year period commencing in 1987.

The contract price for the additional units will be based on the following multi-year procurement plan:

- (1) The adjusted LCC award price.
- (2) Adjustment of award price based on Producer Price Index Commodity Code 14-11-01. The calculation for determining the cost of buses would be as per the following example:
  - a. June 1986 Producer Price Index as covered under Commodity Code 14-11-01, Finished Goods Section, motor vehicle including coaches.

Unadjusted	348.2
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ADDENDUM NO. 6  
REVISED

BID NO. CA-90-X120-R

- b. Index at time of calculation based on averaging the final published index from the preceding year and all months preceding the actual award date.

1987	NOV	(FINAL)	356.2	
1987	DEC		356.1	
1988	JAN		356.4	
1988	FEB		356.6	
1988	MAR		356.5	
		AVERAGE	<u>356.4</u>	356.4

- c. Percentage increase/decrease to Base Price. (+) 1.024
- d. LCC Adjusted Price bid on 120 buses. \$165,000.00
- e. Adjusted price for 150 buses ordered in April, 1988. \$168,960.00

By execution below bidder agrees to furnish buses and spare parts similar to the 237 Diesel buses required under specification CA-90-X120-R in accordance with the multi-year procurement plan specified herein.

\_\_\_\_\_  
NAME OF COMPANY

\_\_\_\_\_  
BY (PRINT YOUR NAME)

\_\_\_\_\_  
SIGNATURE BY AUTHORIZED INDIVIDUAL

ADDENDUM #6

Revised

BID NO. CA-90-X120-R

SOLICITATION, OFFER & AWARD

1.23.8 OFFER

BIDDER'S STATEMENT

BIDDER: OUR OFFER IS AFFIRMED HERETO. It is understood that the SCRID's specifications and conditions set forth form part of our offer.

We specifically agree to keep this offer open for ninety days.

\_\_\_\_\_  
(COMPANY NAME)

\_\_\_\_\_  
(FULL MAILING ADDRESS)

\_\_\_\_\_  
(TELEPHONE)

\_\_\_\_\_  
(LEGAL NATURE OF BUSINESS ENTITY)

BY:

\_\_\_\_\_  
(TYPE NAME OF AUTHORIZED INDIVIDUAL)

\_\_\_\_\_  
(TITLE)

\_\_\_\_\_  
(SIGNATURE OF AUTHORIZED INDIVIDUAL)

DATE: \_\_\_\_\_

ADDENDUM #6

Revised

Part I - Attachment 1

237 EA. DIESEL POWERED BUSES - 40-FOOT HEAVY DUTY TRANSIT COACH

LCC Calculation Worksheet  
(To Be Completed By Bidder)

A. Base Price Life Cycle Cost Factor #1 (LCCF)

Part A will be completed by the District after opening the price proposal.

Indicate the prices A & B entered In Part I, Section 1.2 Offer on page 14 and 15.

A \_\_\_\_\_ + B \_\_\_\_\_ LCCF#1 \_\_\_\_\_

B. Life Cycle Cost Factor #2

Amounts Added for Life Cycle Costing Based on Fleet Standardization

B.1 District records for parts inventory, warehousing and mechanic training indicate that new buses which are not substantially similar to those already in the fleet, result in an incremental cost increase of \$3445 each over their service life. Accordingly, this extra cost associated with dissimilar buses and their subcomponents is added to the vehicle purchase price for purposes of Life Cycle Costings.

B.2 Bidder shall indicate which of the following systems descriptions are common to the bus bid on and other buses currently in the District's fleet. The District reserves the right to concur in or reject all such determinations. See Part I, Attachment 5 for a listing of systems or system components already in the District's fleet.

B.3 Add on Price for each Bus type with no common components: \$3445

- Deduct for similar engine \$1233 \_\_\_\_\_
- Deduct for similar transmission \$923 \_\_\_\_\_
- Deduct for similar axle and brakes \$615 \_\_\_\_\_
- Deduct for similar body components \$308 \_\_\_\_\_

- Deduct for similar A/C components \$246 (i.e. Compressor and Condenser if used)	_____
- Deduct for similar main AC alternator \$123	_____
- Other*	_____
Sub-total deducts	_____
Remaining Price Add On	_____

B.4 Calculate LCC standardization factor:

$$\frac{\text{Price Add On Per Bus for Standardization}}{\text{Price Add On Per Bus for Standardization}} \times 237 \text{ buses} = \text{LCCF \#2} \quad \underline{\hspace{2cm}}$$

\* Bidder shall make claim for any additional add on price reduction in writing at pre-bid conference. The District will advise all pre-bid conference attendees of any further add on price reduction items prior to bid opening date.

C. Life Cycle Cost Factor #3 - Passenger Capacity

40-foot buses typically provide 66 seated and standee positions per vehicle. Therefore, the 237 buses will accommodate up to 15,642 passengers.

Bidders shall state the number of their vehicles required to provide 15,642 passenger positions. Any number of more or fewer buses, or percent thereof rounded to the nearest tenth of a bus, different than the base of 237 buses shall be multiplied by the bidders per vehicle cost, including sales tax, import duties, ocean freight, and delivery charges. This cost adjustment factor shall be added to the base bid price. Standee positions shall be defined as a clear floor space of 1.0' x 1.5'. Standee space shall not overlap floor space required for foot space by seated passengers. Total passenger capacity shall not cause vehicle to exceed GWR. Bidders shall submit, with their LCC technical submission, a drawing illustrating seating positions including foot space and standee locations so defined above.

- A. Number of Buses to Equal 15,642 positions \_\_\_\_\_ = X
- B. 237 Buses - X = Difference in Buses \_\_\_\_\_ = Y
- C.  $Y \times \$ \frac{\text{bid cost per bus}}{\text{bid cost per bus}} = \text{LCCF \#3}$  \_\_\_\_\_

D. Life Cycle cost Factor #4 - Fuel Economy

The LCC fuel economy price adjustment shall be determined based on data to be provided by prospective bidders. The data source shall be bus manufacturer's documentation based on computer simulations or SAE Type II test using the duty cycle defined in Part I, Attachment 2.

Data provided to the bidder by the engine manufacturer for use on the computer model shall also be included with the technical submission.

The District may select at random three coaches from the first 15 coaches manufactured as a "typical sample" for fuel consumption verification testing. The coaches selected will be tested by a third party, independent testing agency in compliance with the SAE Type II test sequence to validate the data presented to the District by the manufacturer in (Z) \_\_\_\_\_ MPG. Should test data reveal the typical coach MPG is less than Z \_\_\_\_\_ MPG minus .2 MPG, the manufacturer will be responsible for the difference \_\_\_\_\_ MPG X 237 buses X 300,000 miles X \$1.00 per gallon \_\_\_\_\_ plus all costs incurred to test the coaches. Should the tests validate the Z \_\_\_\_\_ MPG minus .2 MPG, the District will be responsible for all testing costs.

LCC fuel economy will be based on 300,000 service life divided by manufacturer's estimated MPG = life time fuel use.

The base price will be increased by the life cycle fuel cost for bid evaluation purposes.

Service Life = 300,000 miles  
 Z = \_\_\_\_\_ MPG

$\frac{300,000 \text{ miles}}{Z}$  = Lifetime Fuel Use One Bus

Lifetime Fuel Use x \$1.00 per gallon x 237 buses = LCCF #4 \_\_\_\_\_

E. Life Cycle Cost Factor #5 - Preventive Maintenance Program (PMP)

Regular preventive maintenance is necessary to prolong a vehicle's useful life. However, it also results in a considerable portion of total maintenance costs. Therefore, it is the District's objective to purchase a vehicle designed to require the least costly preventive maintenance program over its useful life.



E.1 PMP activities are to be performed at 6,000 mile intervals.

(a) Specified PMP: 6,000 miles

$$\frac{\text{Labor}}{\text{Hrs}} \times \frac{\$28.00}{\text{Labor Rate}} = \frac{\text{Labor}}{\text{Cost}} + \frac{\text{Materials}}{\text{Cost}} = \frac{\text{Cost}}{\text{Per PMP}} \times \frac{100}{\# \text{ PMP For Bus Life}} = \frac{\text{PMP}}{\text{Total For Bus Life}}$$

PMP Cost One Bus x 237 Buses = LCCF #5 \_\_\_\_\_

E.2 Bidder shall provide, with the technical submission, copies of previously published maintenance manuals indicating PMP requirements. Technical submission shall also include itemized labor time required to complete each PMP task and related material cost.

F. Life Cycle Cost Factor #6 - Removal and Rebuild Costs (RRC)

It is necessary to remove and rebuild the engine, engine subassembly and components to achieve the specified life of the vehicle. This results in a considerable portion of the total life cycle costs. Therefore, it is the District's objective to purchase a vehicle designed to require the least costly maintenance over its useful life. To make this determination, the bidder shall provide: 1) Labor hours required to remove and replace the engine, engine subassembly or components, 2) Labor hours required to rebuild these units, 3) Parts required to recondition these units. These costs must be multiplied by the number of cycles required for rebuilding the components to achieve the 600,000 specified miles.

RRC cost one bus x 237 buses = LCCF #6 \_\_\_\_\_

Replace and Rebuild Costs (RRC)

	<u>Labor Hours</u>			<u>Labor Rate</u>	<u>Total</u>	<u>Parts Required Cost</u>	<u>Total</u>	<u>Life Cycle Frequency</u>
	<u>R&amp;R Labor</u>	<u>Rebuild Labor</u>	<u>Total Labor Hours</u>			<u>Rebuild Parts Cost</u>		
Engine Tune Up	___ hrs.		= ___ hrs.	x \$28.00 hr.	= \$ ___	+ \$ ___	= \$ ___	$\frac{X12}{50K} = \$$ ___
Engine	___ hrs.	+ ___ hrs.	= ___ hrs.	x \$28.00 hr.	= \$ ___	+ \$ ___	= \$ ___	$\frac{X2}{250K} = \$$ ___
Cylinder Head(s) 1 or 3	___ hrs.	+ ___ hrs.	= ___ hrs.	x \$28.00 hr.	= \$ ___	+ \$ ___	= \$ ___	$\frac{X2}{250K} = \$$ ___
Injectors	___ hrs.	+ ___ hrs.	= ___ hrs.	x \$28.00 hr.	= \$ ___	+ \$ ___	= \$ ___	$\frac{X2}{250K} = \$$ ___
Fuel Pump	___ hrs.	+ ___ hrs.	= ___ hrs.	x \$28.00 hr.	= \$ ___	+ \$ ___	= \$ ___	$\frac{X2}{250K} = \$$ ___
Transmission	___ hrs.	+ ___ hrs.	= ___ hrs.	x \$28.00 hr.	= \$ ___	+ \$ ___	= \$ ___	$\frac{X2}{250K} = \$$ ___
Main Alternator	___ hrs.	+ ___ hrs.	= ___ hrs.	x \$28.00 hr.	= \$ ___	+ \$ ___	= \$ ___	$\frac{X2}{250K} = \$$ ___
Radiator	___ hrs.	+ ___ hrs.	= ___ hrs.	x \$28.00 hr.	= \$ ___	+ \$ ___	= \$ ___	$\frac{X2}{250K} = \$$ ___
A/C Compressor	___ hrs.	+ ___ hrs.	= ___ hrs.	x \$28.00 hr.	= \$ ___	+ \$ ___	= \$ ___	$\frac{X2}{250K} = \$$ ___
A/C Condensor Motor	___ hrs.	+ ___ hrs.	= ___ hrs.	x \$28.00 hr.	= \$ ___	+ \$ ___	= \$ ___	$\frac{X2}{250K} = \$$ ___

G. Summary of LCC Factors

To determine the lowest bidder based on the LCC factors, the base bid shall be adjusted by LCCF #2 through #6. Bidders shall enter LCCF #2 through #6 below.

- 1. LCCF #1 = \$ Base Bid Price (To be Inserted By District) \$ \_\_\_\_\_
- 2. LCCF #2 = Standardization Price Adjustment \$ \_\_\_\_\_
- 3. LCCF #3 = Passenger Capacity Price Adjustment \$ \_\_\_\_\_
- 4. LCCF #4 = Fuel Economy Price Adjustment \$ \_\_\_\_\_
- 5. LCCF #5 = PMP Price Adjustment \$ \_\_\_\_\_
- 6. LCCF #6 = RRC Price Adjustment \$ \_\_\_\_\_

H. Factor Weights (LCC Price Adjusted)

The five LCC factors from item G above, excluding item 1, shall be entered below for weighing purposes in order to more accurately reflect their importance to the District. The factor weights used are based on the present cost of money, the relative impact of the factor on future operating costs, and the relative accuracy in quantifying each (see Part I, Attachment 4).

Bidders shall complete Factors 2 to 6 of the following calculation. The District will complete Factor 1, after the price proposal opening date, to determine the adjusted LCC bid price which shall be used for bid evaluation purposes.

LCCF #1	_____	x	50%	=	_____
LCCF #2	_____	x	4%	=	_____
LCCF #3	_____	x	5%	=	_____
LCCF #4	_____	x	30%	=	_____
LCCF #5	_____	x	7%	=	_____
LCCF #6	_____	x	4%	=	_____
<hr/>					
Total Adjusted LCC Price for 237 Buses (To Be Computed by District)			100%	=	_____ *

ADDENDUM #6  
Revised

Part I, Attachment 5

LIST OF SYSTEM COMPONENTS ALREADY IN DISTRICT'S FLEET

ENGINE

6V71 DDA  
8V71 DDA  
6V92 DDA  
903 Cummins  
3208 Caterpillar  
D-2566 M.A.N

TRANSMISSION

V731  
HT748  
VS2  
MT643  
MT643  
RENK - 874B

AXLE

Rockwell  
Eaton  
M.A.N.  
"S" Cam  
Wedge Brake

BODY

GMC RTS II  
GFC 870  
GMC 5307A  
Flxible III-CC  
AMG B  
Carpenter CBW-300  
Neoplan AN-44DA

AIR CONDITIONING COMPRESSOR

Trane  
Thermo King  
Carrier

ELECTRICAL (RELAYS, CIRCUIT BREAKERS)

Delco Remy  
Bosch  
Cutler-Hammer  
Cole  
Essex  
Ohio Electric  
Autolite

Revised

BID NO. CA-90-X120-R

PART I, ATTACHMENT 8

This form must be completed and attached to Bid unless a certified check is attached.

267 40-FOOT HEAVY DUTY TRANSIT COACHES

FOR THE SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT

BID BOND

KNOW ALL PEOPLE BY THESE PRESENTS, that we \_\_\_\_\_ as Principal, hereinafter called the Principal, and \_\_\_\_\_ a corporation duly organized under the laws of the State of \_\_\_\_\_ as Surety, hereinafter called the Surety, are held and firmly bound unto the SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT, as Obligee, hereinafter called the Obligee, in the sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for \_\_\_\_\_

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

SIGNED AND SEALED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 19\_\_\_\_

\_\_\_\_\_  
(Witness) \_\_\_\_\_  
(Principal) \_\_\_\_\_ (Seal)  
\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Witness) \_\_\_\_\_  
(Surety) \_\_\_\_\_ (Seal)  
\_\_\_\_\_  
(Title)

Revised

BID NO. CA-90-X120-R

PART I, ATTACHMENT 9

267 40-FOOT HEAVY DUTY TRANSIT COACHES

FAITHFUL PERFORMANCE BOND

KNOW ALL PEOPLE BY THESE PRESENTS:

That \_\_\_\_\_, as Principal, and

\_\_\_\_\_, as Surety, are held and firmly bound unto the SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT, as Obligee, in the just and full amount \_\_\_\_\_ for the

(words and figures)

payment whereby bind ourselves, our heirs, executors, administrators and assigns, jointly and severally, firmly by these presents.

Given under our hands and sealed with our seals this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

The condition of the foregoing obligation is such that, WHEREAS, the above-named Principal is about to enter into a contract with the Southern California Rapid Transit District whereby said Principal agrees to \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

as provided in said contract, which said contract is hereby referred to and made a part hereof to the same extent as if the same were herein specifically set forth;

NOW THEREFORE, if the said Principal shall well and truly do and perform all things agreed by it/him in said contract to be done and performed, then this obligation is to be void; otherwise to remain in full force and effect;

SPECIAL REQUIREMENTS - ATTACHMENT D

Bus Grade Methanol Fuel

	<u>Methanol Fuel</u> (1)
METHANOL, WT%	96.0
WATER, WT%	2.0
CHLORIDE, PPM	< 2
ORGANIC SULFUR, PPM	100
IRON, PPM	5
SODIUM, PPM	5
COLOR, APHA	250
HYDROCARBONS, WT% (2)	2.0
OTHER METALS, PPM	3

(1) THE CONTROLLING NUMBER IS METHANOL PURITY.  
THE WATER PLUS HYDROCARBON COMPONENTS SHOULD  
BE CONSIDERED AS A TOTAL

(2) GASOLINE/NAPHTHA RANGE



**SOUTHERN CALIFORNIA  
RAPID TRANSIT DISTRICT**

124 WEST 4TH STREET • LOS ANGELES, CALIFORNIA 90013 • TELEPHONE (213) 972-6158

John A. Dyer  
General Manager

**ADDENDUM**

covering

**CHANGE IN SPECIFICATIONS AND/OR PLANS**

Date Issued December 17, 1986 Addendum No. 7  
Date Effective December 17, 1986  
Bid No. CA-90-X120-R  
Contract 30 Methanol and 237 Diesel 40-Foot Transit Coaches

INTENT

1. This addendum is issued prior to receipt of bids to provide for modifications in plans and specifications. Acknowledgment of this addendum shall be made and cost of work included in bidder's proposal.
2. Page I-18 and I-19, Section 1.23.6 OPTION PRICING (Cont'd)  
Delete pages I-18 and I-19 in their entirety. Insert revised Page I-18 and I-19, attached.
3. Page 1 of 6, Part I, Attachment 1, LCC Calculation Worksheet  
Delete page 1 of 6 in its entirety. Insert revised page 1 of 6, attached.
4. Page 2 of 6, Part I, Attachment 1, LCC Calculation Worksheet  
Delete page 2 of 6 in its entirety. Insert revised page 2 of 6, attached.
5. Page 3 of 6, Part I, Attachment 1, LCC Calculation Worksheet  
Delete page 3 of 6 in its entirety. Insert revised page 3 of 6, attached.
6. Add new section identified as "Sample, LCC Calculation Worksheet."
7. All other terms and conditions remain the same.

Issued by: M. J. Watten



ADDENDUM NO. 7  
REVISED

BID NO. CA-90-X120-R

SOLICITATION OFFER & AWARD

OPTION PRICING CON'T  
1.23.6

Delivery for any option quantity shall be the same as that offered under the base contract. This delivery period shall begin on the date the District exercises this option. This option will not be used in evaluating the base bid.

1-30

Unit Price	\$ _____
6-1/2% Sales Tax	\$ _____
Delivery Charges	\$ _____
Import Duties	\$ _____
Ocean Freight	\$ _____
TOTAL	\$ _____

NOT TO BE CONSIDERED IN CONTRACT AWARD.

OPTION E - LONG TERM PURCHASE OF ADDITIONAL BUSES (Mandatory)

At the election of the District and subject to availability of funds, District will purchase additional diesel powered buses in increments of 25 units from a minimum of 75 to a maximum of 225 per year for a five year period commencing in 1987.

The contract price for the additional units will be based on the following multi-year procurement plan:

- (1) The base price shall include the unit price shown on page I-13 plus the itemized cost for the delivery, import duty and ocean freight and exclude sales tax and all other taxes.
- (2) Adjustment of unit price based on Producer Price Index Commodity Code 14-11-01. The calculation for determining the cost of buses would be as per the following example:
  - a. February 1987 Producer Price Index as covered under Commodity Code 14-11-01, Finished Goods Section, motor vehicle including coaches.

Unadjusted 348.2

ADDENDUM NO. 7  
REVISED

BID NO. CA-90-X120-R

- b. Index at time of calculation based on averaging the final published index from the preceding year and all months preceding the actual award date for the option buses.

1987	NOV	(FINAL)	356.2	
1987	DEC		356.1	
1988	JAN		356.4	
1988	FEB		356.6	
1988	MAR		356.5	
		AVERAGE	356.4	356.4

- c. Percentage increase/decrease to Base Price. (+) 1.024
- d. Base price on 237 diesel powered buses as defined in the preceding paragraph (1). \$165,000.00
- e. Adjusted price for 150 buses ordered in April, 1988. \$168,960.00

By execution below bidder agrees to furnish buses and spare parts similar to the 237 Diesel buses required under specification CA-90-X120-R in accordance with the multi-year procurement plan specified herein.

\_\_\_\_\_  
NAME OF COMPANY

\_\_\_\_\_  
BY (PRINT YOUR NAME)

\_\_\_\_\_  
SIGNATURE BY AUTHORIZED INDIVIDUAL

ADDENDUM #7

Revised

Part I - Attachment 1

237 EA. DIESEL POWERED BUSES - 40-FOOT HEAVY DUTY TRANSIT COACH

LCC Calculation Worksheet  
(To Be Completed By Bidder)

A. Base Price Life Cycle Cost Factor #1 (LCCF)

Part A will be completed by the District after opening the price proposal.

Indicate the prices A & B entered In Part I, Section 1.2 Offer on page 14 and 15.

A \_\_\_\_\_ + B \_\_\_\_\_ LCCF#1 \_\_\_\_\_

B. Life Cycle Cost Factor #2

Amounts Added for Life Cycle Costing Based on Fleet Standardization

B.1 District records for parts inventory, warehousing and mechanic training indicate that new buses which are not substantially similar to those already in the fleet, result in an incremental cost increase of \$3445 each over their service life. Accordingly, this extra cost associated with dissimilar buses and their subcomponents is added to the vehicle purchase price for purposes of Life Cycle Costings.

B.2 Bidder shall indicate which of the following systems descriptions are common to the bus bid on and other buses currently in the District's fleet. The District reserves the right to concur in or reject all such determinations. See Part I, Attachment 5 for a listing of systems or system components already in the District's fleet.

B.3 Add on Price for each Bus type with no common components: \$3445

- Deduct for similar engine \$1233 \_\_\_\_\_
- Deduct for similar transmission \$923 \_\_\_\_\_
- Deduct for similar axle and brakes \$612 \_\_\_\_\_
- Deduct for similar body components \$308 \_\_\_\_\_

REVISED

Part I - Attachment I

- Deduct for similar A/C components \$246  
(i.e. Compressor and Condenser if used) \_\_\_\_\_
- Deduct for similar main AC alternator \$123 \_\_\_\_\_
- Other\* \_\_\_\_\_
- Sub-total deducts \_\_\_\_\_
- Remaining Price Add On \_\_\_\_\_

B.4 Calculate LCC standardization factor:

$$\frac{\text{Price Add On Per Bus for Standardization}}{\text{Price Add On Per Bus for Standardization}} \times 237 \text{ buses} = \text{LCCF \#2}$$

\* Bidder shall make claim for any additional add on price reduction in writing at pre-bid conference. The District will advise all pre-bid conference attendees of any further add on price reduction items prior to bid opening date.

C. Life Cycle Cost Factor #3 - Passenger Capacity

40-foot buses typically provide 66 seated and standee positions per vehicle. Therefore, the 237 buses will accommodate up to 15,642 passengers.

Bidders shall state the number of their vehicles required to provide 15,642 passenger positions. Any number of more or fewer buses, or percent thereof rounded to the nearest tenth of a bus, different than the base of 237 buses shall be multiplied by the bidders per vehicle cost, including sales tax, import duties, ocean freight, and delivery charges. This cost adjustment factor shall be added to the base bid price. Standee positions shall be defined as a clear floor space of 1.0' x 1.5'. Standee space shall not overlap floor space required for foot space by seated passengers. Total passenger capacity shall not cause vehicle to exceed GWR. Bidders shall submit, with their LCC technical submission, a drawing illustrating seating positions including foot space and standee locations so defined above.

- A. Number of Buses to Equal 15,642 positions \_\_\_\_\_ = X
- B. X (+ or -) The number of buses required to accommodate 15,642 positions \_\_\_\_\_ = Y
- C. Y x \$ bid cost per bus = LCCF #3 \_\_\_\_\_

D. Life Cycle cost Factor #4 - Fuel Economy

The LCC fuel economy price adjustment shall be determined based on data to be provided by prospective bidders. The data source shall be bus manufacturer's documentation based on computer simulations or SAE Type II test using the duty cycle defined in Part I, Attachment 2.

Data provided to the bidder by the engine manufacturer for use on the computer model shall also be included with the technical submission.

The District may select at random three coaches from the first 15 coaches manufactured as a "typical sample" for fuel consumption verification testing. The coaches selected will be tested by a third party, independent testing agency in compliance with the SAE Type II test sequence to validate the data presented to the District by the manufacturer in (Z) \_\_\_\_\_ MPG. Should test data reveal the typical coach MPG (W) \_\_\_\_\_ is less than Z \_\_\_\_\_ MPG minus 0.2 MPG, the manufacturer will be responsible for the difference in lifetime (300,000 miles per bus) fuel cost plus all costs incurred to test the coach. The difference in lifetime fuel cost will be equal to:

$$\left( \frac{300,000}{W} - \frac{300,000}{Z-0.2} \right) \times \$1.00 \text{ per gallon} \times 237 \text{ buses}$$

Should the tests validate the Z \_\_\_\_\_ MPG minus 0.2 MPG, the District will be responsible for all costs incurred in the fuel consumption verification test.

LCC fuel economy will be based on 300,000 service life divided by manufacturer's estimated MPG = life time fuel use.

Life cycle fuel cost will be added to the base price for bid evaluation purposes.

Service Life = 300,000 miles for bid evaluation purposes.  
 Z = \_\_\_\_\_ MPG

$$\frac{300,000 \text{ miles}}{Z} = \text{Lifetime Fuel Use One Bus}$$

Lifetime Fuel Use x \$1.00 per gallon x 237 buses = LCCF #4 \_\_\_\_\_

E. Life Cycle Cost Factor #5 - Preventive Maintenance Program (PMP)

Regular preventive maintenance is necessary to prolong a vehicle's useful life. However, it also results in a considerable portion of total maintenance costs. Therefore, it is the District's objective to purchase a vehicle designed to require the least costly preventive maintenance program over its useful life.

ADDENDUM #7

Part I - Attachment 1

237 EA. DIESEL POWERED BUSES - 40-FOOT HEAVY DUTY TRANSIT COACH

LCC Calculation Worksheet  
(To Be Completed By Bidder)

A. Base Price Life Cycle Cost Factor #1 (LCCF)

Part A will be completed by the District after opening the price proposal.

Indicate the prices A & B entered In Part I, Section 1.2 Offer on page 14 and 15.

A 0 + B 0 LCCF#1 0

B. Life Cycle Cost Factor #2

Amounts Added for Life Cycle Costing Based on Fleet Standardization

B.1 District records for parts inventory, warehousing and mechanic training indicate that new buses which are not substantially similar to those already in the fleet, result in an incremental cost increase of \$3445 each over their service life. Accordingly, this extra cost associated with dissimilar buses and their subcomponents is added to the vehicle purchase price for purposes of Life Cycle Costings.

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B.3 Add on Price for each Bus type with no common components: \$3445

- Deduct for similar engine \$1233	<u>-\$1,233</u>
- Deduct for similar transmission \$923	<u>-\$ 923</u>
- Deduct for similar axle and brakes \$612	<u>-0-</u>
- Deduct for similar body components \$308	<u>-\$ 308</u>

- Deduct for similar A/C components \$246 (i.e. Compressor and Condenser if used)	<u>-\$ 246</u>
- Deduct for similar main AC alternator \$123	<u>-\$ 123</u>
- Other*	<u>0</u>
Sub-total deducts	<u>(2833)</u>
Remaining Price Add On	<u>\$ 612</u>

B.4 Calculate LCC standardization factor:

$$\frac{\$612}{\text{Price Add On Per Bus for Standardization}} \times 237 \text{ buses} = \text{LCCF \#2} \quad \underline{\$145,044}$$

\* Bidder shall make claim for any additional add on price reduction in writing at pre-bid conference. The District will advise all pre-bid conference attendees of any further add on price reduction items prior to bid opening date.

C. Life Cycle Cost Factor #3 - Passenger Capacity

40-foot buses typically provide 66 seated and standee positions per vehicle. Therefore, the 237 buses will accommodate up to 15,642 passengers.

Bidders shall state the number of their vehicles required to provide 15,642 passenger positions. Any number of more or fewer buses, or percent thereof rounded to the nearest tenth of a bus, different than the base of 237 buses shall be multiplied by the bidders per vehicle cost, including sales tax, import duties, ocean freight, and delivery charges. This cost adjustment factor shall be added to the base bid price. Standee positions shall be defined as a clear floor space of 1.0' x 1.5'. Standee space shall not overlap floor space required for foot space by seated passengers. Total passenger capacity shall not cause vehicle to exceed GWR. Bidders shall submit, with their LCC technical submission, a drawing illustrating seating positions including foot space and standee locations so defined above.

A. Number of Buses to Equal 15,642 positions	<u>237</u>	= X
B. X (+ or -) The number of buses required to accommodate 15,642 positions	<u>0</u>	= Y
C. Y x \$ <u>0</u> bid cost per bus		= LCCF #3
	<u>0</u>	

## D. Life Cycle cost Factor #4 - Fuel Economy

The LCC fuel economy price adjustment shall be determined based on data to be provided by prospective bidders. The data source shall be bus manufacturer's documentation based on computer simulations or SAE Type II test using the duty cycle defined in Part I, Attachment 2.

Data provided to the bidder by the engine manufacturer for use on the computer model shall also be included with the technical submission.

The District may select at random three coaches from the first 15 coaches manufactured as a "typical sample" for fuel consumption verification testing. The coaches selected will be tested by a third party, independent testing agency in compliance with the SAE Type II test sequence to validate the data presented to the District by the manufacturer in (Z) 4.1 MPG. Should test data reveal the typical coach MPG (W) 3.8 is less than Z 4.1 MPG minus 0.2 MPG, the manufacturer will be responsible for the difference in lifetime (300,000 miles per bus) fuel cost plus all costs incurred to test the coach. The difference in lifetime fuel cost will be equal to:

$$\left( \frac{300,000}{W} - \frac{300,000}{Z-0.2} \right) \times \$1.00 \text{ per gallon} \times 237 \text{ buses} = \$479,757$$

Should the tests validate the Z 4.1 MPG minus 0.2 MPG, the District will be responsible for all costs incurred in the fuel consumption verification test.

LCC fuel economy will be based on 300,000 service life divided by manufacturer's estimated MPG = life time fuel use.

Life cycle fuel cost will be added to the base price for bid evaluation purposes.

Service Life = 300,000 miles for bid evaluation purposes.

Z = 4.1 MPG

$\frac{300,000 \text{ miles}}{Z}$  = Lifetime Fuel Use One Bus

Lifetime Fuel Use x \$1.00 per gallon x 237 buses = LCCF #4 \$17,341,463

## E. Life Cycle Cost Factor #5 - Preventive Maintenance Program (PMP)

Regular preventive maintenance is necessary to prolong a vehicle's useful life. However, it also results in a considerable portion of total maintenance costs. Therefore, it is the District's objective to purchase a vehicle designed to require the least costly preventive maintenance program over its useful life.



E.1 PMP activities are to be performed at 6,000 mile intervals.

(a) Specified PMP: 6,000 miles

$$\frac{7}{\text{Labor Hrs}} \times \frac{\$28.00}{\text{Labor Rate}} = \frac{\$196.00}{\text{Labor Cost}} + \frac{\$60.00}{\text{Materials}} = \frac{\$156.00}{\text{Cost Per PMP}} \times \frac{100}{\% \text{ PMP For Bus Life}} = \frac{\$15,600}{\text{PMP Total For Bus Life}}$$

$$\text{PMP Cost One Bus} \times 237 \text{ Buses} = \text{LCCF \#5} \quad \underline{\underline{\$3,697,200}}$$

E.2 Bidder shall provide, with the technical submission, copies of previously published maintenance manuals indicating PMP requirements. Technical submission shall also include itemized labor time required to complete each PMP task and related material cost.

F. Life Cycle Cost Factor #6 - Removal and Rebuild Costs (RRC)

It is necessary to remove and rebuild the engine, engine subassembly and components to achieve the specified life of the vehicle. This results in a considerable portion of the total life cycle costs. Therefore, it is the District's objective to purchase a vehicle designed to require the least costly maintenance over its useful life. To make this determination, the bidder shall provide: 1) Labor hours required to remove and replace the engine, engine subassembly or components, 2) Labor hours required to rebuild these units, 3) Parts required to recondition these units. These costs must be multiplied by the number of cycles required for rebuilding the components to achieve the 600,000 specified miles.

$$\text{RRC cost one bus} \times 237 \text{ buses} = \text{LCCF \#6} \quad \underline{\underline{\$3,072,468}}$$

## Replace and Rebuild Costs (RRC)

	<u>Labor Hours</u>		<u>Labor Rate</u>	<u>Total</u>	<u>Parts Required Cost</u>		<u>Life Cycle Frequency</u>
	<u>R&amp;R Labor</u>	<u>Rebuild Labor</u>			<u>Total Labor Hours</u>	<u>Rebuild Parts Cost</u>	
Engine Tune Up	<u>8</u> hrs.			= <u>8</u> hrs. x \$28.00 hr. = \$ <u>224</u>	+ \$ <u>125</u>	= \$ <u>349</u>	$\frac{X12}{50K} = \$4188$
Engine	<u>4</u> hrs.	+ <u>40</u> hrs.		= <u>44</u> hrs. x \$28.00 hr. = \$ <u>1232</u>	+ \$ <u>600</u>	= \$ <u>1832</u>	$\frac{X2}{250K} = \$3664$
Cylinder Head(s) 1 or 3	<u>1</u> hrs.	+ <u>3</u> hrs.		= <u>4</u> hrs. x \$28.00 hr. = \$ <u>112</u>	+ \$ <u>50</u>	= \$ <u>162</u>	$\frac{X2}{250K} = \$324$
Injectors	<u>1</u> hrs.	+ <u>1</u> hrs.		= <u>2</u> hrs. x \$28.00 hr. = \$ <u>56</u>	+ \$ <u>40</u>	= \$ <u>96</u>	$\frac{X2}{250K} = \$192$
Fuel Pump	<u>1</u> hrs.	+ <u>1</u> hrs.		= <u>2</u> hrs. x \$28.00 hr. = \$ <u>56</u>	+ \$ <u>35</u>	= \$ <u>91</u>	$\frac{X2}{250K} = \$182$
Transmission	<u>3</u> hrs.	+ <u>20</u> hrs.		= <u>23</u> hrs. x \$28.00 hr. = \$ <u>644</u>	+ \$ <u>300</u>	= \$ <u>944</u>	$\frac{X2}{250K} = \$1888$
Main Alternator	<u>1</u> hrs.	+ <u>2</u> hrs.		= <u>3</u> hrs. x \$28.00 hr. = \$ <u>84</u>	+ \$ <u>60</u>	= \$ <u>144</u>	$\frac{X2}{250K} = \$288$
Radiator	<u>5</u> hrs.	+ <u>4</u> hrs.		= <u>9</u> hrs. x \$28.00 hr. = \$ <u>252</u>	+ \$ <u>200</u>	= \$ <u>452</u>	$\frac{X2}{250K} = \$904$
A/C Compressor	<u>3</u> hrs.	+ <u>7</u> hrs.		= <u>10</u> hrs. x \$28.00 hr. = \$ <u>280</u>	+ \$ <u>200</u>	= \$ <u>480</u>	$\frac{X2}{250K} = \$960$
A/C Condensor Motor	<u>2</u> hrs.	+ <u>2</u> hrs.		= <u>4</u> hrs. x \$28.00 hr. = \$ <u>112</u>	+ \$ <u>75</u>	= \$ <u>187</u>	$\frac{X2}{250K} = \$374$
							\$12,964

x 237 Coaches  
Total MRRRC = \$3,072,468

## G. Summary of LCC Factors

To determine the lowest bidder based on the LCC factors, the base bid shall be adjusted by LCCF #2 through #6. Bidders shall enter LCCF #2 through #6 below.

1. LCCF #1 = \$ Base Bid Price (To be Inserted By District)	\$ <u>0</u>
2. LCCF #2 = Standardization Price Adjustment	\$ <u>145,044</u>
3. LCCF #3 = Passenger Capacity Price Adjustment	\$ <u>0</u>
4. LCCF #4 = Fuel Economy Price Adjustment	\$ <u>17,341,463</u>
5. LCCF #5 = PMP Price Adjustment	\$ <u>3,697,200</u>
6. LCCF #6 = RRC Price Adjustment	\$ <u>3,072,468</u>

## H. Factor Weights (LCC Price Adjusted)

The five LCC factors from item G above, excluding item 1, shall be entered below for weighing purposes in order to more accurately reflect their importance to the District. The factor weights used are based on the present cost of money, the relative impact of the factor on future operating costs, and the relative accuracy in quantifying each (see Part I, Attachment 4).

Bidders shall complete Factors 2 to 6 of the following calculation. The District will complete Factor 1, after the price proposal opening date, to determine the adjusted LCC bid price which shall be used for bid evaluation purposes.

LCCF #1	<u>0</u>	x	50%	=	<u>0</u>
LCCF #2	<u>145,044</u>	x	4%	=	<u>5,802</u>
LCCF #3	<u>0</u>	x	5%	=	<u>0</u>
LCCF #4	<u>17,341,463</u>	x	30%	=	<u>5,202,439</u>
LCCF #5	<u>3,697,200</u>	x	7%	=	<u>258,804</u>
LCCF #6	<u>3,072,468</u>	x	4%	=	<u>122,899</u>
Total Adjusted LCC Price for 237 Buses (To Be Computed by District)					<u>100% = *</u>



**SOUTHERN CALIFORNIA  
RAPID TRANSIT DISTRICT**

124 WEST 4TH STREET • LOS ANGELES, CALIFORNIA 90013 • TELEPHONE (213) 972-6158

John A. Dyer  
General Manager

**ADDENDUM**

covering

**CHANGE IN SPECIFICATIONS AND/OR PLANS**

Date Issued December 26, 1986 Addendum No. 8  
Date Effective December 26, 1986  
Bid No. CA-90-X120-R  
Contract 30 Methanol and 237 Diesel Coaches

---

INTENT

1. This addendum is issued prior to receipt of bids to provide for modifications in plans and specifications. Acknowledgment of this addendum shall be made and cost of work included in bidder's proposal.
2. The bid opening date is hereby delayed from January 6, 1987 and rescheduled for January 20, 1987 at 10:00 a.m.

Issued by: M. Z. Walter ⊕



**SOUTHERN CALIFORNIA  
RAPID TRANSIT DISTRICT**

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John A. Dyer  
General Manager

**ADDENDUM**

covering

**CHANGE IN SPECIFICATIONS AND/OR PLANS**

Date Issued December 30, 1986 Addendum No. 9  
Date Effective December 30, 1986  
Bid No. CA-90-X120-R  
Contract 30 Methanol and 237 Diesel Coaches

INTENT

1. This addendum is issued prior to receipt of bids to provide for modifications in plans and specifications. Acknowledgment of this addendum shall be made and cost of work included in bidder's proposal.
2. Page 1-3, Section 1.5, Bid Requirements:
  - 1) Revise LCC Technical Submittal due date to read: January 20, 1987.
  - 2) Revise sealed price bid opening date to read: February 3, 1987.
3. All other terms and conditions remain the same.

Issued by: M Z Walter



**SOUTHERN CALIFORNIA  
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John A. Dyer  
General Manager

**ADDENDUM**

covering

**CHANGE IN SPECIFICATIONS AND/OR PLANS**

Date Issued January 16, 1987 Addendum No. 10  
Date Effective January 16, 1987  
Bid No. CA-90-X120-R  
Contract 30 Methanol and 237 Diesel 40-Foot Transit Coaches

INTENT

1. This addendum is issued prior to receipt of bids to provide for modifications in plans and specifications. Acknowledgment of this addendum shall be made and cost of work included in bidder's proposal.
2. Page 1-3, Section 1.5, BID REQUIREMENTS
  - 1) Revise bid submittal due date as follows: Sealed bid package consisting of the LCC Technical Proposal and the sealed bid prices are due on or before 10:00 a.m., February 23, 1987.
  - 2) Revise sealed price bid opening date to read: March 9, 1987.
3. All other terms and conditions remain the same.

Issued by: M3Walters



# SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT

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John A. Dyer  
General Manager

## ADDENDUM

covering

### CHANGE IN SPECIFICATIONS AND/OR PLANS

Date Issued January 23, 1987 Addendum No. 11  
 Date Effective January 23, 1987  
 Bid No. CA-90-X120-R  
 Contract 30 Methanol and 237 Diesel 40-Foot Transit Coaches

#### INTENT

1. This addendum is issued prior to receipt of bids to provide for modifications in plans and specifications. Acknowledgment of this addendum shall be made and cost of work included in bidder's proposal.
2. Page 1-5, Section 1.10, PAYMENT SCHEDULE

Revise Section to read: The District shall make payment by check for the contract price within 30 days after final acceptance of each coach. However, 3% of the total contract price shall be withheld from the final two invoices covering a minimum of ten (10) coaches and paid one (1) year after final acceptance of the last bus in the form of a one year note to bear interest at the prevailing tax free rate at date of note. This action will permit the District to participate in the benefits of a safe harbor lease.

Contractor's invoices for coaches, spare parts, and/or equipment shall be submitted to the procuring Agency 30 calendar days prior to each delivery.

The Contractor shall invoice in maximum lots of five coaches. Each invoice shall include:

Contract Number	Line item number invoiced
Number of spare parts/equipment invoiced, if applicable	Model and serial number of coach invoiced, if applicable
Unit or total prices by line item number	Total invoice amount

Issued by: *M. J. Waters*

3. Page 1-34, Section 2.44, FLEET DEFECTS

Revise Section to Read: "In the event of a breach of the warranty requirements set forth in Section IV, 1.6, et seq. (fleet defects) causing coaches to be out of service for repairs, the contractor, in addition to all warranty services, and costs thereof, shall pay to the District as liquidated damages \$100.00/per day/per coach for the period that the coach is out of service. The total amount for liquidated damages due to fleet defects shall not exceed one-million dollars (\$1,000,000.00).

As an alternate, the contractor may provide a substitute coach in good working condition, suitable for rapid transit service, for every day that the defective coach is out of service. If monies are still due and owing, or shall become due and owing from the District to the contractor, the damages provided for hereunder shall be deducted therefrom."

4. Part I - Attachment 1, Page 3 of 6, Section D - Life Cycle Cost Factor No. 4 Fuel Economy

Delete Life Cycle Cost Factor No. 4.

5. Page I-17, Section 1.23.6, OPTION PRICING

Bidders are to include with their bid package the attached bid form identified as "OPTION F - ADDITIONAL METHANOL BUSES".

6. Page II-47, Section 2.6.4.1, ELECTRONIC DESTINATION SIGNS

Insert the following Section: The Contractor shall equip all buses with Vultron BVK 10900 Electronic Destination Sign Systems. It shall consist of a seven inch front sign, a three inch side sign, a driver's message monitor and display unit and interconnecting harness and cabling.

The visibility of the headsign should enable a person with 20/20 vision to identify all characters from a minimum of 200 feet during daylight hours and illuminated so that night vision is no less than 150 feet. The side sign shall have a minimum visibility of 50 feet during the day and 30 feet at night. Both signs shall have equal readability at points 60 degrees on each side of a line drawn perpendicular to the center of the display. Ninety-five percent of the headsign shall be readable to a person with 20/20 vision and average height at a point no more than six feet from the front of the bus. The display modules must be capable of producing "double bold" characters and both side and headsigns must display the same messages.

The driver's message monitor shall be equipped with "LA Controls", separate thumbwheel switches for route numbers and destination codes. The interior display shall only be visible when a push to operate switch is activated.



The sign shall operate on standard 24 or 12 volt DC power and shall only operate when the master switch is in the "ON" position. When the switch is turned off, all dots must show black within 15 seconds.

A remote emergency switch (customer-supplied) capability shall be provided that will display an emergency message on the exterior of the vehicle. This message will not appear on the driver's message monitor.

The sign system will be capable of displaying up to 4,000 fifteen character lines of information. The system shall be capable of sequencing the display from 1.5 to 10 seconds. The District will furnish the Contractor with a master list of destinations and destination codes. The Contractor or sign vendor shall install the programmed EPROMS using ZIF sockets.

The Contractor will agree to make up to two changes each year to the master EPROMS at no cost to the District for a maximum of five years. The District will be responsible for duplicating the revised EPROMS and installing them on the coach equipment.

The Contractor will agree to furnish technical documentation and drawings to support the maintenance and depot repair of the sign electronic sub-assemblies. The Contractor will provide spare parts to support the repair of the sign system at a reasonable cost and lead time. All parts, including the display dots shall have a warranty period of not less than two years.

7. All other terms and conditions remain the same.

REVISED

SOLICITATION OFFER & AWARD  
OPTION PRICING

1.23.6

OPTION F - ADDITIONAL METHANOL BUSES

Bidder shall state price to furnish 1 to 5 additional methanol powered buses to be shipped to and paid for by the Regional Transportation District (RID), Denver, Colorado. Buses are to be the same as those offered under the base contract; however, it is anticipated that there may be some minor deviations such as exterior and interior color schemes, etc. The quantity of buses shall be determined at the time the option is exercised.

Bidder's pricing for the option quantity shall be from the date of award by the SCRID District's Board of Directors of the base contract. RID Denver reserves the right to exercise this option in its own best interest at any time during the 90 day period. If the option is exercised, a separate contract will be executed between RID Denver and the successful bidder.

Delivery period for any option quantity shall be the same as that offered under the base contract. This delivery period shall begin on the date the RID Denver exercises this option. This option will not be used in evaluating the base bid.

1 to 5

UNIT PRICE	\$ _____
DELIVERY CHARGES (Denver, Colorado)	\$ _____
IMPORT DUTIES	\$ _____
OCEAN FREIGHT	\$ _____
TOTAL	\$ _____

BIDDER'S STATEMENT:

OUR OFFER IS AFFIRMED HERETO. It is understood that the Southern California Rapid Transit District specifications and conditions set forth on proposal sheets form part of our offer.

We specifically agree to keep this offer open for 90 days after award of the base contract.

FIRM \_\_\_\_\_

BY \_\_\_\_\_  
TYPE OR PRINT YOUR NAME

SIGNED BY \_\_\_\_\_

TITLE \_\_\_\_\_

TELEPHONE NO. ( ) \_\_\_\_\_

DATE \_\_\_\_\_

READ CAREFULLY ALL PARAGRAPHS - SIGN AND RETURN COPY WITH YOUR BID.



**SOUTHERN CALIFORNIA  
RAPID TRANSIT DISTRICT**

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John A. Dyer  
General Manager

**ADDENDUM**

covering

**CHANGE IN SPECIFICATIONS AND/OR PLANS**

Date Issued February 16, 1987 Addendum No. 12  
 Date Effective February 16, 1987  
 Bid No. CA-90-X120-R  
 Contract 30 Methanol and 237 Diesel 40-foot Transit Coaches

INTENT

1. This addendum is issued prior to receipt of bids to provide for modifications in plans and specifications. Acknowledgment of this addendum shall be made and cost of work included in bidder's proposal.
2. Item 26, Addendum No. 6 dated December 9, 1986  
re: Section 2.1.5.1, HEIGHT  
 Edit the value in the fifth line to read: "plus or minus .5°"
3. Page II-52, Section 3.1.1.1, POWER REQUIREMENTS  
 Add the following paragraph: The ZF transmission is an approved propulsion system component.
4. All other terms and conditions remain the same.

Issued by: M. J. Walters



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John A. Dyer  
General Manager

**ADDENDUM**

covering

**CHANGE IN SPECIFICATIONS AND/OR PLANS**

Date Issued February 20, 1987 Addendum No. 13  
 Date Effective February 20, 1987  
 Bid No. CA-90-X120-R  
 Contract 30 Methanol and 237 Diesel 40-Foot Transit Coaches

INTENT

1. This addendum is issued prior to receipt of bids to provide for modifications in plans and specifications. Acknowledgment of this addendum shall be made and cost of work included in bidder's proposal.
2. Page I-3, Section 1.5, BID REQUIREMENTS
  - 1) Revise bid submittal due date as follows: Sealed bid package consisting of the LCC Technical Proposal and the sealed bid prices are due on or before 10:00 a.m., March 9, 1987.
  - 2) Revise sealed price bid opening date to read: March 23, 1987.
3. All other terms and conditions remain the same.

AUG 30 '90

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Addendum

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Issued by: *Maguard*