

**STATUS OF ENVIRONMENTAL
MITIGATION MEASURES FOR
LOS ANGELES METRO (RED LINE) PROJECT
SEGMENTS 2 & 3**

20th EDITION, JUNE 1995

Prepared by:

Los Angeles County Metropolitan Transportation Authority
818 West Seventh Street
Los Angeles, CA 90017

for the
Federal Transit Administration
U.S. Department of Transportation

TF
200
.S72
E423
1995
Jun
20th

28 620576

**STATUS OF ENVIRONMENTAL
MITIGATION MEASURES FOR
LOS ANGELES METRO (RED LINE) PROJECT**

SEGMENTS 2 & 3

20th EDITION, JUNE 1995

Prepared by:

Los Angeles County Metropolitan Transportation Authority
818 West Seventh Street
Los Angeles, CA 90017

for the
Federal Transit Administration
U.S. Department of Transportation

TABLE OF CONTENTS

Special Introduction.....	1
Introduction.....	1
Background.....	3
Consolidated Excavation Site Mitigation Monitoring Program.....	3
MTA Construction Staff Recommendation.....	4
Mitigation Measures Status Report References.....	4
Organization and Format of the Report.....	5
Summary Status of Mitigation Measures and Audits.....	7
Mitigation Measure Status Report Audit Summary for Quarter 1, 1995.....	10
Mitigation Measure Status Report Audit Summary for Quarter 2, 1995.....	28
Mitigation Measures Closed During Reporting Period.....	36
Status of Environmental Mitigation Measures.....	37
Transportation and Parking.....	37
Land Use and Development.....	56
Economic and Fiscal.....	78
Land Acquisition and Displacement.....	83
Social and Community.....	85
Safety and Security.....	86
Aesthetics.....	96
Noise and Vibration.....	98
Energy.....	117
Sub-Surface Conditions.....	120
Biology.....	134
Construction.....	136
Cultural Resources.....	164
Light and Glare.....	171
Air Quality.....	172
Hydrology and Groundwater.....	175
Preexisting or Other Hazardous Materials.....	176
Utilities.....	178
Appendix - Glossary of Acronyms.....	179

**STATUS OF ENVIRONMENTAL MITIGATION MEASURES
FOR LOS ANGELES METRO RED LINE PROJECT
SEGMENTS 2 & 3**

SPECIAL INTRODUCTION

On April 1, 1993, by mandate of State legislation (AB152), the Los Angeles County Transportation Commission (LACTC) and the Southern California Rapid Transit District (SCRTD) were merged into one agency, the Los Angeles County Metropolitan Transportation Authority (MTA). This new agency combines all the duties and obligations of the LACTC and the SCRTD under one governing board made up of 13 voting members. The Rail Construction Corporation (RCC) was formerly the construction subsidiary of the former LACTC. MTA is made up of three main groups, policy-making, operations (SCRTD), and MTA Construction (formerly RCC).

For the purposes of this report, all references to SCRTD, the District, or Operations have been changed to MTA Operations. All references to LACTC and the Commission have been changed to the MTA and the Authority.

INTRODUCTION

The Los Angeles Metro Red Line Project, a 17.3-mile standard rail rapid transit system shown in Figure 1, is the central link of a 400-mile county-wide rail transit system, approved by Los Angeles County voters as Proposition A in 1980. The first 4.4 miles of this project, from the yards and shops near Union Station to the Wilshire/Alvarado Station, is called Minimum Operable (MOS) Segment 1 (Segment 1) and is now in operation. The next 6.7 mile segment of the project (Segment 2), the main subject of early editions of this report, runs west from the Wilshire/Alvarado Station with one branch running along Wilshire Boulevard and terminating at the Wilshire/Western Station and another branch running north on Vermont Avenue and then west on Hollywood Boulevard and terminating at the Hollywood/Vine Station. The third Segment of the Project (Segment 3, North Hollywood) which is 6.3 miles, runs west from the Hollywood/Vine Station to the Hollywood/Highland Station, then runs north and terminates at the North Hollywood Station (see Figure 1). This report does not contain mitigation measures pertaining to Segment 3 Mid-Cities. The MTA has changed the designation of the components of the project. MOS-2 has been renamed Segment 2 and MOS-3 has been renamed Segment 3. Metro Red Line is thus composed of Segments 1, 2 and 3.

The terms of the Full Funding Grant Agreement (FFGA) for federal financing of the Segments 2 and 3 contract requires the preparation of a Mitigation Measures Status Report (MMSR), similar to the report required by the federal funding agreement for Segment 1. This report has been prepared in fulfillment of the Segments 2 and 3 between the Federal Transit Administration (FTA) and the MTA signed April 10, 1990. This MMSR satisfies Section 3 of the FFGA agreement.

BACKGROUND

The Metro Red Line Project was adopted and approved for construction in December 1983. However, a methane gas explosion and fire near Third Street and Fairfax Avenue resulted in the U.S. Congress passing a resolution in December 1985 requiring MTA to study the potential methane gas risk relating to the adopted Metro Rail alignment beyond Segment 1 and to avoid tunneling into or through areas identified as "potential risk" or "potential high risk" zones. A Los Angeles City Task Force report, dated June 10, 1985, identified these zones.

As a result, the project beyond Segment 1 was revised and a new Final Supplemental Environmental Impact Statement and Subsequent Environmental Impact Report (SEIS/SEIR) was published in July 1989.

The Segments 2 and 3 Project and environmental mitigation's associated with this project were adopted by the MTA in 1989. The environmental mitigation measures contained in the Final SEIS/SEIR have also been incorporated into the Segments 2 and 3 FFGA, by reference. The FFGA requires that these mitigation measures be implemented as part of the implementation of the Segments 2 and 3 Metro Red Line Project. The FFGA also requires that where options exist, FTA will be consulted to reach agreement on specific measures to be implemented. FTA requires that the quarterly review meetings be the forum to report on the progress of implementation of mitigation measures and to reach decisions on mitigation options still under consideration. FTA also requires that no mitigation measure be withdrawn or substantially changed without its express written approval. Commencing with the 3rd quarter report (September 1994), a Mitigation Measure Audit Program was initiated to ensure implementation of the respective mitigation measures. A summary is provided in this report.

CONSOLIDATED EXCAVATION SITE MITIGATION MONITORING PROGRAM

Three excavation sites for the tunnels of the Vermont/Hollywood leg of Segment 2 of the Metro Red Line have been consolidated into one site in the north parking lot of Barnsdall Park near the intersection of Hollywood Boulevard and Vermont Avenue. The excavation of tunnels for Segment 2 of the Metro Red Line is on the critical path of the project and directly affects its 1998 Revenue Operation Date. Therefore, if the approval or execution of this project is delayed it will cause a day-for-day delay in the opening of the Vermont/Hollywood branch of Segment 2 at the Hollywood/Vine Station.

ORGANIZATION AND FORMAT OF THE REPORT

The next section, **Summary Status of Mitigation Measures and Audits**, provides a series of tables which summarize the status of current mitigation measures. The tables show which measures have been audited in the current quarter and those scheduled for an audit next quarter. The following section, **Mitigation Measure Status Report Audit Summary**, describes each mitigation subject and the audit results of that subject. Audit dates are also given. The next section, **Mitigation Measures Closed During Reporting Period**, provides a list of mitigation measures that have been completed and for which no further action is required. These measures will be dropped from subsequent reports. Previous MMSR editions can be consulted for review of these measures. The final section of the report, **Status of Environmental Mitigation Measures**, provides a detailed description of the status of each mitigation measure. Mitigation measures are grouped into the following major categories (abbreviations also shown):

<u>Category</u>	<u>Abbreviation</u>
Transportation and Parking	T&P
Land Use and Development	LU&D
Economic and Fiscal	E&F
Land Acquisition and Displacement	LA&D
Social and Community	S&C
Safety and Security	S&S
Aesthetics	A
Noise and Vibration	N&V
Energy	E
Sub-Surface Conditions	SSC
Biology	B
Construction	C
Cultural Resources	CR
Light & Glare	L&G
Air Quality	AQ
Hydrology & Ground Water	H&G
Hazardous Materials	HM
Utilities	UTI

Each adopted mitigation measure is assigned a number within the major categories. Each numbered mitigation measure is followed by a reference to the document(s) in which the measure is required, the document which implements the measure, the status of implementing the measure, and future actions needed.

In the summary status section, dates are shown for either estimated or actual completion dates of each mitigation measure. Each measure contains:

- A. Reference Section, indicating in which of the above environmental documents the mitigation measures are found;
- B. Implementation Section, indicating what contract, permit, correspondence, procedure manual, or agreement will implement the mitigation measure;

SUMMARY STATUS OF MITIGATION MEASURES AND AUDITS

The following tables exhibit the current status of all Segment 2 & 3 mitigation measures. Measures selected for a 3rd Quarter 1995 compliance audit have been denoted with a "⊖".

Mitigation Measure	Date Audit Conducted		Est. Completion Date	
	SEG 2	SEG 3 N. Hollywood	SEG 2	SEG 3 N. Hollywood
T&P1			1998	2001
T&P2			1998	2001
T&P3			1996	NA
T&P4			1998	NA
T&P5			1998	NA
T&P6	6/9/95		1998	NA
T&P7			NA	1998
T&P8		6/2/95	NA	1995
T&P9	⊖	⊖	1995	2000
T&P10			1998	2001
T&P11	12/23/94		1996	NA
LU&D1			1998	2001
LU&D2			1996	1996
LU&D3			1996	1996
LU&D4			1996	1996
LU&D5			1996	NA
LU&D6			1996	1996
LU&D7	5/22/95	5/22/95	1996	1996
LU&D8		5/23/95	NA	1996
LU&D9			1996	1996
LU&D10			1996	NA
LU&D11			1996	NA
LU&D12			1997	NA
E&F1	⊖	⊖	95-96	95-96
E&F2			2005	2010
E&F3			1996	1996
LA&D1		⊖	1994*	1995
LA&D2			1996	NA
S&C1	⊖	⊖	95-96	95-96

* Implementation has concluded. Measure will be closed out when revenue operations have been completed.

SUMMARY STATUS OF MITIGATION MEASURES AND AUDITS

Mitigation Measure	<u>Date Audit Conducted</u>		<u>Est. Completion Date</u>	
	SEG 2	SEG 3	SEG 2	SEG 3
	N. Hollywood		N. Hollywood	
C9			1998	1998
C10	3/9/95	7/7/95	1999	1999
C11	6/7/95	7/7/95	1997	1999
C12			1999	1999
C13			1999	1999
C14			1998	1998
CR1	12/23/94	12/23/94	1996	2000
CR2			1996	NA
CR3			1996	NA
L&G1	6/27/95		1998	NA
AQ1	6/27/95		1996	NA
H&G1	6/5/95	7/7/95	1999	1999
HM1	6/7/95		1997	2000
UT1	⊕		1995	NA

NA: Indicates mitigation measure is not applicable to that segment.

**MITIGATION MEASURE STATUS REPORT AUDIT SUMMARY
FOR QUARTER 1, 1995***

* Audits for these mitigation measures were conducted in Quarter 1 & 2.

**Mitigation Measure Status Report Audit Summary
For Sub-Surface Conditions 4 (SSC4)**

AUDIT SUBJECT

DATE

- | | |
|---|--------------------------------|
| (A) Prohibition of smoking and other sources of ignition in sub-surface areas. | Seg 2: 6/5/95
Seg 3: 7/7/95 |
| (B) Allow welding, cutting and similar activities only in atmospheres containing less than 20 percent of the lower explosive limit. | Seg 2: 6/5/95
Seg 3: 7/7/95 |

AUDIT RESULTS

Segment 2

- (A) Checked and verified Contract B251, Conformed Copy, dated 6/24/92, Specification Section 01545, Part 1.2.B, which states that the Contractor must comply with the requirements of Cal/OSHA Tunnel Safety Orders for tunnel excavation operations.

Checked and verified Specification Section 02311, Part 1.1.A, which states that the tunnels have been classified as "gassy" and that the Contractor must comply with the applicable provisions of Tunnel Safety Orders of the State of California.

Verbal communication with Mike Graber - Parsons-Dillingham Lead Inspector, who verified that no smoking nor any sources of ignition were allowed in the sub-surface work areas.

- (B) Checked and verified Specification Section 01545, Part 1.2.B, which states that the Contractor must comply with the requirements of Cal/OSHA Tunnel Safety Orders for tunnel excavation operations.

Checked and verified Specification Section 02311, Part 1.1.A, which states that the tunnels have been classified as "gassy" and that the Contractor must comply with the applicable provisions of Tunnel Safety Orders of the State of California.

Verbal communication with Mike Graber, who verified that a gas tester is used to confirm that atmospheric conditions are less than 20% of the lower explosive limit.

Segment 3

- (A,B) Checked and verified Contract C0311, Conformed Copy, Awarded 12/21/94, Specification Section 01545, Parts 1.1 and 1.2, which state that Cal/OSHA has classified that portion from Station 613+00 to Station 630+00 as "gassy" and that portion from Station 630+00 to 765+00 as "potentially gassy". The Section states that the Contractor must comply with the requirements of Title 8, Tunnel Safety Orders.

**Mitigation Measure Status Report Audit Summary
For Sub-Surface Conditions 8 (SSC8)**

AUDIT SUBJECT

DATE

- | | |
|---|----------------------------|
| (A) The ventilation of the shaft and the tunnels is primary to construction safety. Ventilation will be constantly provided by one 75 to 100 horsepower fan per tunnel. The fans will be installed at the entrance of each tunnel. | Seg 2: 6/5/95
Seg 3: NA |
| (B) Use equipment that will minimize the potential for ignition for explosive gases. This includes equipment that minimizes the potential for sparks, machines with "sniffers" which shuts down equipment if explosive gases are detected, and the installation of "explosive proof" equipment. | Seg 2: 6/5/95
Seg 3: NA |
| (C) Other specific mitigation measures for activities are listed in the 1989 Final SEIS/SEIR. These measures are designed to minimize the possibility of accidents due to encounters with explosive gas. | Seg 2: 6/5/95
Seg 3: NA |

AUDIT RESULTS

Segment 2

- (A) Checked and verified Contract B251, Conformed Copy, dated 6/24/95, Specification Section 01518 "Temporary and Post Construction Ventilation and Lighting", which specifies that all applicable California Code of Regulations, Title 8 requirements are met, including horsepower requirements and a 24-hour operation of the ventilation system.

Verbal communication with Kenny Belville - Parsons-Dillingham Lead Inspector, who verified that fans had been installed and were in operation.

Visual confirmation of this element was not conducted due to the closure of the tunnels (cracks were found).

**Mitigation Measure Status Report Audit Summary
For Construction 10 (C10)**

AUDIT SUBJECT

DATE

- (A) The effectiveness of the mitigation of the noise impacts to the community. The permissible noise limits are based on the type of construction equipment used, and range from 50 dB(A) at night on a nearby single family residences to 90 dB(A) in industrial locations at all times.

Seg 2: 3/9/95
Seg 3: 7/7/95

AUDIT RESULTS

Segment 2

- (A) Checked and verified Contract B251, Conformed Copy, dated 6/24/95, Specification Section 01566, Part 3.1.A.6 "Noise Control", which outlines the maximum allowable construction noise levels.

Segment 3

- (A) Checked and verified Contract C0311, Conformed Copy, Awarded 12/21/95, Specification Section 01566, Part 3.2.D, and Tables 1, 2, & 3, which outline the maximum allowable construction noise levels.

**Mitigation Measure Status Report Audit Summary
For Construction 11 (C11)**

AUDIT RESULTS

Segment 2

- (A) Checked and verified Contract B251, Conformed Copy, dated 6.24.95, Specification Section 01566, Part 3.3 "Air Pollution Controls", A1-A4 for compliance with sub-paragraphs (I) through (iv).

Verbal communication with Kurt Kroner - Parsons-Dillingham Sr. Environmental Engineer, who stated that compliance with SCAQMD Rule 403 is verified by P-D Environmental Control staff.

- (B) Checked and verified Specification Section 01566, Part 3.3.B.1-3 for compliance with sub-paragraphs (I) through (iii).

Verbal communication with Kurt Kroner, who verified that trucks were cleaned with high-pressure air blowers, that loads were covered with tarpaulins, and that streets were cleaned by street cleaners.

- (C) Checked and verified Specification Section 01566, Part 3.3.B.4-5 for compliance with site watering.

Verbal communication with Kurt Kroner, who verified that site watering was occurring during waste removal and disposal.

- (D) Checked and verified Contract Specification Section 01566, Part 3.4.E, which specifies that routine maintenance records be kept

Auditing of this element was not permitted due to the confidentiality of the respective records. A letter giving permission to review such records will be obtained in the third quarter of 1995. The audit will be conducted at that time.

Segment 3

- (A) Checked and verified Contract C0311, Conformed Copy, Awarded 12/21/94, Specification Section 01566, Part 3.4 "Air Pollution Controls", A1-A4 for compliance with sub-paragraphs (I) through (iv). It should be noted that the Contract calls for a maximum of $50 \mu\text{g}/\text{m}^3$ as opposed to $100 \text{mg}/\text{m}^3$ (see A-iii).

- (B) Checked and verified Specification Section 01566, Part 3.4.B.1-3 for compliance with sub-paragraphs (I) through (iii).

Verbal communication with Michael F. Roach - Traylor Bros. & Frontier-Kemper Constructors Project Engineer, who confirmed that all loads of debris leaving the site are tarped down.

No visual sign of debris could be seen on surrounding streets. Street sweeper parked at C0311 job site.

**Mitigation Measure Status Report Audit Summary
For Light and Glare 1 (L&G1)**

AUDIT SUBJECT

DATE

- | | |
|--|-----------------------------|
| (A) Only shielded lamps that would control the direction of the light will be used. | Seg 2: 6/27/95
Seg 3: NA |
| (B) The sound walls and excavated material pile along Hollywood Boulevard and sound walls along the new access road should reduce the amount of light leaving the construction site. | Seg 2: 6/5/95
Seg 3: NA |

AUDIT RESULTS

Segment 2

- (A) Checked and verified Contract B251, Conformed Copy, dated 6/24/95, Special Provisions Section 14-P, which specifies the use of shielded lamps.
- Verbal communication with James Veatch - Parsons-Dillingham Safety Inspector, who confirmed the use of shielded lamps.
- Conducted visual audit of the shielded lamps at the B251 job site.
- (B) Checked and verified Contract Drawings C-241 and C-208 "Barnsdall Park Access Provisions, Section 14.P, which specifies that shielded lamps be used. Shaft and Construction Staging Area", which specify a 12-foot sound barrier.
- Checked and verified Special Provisions, Section 14.G, which specifies a 12-foot sound barrier wall.
- Conducted visual audit of the sound barrier at the B251 job site.

**Mitigation Measure Status Report Audit Summary
For Air Quality 1 (AQ1)**

AUDIT SUBJECT

DATE

- | | |
|---|------------------------------------|
| <p>(I) MTA Construction shall monitor dust throughout the construction period at locations on the school site to be jointly selected by MTA Construction and the Los Angeles Unified School District (LAUSD) staff. The monitoring shall be done on a continual 24-hour basis until otherwise modified by the MTA Construction and LAUSD. Monitoring practices may be modified as warranted by experience and mutual agreement. A monitoring/mitigation protocol shall be agreed upon prior to construction by representatives of MTA Construction and LAUSD. This protocol may be modified in writing by mutual agreement.</p> | <p>Seg 2: 6/5/95
Seg 3: NA</p> |
|---|------------------------------------|

AUDIT RESULTS

Segment 2

- (A) Checked and verified Contract B251, Conformed Copy, dated 6/24/95, Special Provisions 14.A, which specifies that all areas shall be paved with a 6-inch crushed stone base and 3-inch coat of asphalt except for the loading area used by a front-end loader where a soil-cement covering shall suffice.
- Checked and verified Contract Drawing C-208 "Barnsdall Park Access Shaft and Construction Staging Area Grading Plan", which specifies that the construction site be surfaced with 6 inches of compacted crushed aggregate base.
- Verbal communication with Kenny Belville - Parsons-Dillingham Lead Inspector, who verified that the construction site had been paved.
- (B) Checked and verified Specification Section 01566 "Pollution Controls", Part 3.3.B.5, which requires a sprinkler system to be installed to provide water to stockpiled excavation soil.
- Verbal communication with Kenny Belville, who verified that the sprinkler system was in operation during mining periods.
- (C) Checked and verified Specification Section 01566, Part 3.3.B.4, which specifies use of water and soil binders.
- Verbal communication with Kurt Kroner - Parsons-Dillingham Sr. Environmental Engineer who stated that water and soil binders are not being used. Instead, tarpaulins are used to cover the loads. This practice has since been included in recent contracts as a standard method for covering loads.

**Mitigation Measure Status Report Audit Summary
For Air Quality 1 (AQ1)**

Checked and verified the B251 "Daily Inspection Record", which lists the type and number of trucks entering the site. Nine records were audited.

- (I) Verbal communication with Kenny Belville, who verified that 24-hour monitoring is being conducted by P-D staff.

**Mitigation Measure Status Report Audit Summary
For Hydrology and Groundwater 1 (H&G1)**

Checked and verified Contract C0311, Conformed Copy, Awarded 12/21/94, Specification Section 02140, which specifies that "dewatering" will occur according to the requirements of an NPDES permit.

Verbal communication with Kurt Kroner - Parsons-Dillingham Sr. Environmental Engineer, who verified that Parsons Environmental Science is monitoring the discharge.

- (B) Checked and verified Specification Section 01566 "Water Pollution Controls", Part 3.5, which specifies that storm water must be treated and discharged according to the requirements of an NPDES permit. A Storm Water Pollution Prevention Plan is also required.

Conducted visual audit of the treatment system at the C0311 job site (still in construction).

**Mitigation Measure Status Report Audit Summary
For Hazardous Materials 1(HM1)**

Checked and verified Specification Section 01566 "Pollution Controls", Part 3.4.B, which states that the Contractor "...shall perform daily monitoring of wastewater discharges according to NPDES permit guidelines."

Verbal communication with Kurt Kroner - Parsons-Dillingham Sr. Environmental Engineer, who verified that P-D Environmental staff monitors the discharge, and that a "Discharge Monitoring Report" is submitted monthly to the CRWQCB.

- (B) Checked and verified Specification Section 01566, Part 3.5 "Solid and Hazardous Waste Controls". Determination of hazardous nature and disposal requirements are specified.

Verbal communication with Kurt Kroner, who verified that P-D Environmental staff analyzes excavated soil.

- (C) Checked and verified Specification Section 01566, Part 3.5. Health and safety measures to prevent worker exposure are not expressly discussed, but refers to California Code of Regulation (CCR) Titles 22, 23 and 26, which govern the handling and transportation of hazardous materials.

Verbal communication with Kurt Kroner, who said that the safety measures and Cal/OSHA regulations do not apply to Specification Section 01566-3.5. This mitigation measure is for Contractor-generated waste. P-D ensures compliance with Cal/EPA and Fed/EPA regulations.

**MITIGATION MEASURE STATUS REPORT AUDIT SUMMARY
FOR QUARTER 2, 1995**

**Mitigation Measure Status Report Audit Summary
For Transportation and Parking 6 (T&P6)**

AUDIT SUBJECT

DATE

- | | |
|--|----------------------------|
| (A) At the Hollywood/Vine Station, provide bus layover facilities and Kiss and Ride spaces in a parcel north of Hollywood Boulevard. The parcel south of Hollywood Boulevard should be used to provide additional Kiss and Ride spaces. During operation of Hollywood/Vine as an interim station, provide interim layover. (The current design provides the station, Kiss and Ride, and Park and Ride to the south side of Hollywood Boulevard, west of Argyle Avenue. | Seg 2: 6/9/95
Seg 3: NA |
|--|----------------------------|

AUDIT RESULTS

Segment 2

- (A) Checked and verified "Metro Rail Project/UMTA Grant No. CA-03-0341, Response to UMTA Concerns of 4/25/90 on Initial MMOS-2 Cost Reduction Measures", dated 5/25/90, addressed to Mr. Henry Nejako - Acting Regional Manager, Urban Mass Transportation Administration, Region 9, written by Neil Peterson, Executive Director, Los Angeles County Transportation Commission.

**Mitigation Measure Status Report Audit Summary
For Land Use and Development 7 (LU&D7)**

AUDIT SUBJECT

DATE

- | | |
|--|----------------------------------|
| (A) Redirect commercial development to other station areas by providing joint Specific Plan and master planning processes. | Seg 2: 5/22/95
Seg 3: 5/22/95 |
|--|----------------------------------|

AUDIT RESULTS

Segment 2

- (A) Checked and verified "Land Use/Transit Compatibility Study", Final Report, pages 111-1 and 111-2, dated 9/19/92. The Study recommends retail space at the ground level, and affordable housing at the upper levels.

Segment 3

- (A) Checked and verified "Land Use/Transportation Policy", page 19, adopted by the City Council 11/2/93. The Policy develops and applies urban design standards to ensure the development of a high-quality and safe and secure urban environment.

Checked and verified "City General Plan Framework Element", page 2, dated 4/26/95. The Plan establishes a hierarchy of land use patterns including targeted growth areas around rail and bus lines.

**Mitigation Measure Status Report Audit Summary
For Sub-Surface Conditions (SSC3)**

<u>AUDIT SUBJECT</u>	<u>DATE</u>
(A) Requirement of ventilation plan by the contractors.	Seg 2: 6/2/95 Seg 3: Not Audited
(B) Provision of an explosion-proof emergency ventilation system.	Seg 2: 6/9/95 Seg 3: 6/2/95
(C) Implementation of a proper ventilation system including fans and controls for fresh air intake and exhaust removal.	Seg 2: 6/9/95 Seg 3: 5/5/95
(D) Issuance of Contract B-229 Temporary Ventilation for Wilshire.	Seg 2: 6/2/95 Seg 3: 6/2/95

AUDIT RESULTS

Segment 2

- (A) Checked and verified Tunnel Ventilation Plan addressed to Cliff Sammons - Senior Project Engineer Cal/OSHA, REF: "Metro Red Line Contract B-251, request for Reclassification of ARW#1 and ALW#2 Tunnels", written by E.O. Mixon - Shea-Kiewit-Kenny Project Director, dated 5/1/95.

Checked and verified "B290 Task Order", Scope of Work: "Wilshire Corridor Temporary Post Construction Ventilation.
- (B) Checked and verified Contact B251, Conformed Copy, dated 6/24/95, Specification Section 01518, Part 2.3, which specifies that ventilating equipment shall be explosion-proof type.
- (C) Checked and verified Specification Sections 01545, Parts 1.2 and 2.1, which specifies that the construction equipment and tools, and the electrical equipment and installation shall conform to Cal/OSHA and the California Code of Regulations, respectively.

Conducted visual audit of ventilation system at the B201 job site with George Fisher - Assistant Resident Engineer (P-D).
- (D) Checked and verified Contract B229R, Conformed Copy, dated 10/27/93, Specification Section 15852 "Temporary Post Construction Ventilation", which specifies that the ventilation system design shall meet applicable California Administrative Code (CAC) Title 8 requirements.

**Mitigation Measure Status Report Audit Summary
For Sub-Surface Conditions 6 (SSC6)**

AUDIT SUBJECT

DATE

- (A) Refuge chambers or alternate escape routes shall be provided in accordance with requirements of the California Division of Industrial Safety. Workers will be provided with emergency rescue equipment and trained in its use.

Seg 2: 5/25/95
Seg 3: Not Audited

AUDIT RESULTS

Segment 2

- (A) Conducted visual audit of safety step-ups at the B-251 job site at Barnsdall Park (tunnel 2) with Omar Ramirez - Shea-Kiewit-Kenny Safety Rep.

Checked and verified B-251 Contract Drawing "Tunnel Safety Platform Plan and Details", which specifies safety step-ups every 200 feet.

Conducted visual audit of refuge chamber at B-251 job site (tunnel 2). It should be noted that the refuge chamber is located at set No. 1946, 7,784 feet from the tunnel opening at Barnsdall Park. This is greater than the 5,000 feet specified by the California Code of Regulations, Title 8, Article 8 "Tunnel Classifications", 8425 Operation of Gassy and Extrahazardous Tunnels." Compliance with this element is under review by MTA.

Checked and verified the Shea-Kiewit-Kenny "Site Specification Emergency Plan, General Plan of Action", which specifies self rescuers for underground personnel.

MTA staff observed self-rescuers in tunnels on SKK personnel.

Segment 3

- (A) This measure will be audited in the 3rd Quarter of 1995 due to early stages of construction

MITIGATION MEASURES CLOSED DURING REPORTING PERIOD

No Mitigation Measures were closed during this Quarter.

STATUS OF ENVIRONMENTAL MITIGATION MEASURES

TRANSPORTATION AND PARKING (T&P)

Mitigation Measure T&P1. Implement bus route changes identified in Table 3-1 of SEIS to support Segments 2 and 3 system.

- A. Reference: RRTP SEIS, Pages 3-1-1, 2, 3.
- B. Implementation: All Stations for Segments 2 and 3.
- C. Status: MTA Operations Planning staff will continue to meet with MTA Construction, Joint Development staff to discuss station design issues.

This is a long-term measure and will be implemented upon completion of construction, and commencement of system operation. It will be in accordance with appropriate elements of the Metro Rail Project, Milestone 9, Supporting Services Plan, and the MTA Operations report "Bus-Rail Interface for CORE Alignments." A draft preliminary "Bus/Rail" interface plan for Segment 2 began in December 1994.

- D. Future Action: MTA Operations Planning staff will develop a work plan and timeline for bus/rail interface programs for the Metro Red Line (Phases II, and III). These documents will be reviewed by the MTA's Executive Staff as part of the internal review process before they are finalized. The "Bus/Rail" interface program will be refined before the start of revenue operations, beginning in the Summer of 1995 with the commencement of the public review program. Following completion of the public review process, a revised plan will be presented in the MTA Operations report on "Bus/Rail Interface for Metro Red Line - Phase II."

This measure will be completed after revenue service starts. The Wilshire branch Revenue Operation Date (ROD) is 1996, the Vermont leg to Hollywood/Vine Revenue Operation Date is 1998, and Segment 3 is due to start in 2001.

movements between the street and the facility are safe and effective. At the Hollywood/Vine Station, accessibility of the bus terminal was improved by widening Argyle Avenue.

All station contracts include plans for the permanent restoration of street striping and traffic signals which have been prepared by LADOT. Signal equipment meets current standards and at some intersections will be incorporated into LADOT Automated Traffic Signal and Controls (ATSAC) Projects which allow the monitoring and adjustment of signal timing from a central location to optimize traffic flow.

As part of the traffic monitoring during station construction, Close Circuit Television (CCTV) cameras have been installed at critical intersections. Cameras are remotely monitored and controlled from ATSAC headquarters at City Hall. The cameras will, where possible, remain in place following construction to serve as a permanent traffic monitoring tool.

The Los Angeles City Council passed an ordinance in May 1993 directing LADOT to restore Wilshire Boulevard to its pre-construction width. This requirement was incorporated in the Wilshire/Western and Wilshire/Normandie Station by change notice. The streets at the Wilshire/Western Station have been restored. Street restoration is in progress at the Wilshire/Normandie Station.

Contract B216 includes requirements for widening of Vermont Avenue and 6th Street adjacent to the station site. The plans for Contracts B241, B252 and B261 also include requirements for widening Vermont Avenue during street restoration. The City has indicated it may wish to change the street restoration width in these contracts. MTA is awaiting a response from the City whether it wishes to proceed with the redesign of the pavement restoration. If the City agrees to fund the cost of street revision, change notices to revise street restoration width will be issued.

Segment 3

Contract C0326, Universal City Roadway and Site Restoration is undergoing roadway geometric review by LADOT, LABOE and Caltrans. Preliminary Engineering was completed in May 1995.

Contract C0351, North Hollywood Station, the roadways, including intersection layout and striping, have been designed in coordination with LADOT and LABOE.

Segment 3 Public Affairs and Third Party coordination staff met with LAUSD and schools adjacent to the North Hollywood construction site to coordinate haul routes with

Mitigation Measure T&P3. For the Wilshire/Vermont Station, Contract B216, consider the following design measures:

- (a) A Kiss and Ride lot on the west side of Shatto Place, south of 6th Street.
- (b) A two-way bus roadway for loading and unloading passengers, immediately north of the Kiss and Ride lot and extending from Shatto Place to Vermont Avenue.
- (c) Use the two-way bus roadway as a terminal for short line bus service on Lines 18 and 204 as well as full time by Lines 51 and 201. Continue to operate Line 20 on Wilshire Boulevard for through trips past the station.
- (d) Consider the following modifications to facilitate transfers between bus and rail:
 - (i) Use the Kiss and Ride area temporarily as a bus lay-over.
 - (ii) Use the east side of Vermont between bus roadway and Wilshire Boulevard as a discharge zone for buses whose routes terminate at the station. This includes Lines 51 and 204 (short line) as well as Lines 21, 22, 320, and 426, until such time as the Metro Rail Service is extended to the Wilshire/Western Station.
- (e) Use the north side of Wilshire Boulevard between Shatto Place and Vermont Avenue as the primary loading area for westbound buses on Wilshire Boulevard including terminal lines 21, 22, 320, 322, and 326, as well as through line 20 buses. After rail service is extended to Wilshire/Western, reduce activity at this location to line 20 buses only.
- (f) Operate the majority of bus movements on Shatto between 6th Street and Wilshire Boulevard in the southbound direction.
- (g) Provide an exclusive bus lane along the east side of Vermont Avenue north of Wilshire Boulevard and extending up to 6th Street, to avoid possible bus/auto weaving conflicts.
- (h) Provide at least ten permanent bus stop locations (five on each side) along the north and south curbs of the two-way bus only roadway between Vermont and Shatto Place. Lines 51 and 204 (short line) would use the south curb and lines 18 (short line) and 201 would use the north curb.
- (i) During the operation of Wilshire/Vermont as a temporary terminal, the two-way bus roadway will not have sufficient capacity to terminate lines 21, 22, 320, and 426. During this period, terminating buses will layover in a temporary facility of a pull-through design, to be located on the permanent site of the Kiss and Ride lot, which will be temporarily located at another site within the station site, possibly along the east side of Vermont Avenue.

A. Reference: RRTP SEIS, Pages 3-1-13, 14.

B. Implementation: Wilshire/Vermont, Contract B216.

C. Status: The Wilshire/Vermont Station began construction in May 1995, and incorporates Land Use Development Plan

Mitigation Measure T&P4. For the Wilshire/Western Station, Contract B231, provide layover space for 12 buses. This station will become terminus for bus lines 21, 22, 66, 67, 209, 210, (short trips), 320, and 322. Because of the high volume of passenger activity anticipated, this layover facility should be separated from the passenger loading and unloading. Locate bus layover on the north side of Wilshire Boulevard between Western and Oxford.

- A. Reference: FEIS, Page 3-1-14.
- B. Implementation: Wilshire/Western Station, Segment B230.
- C. Status: Contract B231 originally provided for a 14 bus layover/loading area as requested by MTA Operations to reduce bus traffic around the station area. This layover/loading area provides four bus loading spaces and ten layover spaces. Design shown on B231 contract drawing C-008. However, subsequent to the Notice to Proceed (NTP) a revision was directed by the Board to expand the parking to accommodate 17 buses. This revision is complete and an additional site was acquired by the MTA to accommodate this expansion.
- No revisions during this reporting period (2nd Quarter).
- D. Future Action: Bus operational changes will be implemented upon completion of the project at ROD.
- This measure will be closed when construction is completed in 1998.

Mitigation Measure T&P6. At the Hollywood/Vine Station, provide bus layover facilities and Kiss and Ride spaces in parcel north of Hollywood Boulevard. The parcel south of Hollywood Boulevard should be used to provide additional Kiss and Ride spaces. During operation of Hollywood/Vine as an interim station, provide interim layover.

- A. Reference: SEIS, Pages 3-1-15.
- B. Implementation: Hollywood/Vine Station, Contract B280 & B281.
- C. Status: As a cost reduction measure, FTA approved moving the station, Kiss and Ride, and Park and Ride to the south side of Hollywood Boulevard, west of Argyle Avenue. This meets the requirements for Park and Ride, Kiss and Ride and bus layover.
- No revisions during this reporting period (2nd Quarter).
- D. Future Action: This measure will be closed when construction is complete in 1998.

Mitigation Measure T&P8. For the Burbank/Lankershim/Tujunga intersection, consider an eastbound right-turn only lane and an optional right-turn lane and associated parking restrictions eastbound on Burbank.

- A. Reference: RRTP SEIS, Page 3-1-16.
- B. Implementation: North Hollywood Station, Contract C0351 & C0352.
- C. Status: Final Design was completed for C0351 in September 1994. LADOT and LABOE have agreed to close North Chandler Boulevard east of Lankershim Boulevard. South Chandler Boulevard will become two way to Tujunga Avenue. Additional street widening required to handle station traffic has been incorporated into the final design. (Same status for C0352 design contract).

No revisions during this reporting period (2nd Quarter).

- D. Future Action: Site restoration design under C0352 Contract to continue during 1995 will be closely coordinated with C0351 final design.

This measure will be closed out after completion of construction in 1998.

Segment 3

Segment 3 street widening and turn lane requirements are covered in the responses to Mitigation Measures T&P7 and T&P8.

No revisions during this reporting period (2nd Quarter).

D. Future Action: Segment 2

Complete the street restoration at the Wilshire/Normandie Station to the revised width. The change at the Wilshire/Vermont Station site will not affect the present condition and is reflected as "existing" in the Contract B216 design documents.

Segment 3

MTA Construction will continue to incorporate post construction roadwork into Segment 3 design specifications. This measure will be closed upon completion of construction in 2000.

- (d) This provision will be implemented after Segment 2 goes into operation and ridership builds.
- (e) Currently working with City of Los Angeles and CRA on peripheral and intercept parking. See also response to measure T&P9 regarding Master Plan assessments.
- (f) Same as T&P1. Coordination with LADOT as well.
- (g) Coordinating with LADOT parking bureau.
- (h) Included in design drawings. See drawing A-004 for Contract B231, Wilshire/Western Station.
- (i) Ongoing coordination with Commuter Transportation Services Inc. to determine effectiveness of ridesharing program. General Environmental Consultant (GEC) is coordinating with Commuter Transportation Services (CTS) to determine baseline numbers and percentage of participation by regional employers in preferential parking for car-and van-pools.
- (j) GEC is coordinating with CMP & TSM staff to examine the ways that MTA can encourage or implement increased parking fees and study the market for parking. As development increases in downtown Los Angeles, the availability of raw land that can be used for parking decreases. This puts upward pressure on parking prices. The zoning and parking requirements of the City also limit the availability of parking and tend to force prices up. Air Quality Management Regulation XV is bringing changes by requiring ridesharing incentives and disincentives for single drivers.
- (l) This provision is currently under review by MTA.

No revisions during this reporting period (2nd Quarter).

D. Future Action:

- (a, b) Continue coordination and report specifics of agreements and/or programs.
- (c) Select certain joint development sites from the summary and prepare feasibility studies (see E&F2). See Mitigation Measure LU&D1 and LU&D2.
- (d) Monitor and determine need for preferential parking district.
- (e, f, g) Continue coordination and report on progress. Park and Ride Master Plan will study demand and setting options for additional parking at Segment 2 Stations.

Mitigation Measure T&P11.

- (a) No excavation material, supply, or "ring" trucks will enter or exit the site between the hours of 6-9 a.m. and 3-6 p.m.
- (b) No more than 12 semi-trailer trucks, either flatbed or dump, used for transporting excavated material, delivering concrete support rings, or delivering heavy supplies will enter and leave the site between the hours of 9:00 a.m. and 2:00 p.m.; no more than three such trucks will enter and leave within any one hour during this period.
- (c) During the day (between 6:00 a.m. and 6:00 p.m.) the contractor will be required to stage trucks from off-site so as to eliminate parking or queuing of trucks on Hollywood Boulevard. From 6:00 p.m. to close of business, contractor will not park or queue trucks on Hollywood Boulevard in front of the main shopping center at the southeast corner of Hollywood Boulevard and Edgewood Avenue.
- (d) Synchronized signalization shall be provided between the access points to the proposed construction site and the Hollywood/Vermont intersection.
- (e) Trucks should be dispersed over more than one haul route. Hollywood Boulevard west from the site is the preferred route. The haul route north on Vermont Avenue and east on Los Feliz Boulevard shall not be used.
- (f) Excavation will normally be done five days per week and removal of excavated material six days per week. Work will not normally be conducted on Sunday.
- (g) The contractor shall provide off-street, off-site parking for employees. The contractor will be required to stage employees from off-site and to bring them to the site in high occupancy vehicles so as to eliminate construction workers parking in the vicinity of the site.
- (h) MTA Construction shall provide 44 replacement parking spaces for Barnsdall Park convenient to the Park.
- (i) A new access road will be provided to the Park, and Park access will be maintained at all times.
- (j) MTA will provide and train crossing guards for the safety of pedestrians at the entrances and exits of site. Contractor shall cooperate with this safety program.

A. Reference: Consolidated Excavation Site Mitigation Monitoring Program.

B: Implementation: Contract B251 and other documents.

C: Status:

- (a) Special Provision 14.D restricts the time that the material, supply, or "ring" trucks will enter or exit the construction site during the excavation phase which started in July, 1993. The MTA and LAUSD have amended the existing agreement for the consolidated excavation site. The changes proposed would allow 44 semi-trailer trucks or transit-mix concrete trucks to enter and leave the site between 6:00 AM and 6:00 PM, with

excavated materials will enter the site through the Park traffic entrance. Contractor entrance drawings were approved by CM on September 2, 1992.

- (j) Special Provision 14.O provides trained crossing guards for the safety of pedestrians at the entrances & exits of construction site. Contractor employs flaggers trained by LADOT. MTA provides additional crossing guards to LAUSD through the LADOT crossing guards program.

No revisions during this reporting period (2nd Quarter).

D. Future Action:

- (a) Terms of the agreement will be monitored in subsequent reports.
- (i) The Park access roads will be constructed during restoration according to the plans of the City of Los Angeles Department of Recreation & Parks.

This measure will be closed out after construction ends in mid 1996.

basis during final construction to facilitate transit and joint development.

Station Area Assessments and/or Land Use Compatibility Assessments with recommendations to ensure compatibility with joint development have been completed for the following stations:

Hollywood/Highland; Universal City (reassessment due to MOU with MCA); North Hollywood; Wilshire/Vermont; and Wilshire/Western.

In 1995 a Master Plan will be completed for Universal City. A reassessment of the station area assessment began in January 1995 to address changes to the station site plan as a result of the March 1994 Memorandum of Understanding with MCA/Universal Studios.

No revisions during this reporting period (2nd Quarter).

D. Future Action: Segment 2

Monitor City of Los Angeles' proposals to change zoning of transportation facilities to "Open Space".

Develop an implementation program with the LADOP to identify which combination(s) of incentive tools available will be most effective in promoting the goals of the Land Use Transportation Policy.

Complete Station Area Assessments, Land Use Compatibility Studies, and/or Development Plans per the schedule in LU&D2.

Site-specific development opportunities are being used as case studies for evaluations of legal and financial tools for joint development.

In 1994-1995, site-specific Development Plans, leading to the selection of developers, will commence for the following stations:

Wilshire/Vermont; North Hollywood; Vermont/Santa Monica; Vermont/Beverly; Hollywood/Western; and Hollywood/Vine.

Selection of developers is subject to market conditions and availability of financing. Target selection dates are for 1995 to achieve commencement of joint development projects in 1998-1999.

Mitigation Measure LU&D2. As part of project cost, MTA will prepare station plans for those stations where available land owned by MTA is most susceptible to development. MTA will conform to the adopted land use goals set forth in the City Specific Plans, Community Plans, Redevelopment Agency Plans for the Hollywood and North Hollywood station areas, and the City of Los Angeles revitalization program. These station plans will be used as the basis for obtaining development proposals, community support for development projects, and furtherance of MTA's minority business enterprise utilization goals.

- A. Reference: RRTP SEIS.
- B. Implementation: All applicable station areas.
- C. Status: Joint Development staff comments were incorporated in Segment 2 construction drawings for the Vermont Avenue and Hollywood Boulevard corridors. See also Mitigation Measure LU&D1 for additional discussion of construction drawing status.

MTA Joint Development staff assembled core teams to participate in studies and conducted community workshops and focus groups to assure the Station Plan (Area) Assessments and Land Use Compatibility Studies allow for consideration of community interests and the interests of all affected transportation and land use agencies.

Joint Development Assessments, Economic/Market Feasibility Analysis, Land Use/Transit Compatibility Studies and Station Area Assessments completed for Segment 2 and 3 Stations are shown on Table 1.

No revisions during this reporting period (2nd Quarter).

- D. Future Action: Scheduled Station Area Assessments, Development Plans and Developer RFP, Selection and Agreements for Segments 2 and 3 are shown on Table 2.

This measure can be closed with the completion of Development Plans scheduled for 1996.

Mitigation Measure LU&D3. In areas identified for residential investment, MTA will require, on land it owns, mixed use developments which will provide for the provision of new housing stock, or where appropriate, the rehabilitation of existing housing stock. In areas identified for commercial investment, MTA will seek City approval for the transfer of development rights between station areas as a means of targeting growth and protecting those areas where community and City goals seek protection or reduced development pressure.

- A. Reference: RRTP SEIS, Page 3-2-26.
- B. Implementation: All applicable areas along Segments 2 and 3.
- C. Status: Segment 2

Real estate requirements were identified and land acquisition is completed for Segments 2. MTA Joint Development staff have prepared Station Area Master Planning studies which identify the probable mix of land uses. In 1992 MTA Joint Development staff assembled core teams to manage studies, conduct community workshops, and set up focus groups to assure that Station Plan Assessment and Land Use Compatibility studies allow for consideration of community and affected agency interests.

Housing development opportunities have been identified in Station Area (formally called Master Plan Assessments) Assessment Studies at or adjacent to all three Hollywood Stations, the Vermont/Santa Monica, Wilshire/Vermont and Vermont/Beverly stations.

On April 8, 1993, MTA conducted a symposium on transit based housing which featured case study evaluation of design and development feasibility at the Vermont/Santa Monica and two other (non-Red Line) station sites.

No revisions during this reporting period (2nd Quarter).

Segment 3

The Hollywood/Highland Station and the North Hollywood Station are located in redevelopment project areas where transfer of density and housing assistance programs can be coordinated with station area development strategies. The Completed Station Area Planning Assessments for Hollywood/Highland have identified housing development opportunities on privately held properties located adjacent to all four quadrants served by the planned station and future entrance knock-out panels.

In 1993 the City of Los Angeles adopted the Land Use Transportation Policy prepared jointly by MTA and the City staff to encourage growth and mixed use development to occur

Segment 3

By 1995 Joint Development Station Area Assessment studies will be completed for all Segment 3 stations. Once the mix of land uses for each site has been identified, and community and City goals are better understood, MTA staff will seek to implement the above mitigation measures regarding commercial, residential and mixed land uses.

This measure is expected to be closed upon completion of the housing studies in 1996.

displacement of 144 residential dwelling units. Displacement started in last half of 1993.

- (c, d) At the Hollywood/Highland Station, recommendations include preservation and infill around existing residential enclaves located within one to two blocks of the station. In 1994 Joint Development Station Area Assessment Studies were completed for Hollywood/Highland Station.

In April 1993, MTA conducted a Transit Based Housing Symposium which featured a case study evaluation of design and development feasibility at three different transit stations.

See also response to Measure LU&D3.

In 1993 the City of Los Angeles adopted the Land Use Transportation Policy prepared jointly by MTA and the City staff to encourage growth and mixed use development to occur in pedestrian friendly "Transit Oriented Districts", generally defined as a 1/4-1/2 mile radii surrounding each transit station. Concurrently, the City of Los Angeles has initiated the General Plan Framework, a city-wide update of the General Plan which seeks to organize growth around transit corridors and stations. Planning Commission and City Council hearings on the draft proposals are scheduled in 1995. In 1994, MTA funded and the City Council initiated community plan amendment and zoning studies to implement transit oriented district recommendations previously adopted in the Land Use Transportation Policy. The Vermont/Santa Monica Station was selected among seven locations to be included in the first round of zoning studies. Also scheduled for City Council consideration in 1995 is an Affordable Housing Incentives Ordinance which would permit increased density and reduced parking for affordable housing developments located adjacent to transit stations and corridors.

No revisions during this reporting period (2nd Quarter).

D. Future Action:

- (a) Identify potential future MTA site development projects. Notify LADOP, Los Angeles County Department of Regional Planning (LACDRP), CRA, CEDO and CAC of our findings and proposals for the involved station areas.
- (b) Phase II of the Station Area Joint Development Assessment Study is expected to be completed in the 3rd Quarter 1995.

Right-of-way acquisition at the Universal City Station will require the displacement of 144 residential dwelling units. Relocation began in early 1994, and is currently in progress. Efforts will be made therefore, to replace and increase the

Mitigation Measure LU&D5. Redirect commercial development to other station areas by providing joint development opportunities elsewhere. (Responsible agencies: LADOP, MTA).

A. Reference: RRTP SEIS, Page 3-2-25, Table 3-18.

B. Implementation: Vermont/Beverly Station area.

C. Status: It is not clear that all commercial development needs to be diverted from the Vermont/Beverly Station. Limited commercial development, such as ground floor retail around the portal plaza, has been the recommendation of a planning assessment study. The study found that a mix of land uses is the appropriate strategy and that ground floor retail can provide a buffer to upper levels of residential units.

Presently there is no indication of a market for major office development at stations such as Vermont/Beverly and Vermont/Santa Monica.

LADOP was presented the findings from the Station Area Assessment Studies in 1992.

In 1993 the City of Los Angeles adopted the Land Use Transportation Policy prepared jointly by MTA and the City staff to encourage growth and mixed use development to occur in pedestrian friendly "Transit Oriented Districts", generally defined as a 1/4-1/2 mile radii surrounding each transit station. Concurrently, the City of Los Angeles has initiated the General Plan Framework, a city-wide update of the General Plan which seeks to organize growth around transit corridors and stations. Planning Commission and City Council hearings on the draft proposals are scheduled in 1995. In 1994 MTA funded and the City Council initiated community plan amendment and zoning studies to implement transit oriented district recommendations previously adopted in the Land Use Transportation Policy. The Vermont/Santa Monica Station was selected among seven locations to be included in the first round of zoning studies. Also scheduled for City Council consideration in 1995 is an Affordable Housing Incentives Ordinance which would permit increased density and reduced parking for affordable housing developments located adjacent to transit stations and corridors.

No revisions during this reporting period (2nd Quarter).

D. Future Action: In 1995, a development plan will be conducted for the Vermont/Beverly Station. This work will evaluate the development opportunities at the station. Solicitation of development proposals will commence in 1995-96.

See Mitigation Measure LU&D2 for schedule of future actions and closure.

increased density and reduced parking for affordable housing developments located adjacent to transit stations and corridors.

No revisions during this reporting period (2nd Quarter).

D. Future Action: Segment 2

Evaluate the Station Area Assessment for these stations to determine the feasibility of this measure. Discrete development opportunities will be identified as a product of the development plans and feasibility studies to be conducted in 1995 for the Vermont/Beverly and Hollywood/Vine Stations. In the course of this work, discussions will be held with LADOP. Diversions will be considered in later stages of a cooperative planning process with other City of Los Angeles agencies.

Segment 3

A Universal City Station area Master Plan will commence in 1995

See Mitigation Measure LU&D2 for schedule of future actions and closures.

Segment 3

MTA is reevaluating the Station Area Assessment Study at Universal City because of the MOU with MCA. A Master Plan will commence in 1995 (subject to budget constraints).

These studies will determine the appropriate density of any commercial development proposed for the site.

This measure will be closed at the end of the development planning process in 1996.

Mitigation Measure LU&D9. Create financial incentives for preservation of historic properties.

- (a) Provide low-interest rehabilitation loans. (Responsible agency: CRA)
- (b) Promote use of existing tax incentives. (Responsible agencies: CRA, LADOP, MTA)

A. Reference: RRTP SEIS, Page 3-2-25, Table 3-18.

B. Implementation: For both (a) and (b), the Hollywood/Vine, Hollywood/Highland, Hollywood/Western, and Vermont/Santa Monica Station areas.

C. Status: Refer to LU&D1 for status of construction drawings.

Station Area Planning Assessments have been directed toward design of the station portal and related development that is compatible with historic structures.

MTA has also established a Construction Enhancement Loan Program (CELP) to assist commercial enterprises and property owners to continue to operate during the period of Metro Rail construction. MTA established a \$25 million revolving loan fund to stabilize operations of impacted businesses. As this program matures its funds could be available for businesses located in historic properties.

No revisions during this reporting period (2nd Quarter).

D. Future Action: Review the available incentives for preservation of historic properties within the station areas. Determine what type of loans and in what amounts are available. Determine availability of tax incentives. Review historic buildings/properties that could be affected by Segment 2. Coordinate with CRA and LADOP to determine the approach to take for each property. See also response to Measure LU&D2 regarding Master Plan assessment studies. This measure will be closed upon completion of the development planning process in 1996.

This measure can be closed-out at the end of the development planning process in 1996.

Mitigation Measure LU&D12. Once project-related construction has ceased, the subject property will be provided to the City of Los Angeles for various recreational- or educational-related activities (e.g., park use, library, parking). Establishment of a library on the subject site would be consistent with the policy objective of the Hollywood Community Plan to construct a new community library in the East Hollywood area. Such a use would also serve to reinforce the presence of Barnsdall Park within the greater Hollywood community.

- A. Reference: Consolidated Excavation Site Mitigation Monitoring Program.
- B. Implementation: Land acquisition by the MTA Real Estate Department.
- C. Status: Acquisition has been completed.
No revisions during this reporting period (2nd Quarter).
- D. Future Action: Return property to the City upon completion of construction in 1997. This measure will then be closed.

A Benefit Assessment information brochure has been developed which provides explanation of the three alternative payment options property owners can choose. Each owner (approximately 1,800) proposed for assessment, except for the Wilshire area, was mailed a copy of the brochure in June 1994. Some 1,900 additional brochures were mailed at the same time to parties who had requested information on Metro Rail and appeared on the MTA Construction mailing list. The three payment options (revised from four) were recommended by the Benefit Assessment Task Force and incorporated by the MTA Board in the Resolution to Proceed. The payment options include 29 annual installments, five annual installments, one lump sum in 1992. The provision, and description, of alternative schedules for payment of assessment tends to lessen the impact of those assessments. This is because property owners can select the schedule that best accommodates their unique financial situation.

D. Future Action: Now that the Benefit Assessment Program has been validated by the courts, the following activities are anticipated for the Segment 2 and North Hollywood extension of Segment 3 Benefit Assessment District creation process:

- (a) The Los Angeles City Council will resume the process of approving the Resolution to Proceed. The matter may be going forth for public hearing before the Los Angeles City Council in twenty four to thirty six months, although, postponement until after initial operation of Segment 3 has been discussed with City personnel to allow for completion of construction and revenue service to start.

The work program for the Benefit Assessment District has been adjusted for fiscal year (FY) 1995-96 to reflect reduced commitment to Segment 2 and 3 formation while this postponement is occurring.

- (b) The City will adopt a resolution with modifications and transmit to the MTA Board of Directors for action.
- (c) MTA Board of Directors will adopt a "Resolution to Create Segment 2 and North Hollywood extension of Segment 3 Benefit Assessment Districts" (creation in the Wilshire District requires an election) in a time as specified by the MTA Board.
- (d) MTA Board of Directors will approve levying of the assessments and methods of payment.
- (e) MTA Board of Directors will approve a Benefit Assessment appeals procedure.

Mitigation Measure E&F2. Whenever it becomes necessary for MTA to acquire property, the existing level of revenues contributed to taxing jurisdictions by that property will be identified. MTA will identify feasible and desirable additional development potential of the property and, in coordination with appropriate local authorities, actively seek to promote use of property through the negotiation of joint development agreements with private developers designed to return acquired property to the tax rolls.

- A. Reference: RRTP SEIS, Page 3-3-6.
- B. Implementation: Joint Development Plans/Programs.
- C. Status: MTA has hired a Director of Joint Development and a Director of Real Estate. Joint Development policies and procedures have been adopted in January 1994 and a Committee for Joint Development has been formed by MTA.

The draft feasibility/market studies prepared by Halcyon Ltd. for the following station sites have been completed:

- Wilshire/Vermont;
- Wilshire Western;
- Vermont/Beverly;
- Vermont/Santa Monica;
- Hollywood/Western;
- Hollywood/Vine; and
- Hollywood/Highland.

Station Area Planning Assessment Studies have been completed for Segment 2 and 3 Stations except Universal City and North Hollywood, and opportunities for private development of station sites have been identified.

No revisions during this reporting period (2nd Quarter).

- D. Future Action: Development plans may be prepared for each station. Subject to market conditions, development proposals will then be solicited. This sequence of events is anticipated to be completed in 1996.

Joint Development of Segment 2 and 3 stations in the Vermont and Hollywood corridors could not commence prior to late 1997 and is not likely to close-out until 2005. The Universal City and the North Hollywood Stations may commence in 1998 but are not likely to close-out until 2010. See also status of Measure LU&D2.

LAND ACQUISITION AND DISPLACEMENT (LA&D)

Mitigation Measure LA&D1. Land acquisition for Metro Rail Segments 2 and 3 and displacement mitigation will be in accordance with the Surface Transportation and Relocation Act of 1987 and the California Relocation Act. The Act provides for uniform and equitable treatment of persons displaced from their properties by federal and federally assisted programs and establishes uniform and equitable land acquisition policies.

- A. Reference: RRTP SEIS, Pages 3-4-2.
- B. Implementation: All identified parcels along Segment 2 and 3 alignment.
- C. Status: MTA Real Estate records the status of all identified parcels along the alignment and produces a report detailing the number of parcels and their status broken down by contract number. The July 7, 1995 report shows that there are currently 89 parcels identified for acquisition in connection with the construction and operation of Segment 2, and 175 identified with the Universal City/North Hollywood extension of Segment 3. Of the identified properties in Segment 2, 81 have been certified for acquisition and 89 are available for construction. There are 40 which have had condemnation action commenced against the property owners.

Of the identified properties in Segment 3 (Project R-82), 233^{*1} have been certified for acquisition, 217 have approved "Just Compensation" with 217 offers made to property owners. The acquisition breakdown is 103 full takes, 125 sub-surface easements, three part-takes, and one temporary construction easement. There are 25 parcels which have had condemnation actions commenced against the property owners and 81 available for possession and construction.

Acquisition of the Wilshire branch of Segment 2 is completed. The Vermont leg of Segment 2 has been completed. The acquisition of real estate for the Hollywood leg was completed in October 1994.

- D. Future Action: The MTA Real Estate Section will continue its efforts in obtaining the required appraisals for certified parcels and in negotiating for the acquisition of said properties.

Acquisition of real estate for Segment 3 will be completed by November 1995.

This measure will be closed out in 1995 after completion of property acquisition for Segment 3.

¹ *This is an increase in parcel certifications due to the addition of fifty-nine individual condominium units.

SOCIAL AND COMMUNITY (S&C)

Mitigation Measure S&C1. Table 3-34 summarizes mitigation that could be implemented by other agencies which include actions similar to those included in the land-use mitigation. These actions will be encouraged by MTA and include actions such as rent control and special zoning to preserve small businesses.

- A. Reference: RRTP SEIS, Pages 3-5-16, 17, 18.
- B. Implementation: All station areas along Segments 2 and 3.
- C. Status: Design for Segments 2 and 3 is underway. The Master Plan process is underway for Segments 2 and 3, and has established opportunities for mixed use development at the Sunset/Vermont Station.

See also responses to measures LU&D1, LU&D2, and LU&D7.

No revisions during this reporting period (2nd Quarter).

- D. Future Action: Analyze Table 3-34 of SEIS/SEIR to identify station areas that will experience impacts. Coordinate with LADOP, LACDRP, CRA, County Development Department (CDD), LADOT, CDC, and the Housing Authority to implement the designated mitigation measures at appropriate stations. As the master planning process is extended to other segments of the Metro Red Line, mixed use opportunities will be established at the other stations.

This measure can be closed out after master planning and station area plans are completed for station areas that implement the provisions of Table 3-34. These plans should be finished in 1995 or 1996.

calculations are prepared at the in-progress design review for all station contracts, and verified by the EMC. Standby electric power supply criteria are contained in Volume IV, Section 4.8 Uninterruptible Power Supply. The B795 Uninterruptible Power Supply Contract wholly addresses the provision for backup power. Alarm systems criteria are identified in Volume V, Section 3.11 Intrusion Detection and Controlled Access. Emergency communication systems requirements are contained in Volume I, Section 2.7, Fire/Life Safety Communications. Closed Circuit T.V. criteria are contained in Volume V, Section 3.8, Closed Circuit Television. Public Address system criteria are located in Volume V, Section 3.7, Public Address. Emergency phone requirements are in Volume I, Section 2.7 Communications.

D. Future Action:

- (a) All station contracts contain adequate design for avoiding pedestrian conflicts. Station and Systems contracts to be awarded by the MTA Board are as follows:

C0321 Universal City-August 1995

- (b) Remaining station and systems contracts incorporating safe access design criteria to be awarded by the MTA Board are as follows:

C0321 Universal City-August 1995

- (c) Remaining station and systems contracts incorporating emergency systems design criteria to be awarded by the MTA Board are:

C0321 Universal City-August 1995

This measure will be closed when the Certificate of Occupancy is issued prior to ROD in 2000.

Tunnel ventilation requirements are contained in Criteria, Volume I, Section 2.2.3 Ventilation.

- (b) Elderly and handicapped requirements are contained in Criteria, Volume III, Section 1.6.8 Elderly and Handicapped Accessibility. The Americans with Disabilities Act (ADA) of 1990 further expands on requirements being implemented on the project. Compliance with ADA is summarized in a report titled Americans With Disabilities Act Accessibility Compliance Plan, dated June 1992, prepared by the EMC.
- (c) Emergency response procedures and training drills will be addressed beginning approximately one year prior to ROD. The Test Program Plan, developed in December 1994 by the EMC, will identify emergency response training drills. These drills will assist in planning and coordination among third party agencies with the MTA during emergencies.

D. Future Action:

- (a) Remaining station contracts incorporating low/non combustible material design criteria, emergency procedures, and ADA accommodations to be awarded by the MTA Board are as follows:

C0321 Universal City-August 1995

Overall closure of this measure will occur when the Certificate of Occupancy is issued prior to revenue operations in the year 2000.

Mitigation Measure S&S4. Design criteria shall provide for a clean, open, well lit and aesthetically pleasing station environment which will discourage criminal element.

- (a) Station design will provide interiors that are open and are clearly lighted. Low ceilings and excessive columns and dark areas and blind spots will be avoided.
- (b) Station cleanliness will be emphasized and vandal and graffiti resistant materials will be used in stations and vehicles.
- (c) An arts program will be implemented to give stations a personalized character that can discourage graffiti.

A. Reference: RRTP SEIS, Page 3-6-5.

B. Implementation: All station contracts and vehicles contracts.

C. Status:

(a, b) Design criteria in Volume I, Section 4.3 Station and Site space contains requirements for stations to be well lighted, free of visual obstructions, and for materials to be graffiti and vandal-resistant.

(c) The Art-In-Transit Program promotes the development and implementation of art work throughout the rail projects. The artwork is handled as part of the individual station contracts.

Station contracts awarded by the MTA Board last quarter are as follows:

All Segment 2 stations have been awarded by the MTA Board.

D. Future Action:

(a, b) Station contracts incorporating the design criteria to be awarded by the MTA Board are:

C0321 Universal City - October 1995

(c) Remaining station contracts incorporating the arts program design criteria to be awarded by the MTA Board are:

C0321 Universal City - October 1995

Overall measure closure will occur in 1999 when Segment 3 construction is completed.

Mitigation Measure S&S6.

- (a) The selected contractor will provide a secure construction site through use of fencing and on-site security personnel. Graffiti will be removed expeditiously by the contractor.
- (b) MTA Construction will work with the Los Feliz school and the Los Angeles Unified School District to establish evacuation routes and plans for emergencies that may occur at the construction site or at the school that may require evacuation of the school.
- (c) If an event occurs on the construction site that would affect the health and safety of the Los Feliz school children, LAUSD and MTA Construction technical staffs will investigate the incident immediately. If LAUSD Health and Safety officials determine that a continuation of construction activities would require the school to be closed, MTA Construction will cease construction activities until the incident can be resolved to the satisfaction of LAUSD and MTA Construction officials.
- (d) In case of an emergency at the construction site that requires the evacuation of the Los Feliz Elementary School students, MTA Construction will reimburse LAUSD for the reasonable and usual costs of the evacuation.
- (e) Funding for two crossing guards during normal school hours will be provided by MTA Construction. The school shall be responsible for determining the deployment of the crossing guards.
- (f) MTA Construction shall improve the public address system on the school playground so that it can be heard at all points on the playground, shall repair and maintain the back-up power supply for the communication system so it is in proper working order, shall install telephone in the school auditorium and in the offices in the auditorium, and shall establish a communication system between the construction site and the school.
- (g) MTA Construction shall establish and maintain a school safety program and meet with school staff on a regular basis. It is the intent of MTA/MTA Construction and LAUSD that continuing communication occur between the two entities throughout the construction period and that mutually agreed upon adjustments be made in the proposed points of agreement as necessary to reflect additional information or changed circumstances. Initially, meetings will be held monthly between MTA Construction management and Los Feliz Elementary School representatives and other appropriate MTA Operations staff. The parties will designate a primary contact person for the purpose of authorizing adjustments to the agreement. In the event of a disagreement, the written agreement between MTA Construction and LAUSD shall prevail except as it may be modified in writing.
- (h) MTA Construction shall provide a shuttle bus to transport students and staff from school to the art classes in Barnsdall Park.
- (i) MTA Construction shall provide at LAUSD's option either an alternate eating/activity area up to 3,000 square feet on the school playground or provide an equivalent amount of improvements for the school to provide this facility.

- (g) On-going monthly meetings continue plus visits and dialogue by construction management and MTA Construction Public Affairs. To date, several safety presentations have been given and several more dates secured for more presentations and field trips. Last meeting was held April 10, 1995.
- (h) This requirement has been established. MTA Construction has provided funding for bus transportation to Barnsdall Art Park furnished by LAUSD.
- (i) LAUSD has completed installing modular buildings. The eating facilities became operational in March 1993.

See also response to mitigation measure T&P11.

No revisions during this reporting period (2nd Quarter).

D. Future Action: Monitor construction activities during use of the site through mid 1996. Upon completion of construction, this measure will be closed.

Mitigation Measure A2.

- (a) During project activities, a wall will be constructed along the northern boundary of the site along Hollywood Boulevard prior to site preparation work. This wall may at first be of plywood and may need to be breached during shaft excavation activities, particularly when the contractor needs to intrude into Hollywood Boulevard. A permanent 12-foot masonry wall will be constructed as early as practical after site preparation activities have been undertaken.
- (b) A 15-foot sound wall along the southwest portion of the site and a 10-foot sound wall along the south east portion of the site will also be constructed north of the new access road, which will further block the view of construction site for people entering the Park and for the apartment buildings southwest of the site.
- (c) At the completion of the project, the project site will be returned to the City of Los Angeles Department of Recreation and Parks. Currently, the City has expressed a desire to build a library with landscaping on the site, as well as a new entrance to the Park. It is anticipated that, once the City of Los Angeles has constructed its desired facilities on the site, the appearance of the project site and area will be considered more aesthetically pleasing to the community than does the current condition of this area.

- A. Reference: Consolidated Excavation Site Mitigation Monitoring Program.
- B. Implementation: Contract B251.
- C. Status: MTA Construction's Design Consultant has prepared specifications and drawings for Contract B251. Drawing No. C-208.

The contractor has completed construction of the 12-foot masonry wall along Hollywood Boulevard on March 15, 1993. See also response to Measure N&V8.

The contractor has constructed a sound absorbing blanket wall above the masonry wall. The sound absorbing blanket wall extends up to 30 feet above the ground. The sound absorbing blanket has been completed, and exceeds the mitigation requirements specified in Contract B251.

No revisions during this reporting period (2nd Quarter).

- D. Future Action: See response to Measure CR3.

Currently, Drawing C212 calls for the MTA Construction to restore the westerly portion of the site to a rough graded condition only. Construction delays have pushed this completion date to mid 1996.

This measure will be closed out when the project site is returned to the City of Los Angeles in mid 1996.

designers for incorporation. Supplemental final reports have been prepared by the consultant to incorporate modified station layouts.

Specific vibration limits and vibration monitoring construction have been incorporated into Contract Specification 01566 for the Neonatal Intensive Care Unit (NICU) at Children's Hospital for Contract B261 in order to reduce construction vibration transmitted to this facility.

The acoustical consultant, Wilson Ihrig and Associates (WIA), is assisting the Systems Integration Group of EMC in ensuring that all recommended mitigation measures have been properly incorporated into the Control Drawings and Specifications. This process was completed in January 1994.

Segment 3

Segment 3 stations and tunnels are being analyzed by the Noise & Vibration Consultant, results of which will be included in bid documents. Reports and/or reviews for Contracts C0301 (Bid Level), C0321 (Final Stage), C0311 (Bid Level), C0331 (Conformed Documents), C0351 (Bid Level) and C301/C11 have been awarded.

No revisions during this reporting period (2nd Quarter).

D. Future Action: Segment 2

This measure is closed for Segment 2.

Segment 3

Ensure inclusion of results from the final reports for Segment 3 contracts in bid documents, prior to advertising.

Segment 3 facilities design should be complete in 1995.

This measure is anticipated to be closed after completion of construction in 2000.

Segment 3

Continuously welded rail and direct fixation rail fasteners will be specified in Segment 3 Contract C1610: Trackwork Installation. The final design for contract C1610 is scheduled for completion in 1995.

Decision on the purchase of rail grinding equipment is pending the results of a survey of overall rail network needs and funding availability. This is expected in 1995.

Construction to the North Hollywood Station and this measure closed by 2000.

- (d) Medical clinic at Wilshire Boulevard and Virgil Avenue;
- (e) Two school/learning centers on Wilshire Boulevard at Virgil Avenue;
- (f) Two churches at 6th Street and Wilshire Boulevard between Vermont Avenue and Normandie Avenue;
- (g) Two commercial buildings on 6th Street between Vermont Avenue and Normandie Avenue; and
- (h) Two apartment/condominium buildings at Wilshire Boulevard and Kenmore Avenue.

In addition to the area identified in the SEIS, floating slab trackbed will be used under four apartment/condominium/motel buildings and a commercial building between 6th Street and Wilshire Boulevard.

2 At the Vermont Avenue and Hollywood Boulevard Corridor, noise and vibration studies have generally been completed. To date, sections requiring soft fasteners and floating slab have been identified for Contract B251. Floating slab trackbed will be required at the following locations:

- (a) 17 apartment buildings along New Hampshire Avenue between 6th Street and 3rd Street;
- (b) Two retail buildings on Vermont Avenue south of 3rd Street
- (c) A church at Vermont Avenue and 1st Street;
- (d) The Braille Institute on Vermont Avenue north of Melrose Avenue;
- (e) An apartment building on Vermont Avenue north of Monroe Street;
- (f) Los Angeles City College on Vermont Avenue north of Monroe Street;
- (g) Hollywood Rehearsal and Recording Studio and Studio Nine Sound Labs at 5504-6 Hollywood Boulevard;
- (h) Xenon Recording Studios at 5540 Hollywood Boulevard;
- (i) Radio Allegria at 5724 Hollywood Boulevard;
- (j) Henry Fonda Theater at 6124-28 Hollywood Boulevard;
- (k) Office building at 6140 Hollywood Boulevard; and
- (l) Hastings Hotel at 6162-66 Hollywood Boulevard.

Segment 3

In North Hollywood:

Review of the final submission of Contract C0311 indicates that soft fasteners will be needed for several single family residences on Kentucky Drive and on Lankershim Boulevard, just south of the Hollywood Freeway.

Review of the conformed drawings of Contract C0331, utilizing the vibration propagation test results of May 1993 indicates that a floating slab will be needed for the residences at 10639 Valleyheart Drive and the six residences at 4022-50 Willowcrest Avenue. The review also indicates that soft fasteners will be needed at the following locations:

- (a) Recording studio Lawabee at 4160 Lankershim Boulevard;
- (b) Saint Charles Borromeo Church at 10838 Moorpark Street;
- (c) Three commercial/offices at 4907-23 Lankershim Boulevard;
- (d) Two commercial/offices at 4900-08 Lankershim Boulevard;
- (e) Office at 4914 Lankershim Boulevard;
- (f) Two commercial/offices at 4920-24 Lankershim Boulevard;
- (g) Office/school at 4930-36 Lankershim Boulevard;
- (h) Office at 5019 Lankershim Boulevard;
- (i) Two commercial/offices at 5000-10 Lankershim Boulevard;
- (j) Commercial/office at 5050-32 Lankershim Boulevard;
- (k) The bank at 5025 Lankershim Boulevard;
- (l) Two commercial/offices at 5050-66 Lankershim Boulevard;
- (m) Hewlett-Packard offices at 5161 Lankershim Boulevard;
- (n) Bill's Place Studio at 11140 Magnolia Boulevard; and
- (o) El Portal Theater at 5265 Lankershim Boulevard.

Review of the pre-final submission of Contract C0351 (North Hollywood Station) indicates that a floating slab trackbed will be needed at the crossover for reduction of the groundbourne noise at eight commercial/office buildings at 5301-5332 Lankershim Boulevard.

No revisions during this reporting period (2nd Quarter).

Mitigation Measure N&V4. If it is discovered during final design that the general and specific mitigation measures are not adequate to meet Project noise and vibration criteria, the implementation of certain extraordinary measures will be considered (along with their technical feasibility and economic reasonableness):

- (a) Use of non-standard floating slab design.
- (b) Vibration isolation by blocking direct transmission of vibration where the subway structure is unusually close to buildings and their foundations. This may be accomplished using elastomer pads in the intervening soil.
- (c) Relocation of crossovers.
- (d) Modification of rail system structure.
- (e) Minor shifts in horizontal or vertical alignment.

A. Reference: RRTP SEIS, Page 3-8-17.

B. Implementation: All Segments 2 and 3.

C. Status: Segment 2

The resiliently supported ties previously specified for use at the Wilshire/Western Station and crossover (see mitigation measure N&V3) were deemed inadequate for underground crossovers in Segment 1 by the operating agency (MTA Operations). Use of this design has thus been discontinued and will not be specified for any future contracts. In its place an equally effective combination of floating-slab track-bed with direct fixation rail fasteners will be used at the Wilshire/Western crossovers.

No extraordinary measures were required in any of the Segment 2 contracts along Wilshire Boulevard, including Contracts B201, B211, B221 and B231 or along the Vermont/Hollywood Corridor including Contracts B241, B251, B252, B261, B271, and B281.

Reconfigured Segment 2 Contracts have been studied to ascertain whether any extraordinary mitigation measures will be necessary. Extraordinary measures have been recommended during construction of B261 (see N&V1).

No revisions during this reporting period (2nd Quarter).

Segment 3

No extraordinary measures were required for Segment 3 Contracts C0301, C0311, C0321, C0331 and C0351.

No revisions during this reporting period (2nd Quarter).

D. Future Action: Segment 2

This measure is closed for Segment 2.

Mitigation Measure N&V5. At locations where extraordinary noise and vibration mitigation measures are not cost-effective or will not reduce levels to within acceptable criteria, the following actions will be taken:

- (a) Inform affected property owners, residents and tenants.
- (b) Provide adequate opportunity to those impacted to comment on proposed design and its impacts, either by visiting or at a hearing.
- (c) Include public comments in report to MTA Board when seeking approval.

A. Reference: RRTP SEIS, Page 3-8-18.

B. Implementation: All Segments 2 and 3.

C. Status: Segments 2&3

Facilities construction contract documents incorporate the recommendations of WIA, EMC specialists noise sub-consultants, for the reduction of noise and vibration caused by system operations both within and contiguous to the station.

Floating slab and special direct fixation fasteners will be installed where recommended. No extraordinary measures have been recommended for the Segment 2 Project.

Based on on-site vibration measurements taken at the Children's Hospital (B261 Vermont/Sunset) MTA has made the vibration limits more restrictive during construction. (See Specification Section 01566).

No revisions during this reporting period (2nd Quarter).

D. Future Action: Segment 2

Segment 2 contracts will be monitored during construction to determine if any additional mitigation measures will be necessary to be incorporated. Item can be closed out after completion of construction in 1998.

Segment 3

Segment 3 designs should be complete in 1995. If necessary, extraordinary measures will be applied in final design. Measure can be closed out after completion of construction in 2001.

Noise and Vibration Consultant, WIA, has reviewed submittals from fan manufacturer to ensure compliance with maximum sound power levels in Contract B740.

No revisions during this reporting period (2nd Quarter).

Segment 3

Review of Contracts C0301, C0311, C0321, C0331, and C0351 has been completed and the Section Designers incorporated the necessary mitigation measures into the design package.

No revisions during this reporting period (2nd Quarter).

D. Future Action: Segment 2

This measure will be closed out after successful noise tests of fan & vent shafts during construction in 1999.

Segment 3

Noise testing of fans and sound attenuators will be conducted as required by contract B740.

This measure will be closed out after successful noise tests of fan & vent shafts during construction in 1999.

Segment 3

Segment 3 stations and tunnels have been analyzed by the acoustical consultant (WIA). Results have been included in bid documents for Contracts C0301, C0321, C0311, C0331, and C0351.

The recommendations have been implemented in the contract documents for these Segment 2 and 3 Contracts. They include the application of acoustical treatment to the vent shafts, addition of sound attenuators at both ends of the ventilation fans, lining of ductwork with acoustical material and applying spray-on acoustical material at station ends. Specification Sections 08381, 09511, 15242, 15888 and 15920, in Technical Provisions incorporate these measures.

No revisions during this reporting period (2nd Quarter).

D. Future Action: Segment 2

A request for waiver will be submitted to FTA during the 3rd Quarter of 1995.

This measure will be closed out after successful noise tests of ancillary facilities during construction in 1996 or 1997.

Segment 3

EMC and acoustical consultant WIA have analyzed Segment 3 Construction Contracts for compliance. All Segment 3 construction contracts are being analyzed and designed to meet the N&V6 requirements.

This measure will be closed out after successful noise tests of ancillary facilities during construction in 1998.

C. Status:

- (a) Contractor has been using equipment onsite since October 5, 1992.
- (b) Strobe lights were installed on loaders at B251 as of November 15, 1992, however back-up alarms have not been eliminated because of inaction by Cal/OSHA.
- (c) Submittal approved December 9, 1992.
- (d) MTA Construction's Design Consultant has prepared specifications and drawings for Contract B251. Specification Section 01566 and Special Provision 14.F covers the first four measures. Sound walls were installed. See (g) status below.
- (e) For the Consolidated Excavation Site, MTA Construction and the Contractor have adopted a noise measurement and mitigation program based on ambient readings taken by the Los Angeles Police Department (LAPD) before construction activities began. The ambient measurements are used by the Construction Management Contractor and LAPD to determine the maximum construction noise levels. A system of sound barrier walls, equipment silencing, and receptor soundproofing has been installed to mitigate project impacts and comply with the spirit of the project noise criteria. Frequent noise monitoring at Los Feliz Elementary School indicates a very low incidence of exceeding project noise criteria.
- (f) For haul route, see response to Measure T&P11. Approved by LADOT on October 27, 1992.
- (g) Design for noise walls and sound barriers along the south side of the construction site is complete. They were included in a change order to Contract B251. The noise consultant has determined that a noise barrier wall along the north side of the access road, at the southeast corner of the site, would not be effective in reducing noise levels at Residence A. Even a 20-foot high soundwall along the roadway would leave noise levels at Residence A above project criteria. The acoustic consultant recommended a 20-foot high noise curtain near Residence A, or reductions of noise at the source. MTA Construction has proposed and FTA has approved installing double windows inside Residence A on the north and west walls to reduce noise to within project criteria. The double windows have been installed.
- (h) Contract Drawing C208 includes the noise barrier wall on the north side of the site. The block wall fronting Hollywood Boulevard east of Barnsdall Park access road was completed November 6, 1992. The wall west of the access road was completed in March 1993.
- (i) See Drawing C204 for sound barrier specifications.

ENERGY (E)

Mitigation Measure E1. For operational efficiency, electronic (semi-conductor) traction motor speed controls and regenerative braking will be used. Other measures which will be used for propulsion energy efficiency include:

- (a) Aluminum clad steel "third rail."
- (b) Automatic control with coasting feature.
- (c) Rail vehicles that can be switched off when not in use.

A. Reference: RRTP SEIS, Page 3-10-3.

B. Implementation: All Segments 2 and 3.

C. Status:

- (a) MTA Construction Red Line Project System Design Criteria and Standards, Volume V, Section 4, Paragraph 4.5.2 requires "bimetallic" contact rail of a certain resistance.

The Segment 2 contact-rail procurement is under Contract B612.

- (b) The Segment 2 and Segment 3 passenger vehicles are being purchased by exercising the option that exists in the Segment 1 Contract A650.

The propulsion subsystem electronic controls, regenerative braking, and coast requirements are found in the Technical Provisions Section 14.

MTA Construction Red Line Project System Design Criteria and Standards, Volume V, Section 1 Paragraph 1.9.3 requires chopper control and regenerative braking. However, recent advancements in propulsion subsystems have progressed to the point that the MTA Construction is comfortable permitting an alternating-current (AC) propulsion subsystem option, which is more efficient than the DC "chopper" subsystem.

- (c) MTA Construction Red Line Project System Design Criteria and Standards, Volume V, Section 1, Paragraph 1.5.R, requires key-switch activation for turning off rail vehicles when not in use.

No revisions during this reporting period (2nd Quarter).

D. Future Action: Segment 3 requirements will be met as part of Segment 2 procurement.

This measure will close out after construction of Segment 2 is completed in the year 1998.

Contract No. B271, Hollywood/Western, Drawing No. E-200;

Contract No. B281, Hollywood/Vine, Drawing No. E-081;

Contract No. B215, Wilshire/Vermont, Drawing No. E-435;

Contract No. C0301, Hollywood/Highland, Drawing No. E-158;

Contract No. C0321, Universal City Station, Drawing No. E-241;
and

Contract No. C0351, North Hollywood Station, Drawing No. E-291.

No revisions during this reporting period (2nd Quarter).

D. Future Action: When specifications are available, include references to them in this report.

Measures have been incorporated in Segment 2 design. This item is closed for Segment 2. This measure will be closed out after completion of Segment 3 construction design in 1999.

- (n) Continued coordination with local fire departments and invitations to key personnel underground during construction to familiarize themselves with the tunnels.
- (o) Location of all the gas probes and abandonment in safe manner.
- (p) Interpretation of gas data for Segments 2 and 3 by an Environmental Monitoring Section, reporting directly to the construction manager.
- (q) In all tunnels classified as "gassy" or "potentially gassy", utilization of equipment, procedures, and schedules for air testing in accordance with established tunnel safety orders of Cal OSHA.
- (r) Apply the extensive technical database developed to investigate the occurrence of subsurface gas to define specific safety design measures for incorporation into the Metro Rail project.

A. Reference: RRTP SEIS, Pages 3-11-18, 19, 20, 21.

B. Implementation: All Segments 2 and 3 Contracts.

C. Status: These measures have been incorporated in program standard specifications. The following is a brief listing of the status of provisions on-going and the reference for provisions already in place:

- (a) Specification Section 07101. Use of HDPE or approved alternate continues throughout Segments 2 and 3, except in the Santa Monica Mountains.
- (b) Specification Section 02311.3.1. The drilling and installation of a magnetometer beyond the tunnel heading works well in locating abandoned oil well casings made of steel but does not work well in locating abandoned oil well casings made of sheet metal or wood. Although magnetometers are presently required for the tunnels in Contract B251, a Value Engineering Change Proposal to eliminate the requirement for use of a magnetometer has been approved. An alternate means for locating these abandoned oil well casings using ground penetrating radar from the surface or impulse radar scanning from the tunnel face was included in the Value Engineering Change Proposal. FTA concurrence has been received for revision of this mitigation measure to use alternate methods, in lieu of the magnetometer probe, to locate abandoned oil well casings beyond the tunnel face. The MTA Construction and MTA Boards have granted approval to proceed with processing a value engineering change to contract B251.

Value Engineering Change Order # 17 was approved on February 4, 1994. This proposal with the B251 contractor is to modify the contract and mitigation measure to use alternate methods, such as ground penetrating radar from the surface or impulse radar scanning from the tunnel face, in lieu of the magnetometer probe to locate abandoned oil well casings beyond the tunnel face.

only the Hollywood and Santa Monica faults were considered to have the potential for surficial fault rupture.

Within the last five years, a growing body of scientific evidence suggests that an active system of smaller thrust faults exists within the Los Angeles metropolitan region. Two, or perhaps three of these several small faults and folds of this thrust system include the MacArthur Park and Echo Park faults and the Normandie fold. Thus far, no exposures of these faults have been identified, and no evidence concerning their magnitude or recurrence interval of movement is available.

Recent investigations of the Echo Park fault, a seismological phenomenon which does not appear to be continuous, suggest that this is an on-trend extension of the Coyote Pass fault northwest of the downtown area. This conclusion is inferred from an aligned series of bedrock hills similar to those manifested in the Elysian Park, Bunker Hill and Hollywood Hills.

Geologic cross-sections within the Puente bedrock along the Metro Rail tunnels do not indicate surficial faulting at the crossing of the postulated fault on Vermont Avenue near the 101 Freeway, nor is there any topographic indication at and west of Vermont Avenue. This would mean that:

These fault structures, though aligned, are not connected and neither the MacArthur Park nor the Echo Park faults pose a fault rupture hazard to the tunnels north of downtown.

The newly identified MacArthur Park fault is exhibited by a clear south facing linear scarp north of the Metro Rail route between downtown and Vermont Avenue north of the tunnels along Wilshire Boulevard. Mapping of the recently constructed Metro Rail tunnels during tunnel boring indicate that the fault does not intersect the tunnels along Wilshire Boulevard. Fault rupture hazard, therefore, is not present.

West of Vermont Avenue, the Normandie Station excavation crosses a linear, gently southwest sloping hillside, where the presence of a newly named fold, the Normandie fold, has been postulated. Cross sections of the station excavation made as the sidewalls were exposed lacked any apparent evidence of faulting. The lack of such secondary faults or fissures generally precludes the possibility of tectonic faulting at the station.

Tunnel construction reached the Hollywood fault, which lies along the South Flank of the Santa Monica Mountains. An analysis of the Hollywood fault is currently underway. While movement along this fault during the last 8000 years can neither be demonstrated nor disproved at this time, estimates of recurrence interval and magnitude are being made. An oversized fiber reinforced concrete liner has been designed for traversing the Hollywood fault. This special seismic section will be constructed in contract C0311.

MONITORING

Mitigation Measure SSC2. Methane gas monitoring during construction will consist of the following actions.

- (a) Monitoring the air in the Segment 2 and 3 tunnels.
- (b) Use of automatic and manual gas monitoring equipment.
- (c) Use of audible and visual warning devices on tunnel excavation machines.
- (d) Maintaining records of gas inflow and measurements, and making them available.

A. Reference: RRTP SEIS, Page 3-11-20.

B. Implementation: All Segments 2 and 3 Tunnel Contracts.

C. Status: These provisions are incorporated in Segment 2 Contracts and in Contract C0331 for Segment 3. These provisions are included in the details of the Technical Specification Sections below:

- (a) Section 01518, 01545 (1) and 02311;
- (b) Section 01545 (3.4);
- (c) Section 01545; and
- (d) Section 01545 (3.4).

Tunneling excavation was completed on the Wilshire branch of Segment 2 in December 1992.

Excavation of the Vermont Avenue tunnel of Segment 2 is complete. Excavation of the Vermont/Hollywood Station reaches of Segment 2 commenced during 2nd Quarter of 1993. The Hollywood Boulevard tunnel excavation was completed in May of 1995.

These provisions were incorporated into all Segment 3 tunnel contracts during final design in 1994.

North Hollywood Tunnel Contract C0331, tunnel excavation is underway.

D. Future Action: Contract C0311 will start tunnel excavation in the 3rd Quarter 1995.

MTA will monitor construction now through Fall 1998 and ensure compliance.

This measure will be closed out after construction of Segment 3 tunnels are complete in 1998.

SPARK CONTROLMitigation Measure SSC4. Measures to control sparks include:

- (a) Prohibition of smoking and other sources of ignition in the subsurface areas.
- (b) Allowing welding, cutting and similar activities only in atmospheres containing less than 20 per cent of the lower explosive limit.

A. Reference: RRTP SEIS, Page 3-11-21.

B. Implementation: All Segment 2 and 3 tunnel segments.

C. Status: Because all Segment 2 tunnels are classified as "gassy" by Cal/OSHA, smoking and welding are controlled by statute. Both provisions of this measure are required of contractors by Cal/OSHA Safety Orders, Technical Specification Sections 01545.1.2 & 02311.1.1.

Construction contractors have full time trained safety representatives present on all shifts to monitor and ensure compliance with all safety requirements. Construction management consultant has full time safety personnel assigned to Segment 2 worksites, conducting inspections and ensuring corrective actions. Additionally, there is a formal monthly safety audit of each contract which includes job inspection attended by management and safety representatives of contractor, construction management consultant and MTA Construction.

Segment 3 tunnels are classified as "potentially gassy" or "non-gassy". For Contracts C0331 and C0311 references to Cal/OSHA requirements are included in Specification Section 01545 and in the Authority Construction Safety and Security Manual.

No revisions during this reporting period (2nd Quarter).

D. Future Action: Monitor construction sites now through fall 1998 to verify compliance with Cal/OSHA Safety Orders. This measure will then be closed out.

REFUGE

Mitigation Measure SSC6. Refuge chambers or alternate escape routes shall be provided in accordance with requirements of the California Division of Industrial Safety. Workers will be provided with emergency rescue equipment and trained in its use.

- A. Reference: RRTP SEIS, Page 3-11-21.
- B. Implementation: All Segment 2 and 3 tunnel segments.
- C. Status: These provisions are included in all contracts and in Cal/OSHA California Administrative Code, Title 8. Contractors are required to follow Cal/OSHA requirements as specified in Contract Technical Specifications Section 02311.1.1. During construction of B201 and B221 tunnels, the contractor installed a temporary emergency exit at Wilshire Boulevard and Vermont Avenue. Emergency exits and vents were installed in the center of Vermont Avenue and Hollywood Boulevard.

During tunnel excavation, all personnel are required to have self-rescuers on their persons. During tunnel concreting and after reclassification of the tunnel by Cal/OSHA, self-rescuers are to be "cached" in work area for personnel use.

No revisions occurred during this reporting period (2nd Quarter).

- D. Future Action: Segment 3 tunnel contracts include all appropriate references to meeting Cal/OSHA requirements.

Monitor construction through 1998 to verify that the provisions are implemented. When construction is completed in 1998, this measure will be closed.

4. Conducting periodic and special surveys of underground facilities (for example, after a significant earthquake) to show there is no significant change in sub-surface conditions. Equipment will interface with SCADA.

No revisions during this reporting period (2nd Quarter).

D. Future Action: Turnover completed system containing above measures to rail operator prior to RODs for different segments. This measure will be closed out after completion of design, installation and testing, and commencement of revenue operations in 2000.

Contract B229 is scheduled for completion during the 3rd Quarter of 1995.

Complete development of temporary post-facilities construction ventilation for the Vermont/Hollywood corridor during 4th Quarter of 1994.

This measure will be closed after construction is complete in 1995.

Mitigation Measure B2.

- (a) Detailed construction plans shall include the locations of existing mature trees and mark those that can and will be avoided.
- (b) Mitigation would include replacement landscaping planting in the new parking lot, at the library site, at the new park entrance, and elsewhere in Barnsdall Park as necessary.

A. Reference: Consolidated Excavation Site Mitigation Monitoring Program.

B. Implementation: Drawing Nos. C207 & C212 indicate all trees to be removed and relocated in Contract B251.

C. Status: An existing mature olive tree at the entrance to the Barnsdall Park was to be saved per Consolidated Excavation Site Mitigation Monitoring Program but was shown to be removed on Drawing No. C207. An arborist determined that the tree would not survive removal, storage and replanting because it had multiple trunks, so the olive tree was removed and disposed off. During replacement landscaping planting for the new parking lot, planting of new trees will be addressed and resolved.

One street tree was removed during site preparation to make room for the original entrance to the worksite. Drawing No. C212 for restoration of a portion of the site indicates that street tree is to be replanted.

No revisions during this reporting period (2nd Quarter).

D. Future Action: Activities will be monitored during construction.

Trees which cannot be removed, stored, and replanted will be replaced in kind or as directed by the Los Angeles City Bureau of Street Trees at the end of construction, scheduled for Fall 1995.

This measure will be closed out after construction and restoration are complete in 1995.

- (c,d,e,f) LADOT has prepared Worksite Traffic Control Plans (WTCP) that have been included in Segment 2 contract documents. Similar plans will be prepared for Segment 3 contracts where traffic circulation is impacted. The WTCP include several phases for each construction site so that traffic flow is maintained during the various stages of installation of the excavation support system and street restoration.

WTCP for Vermont Avenue and Hollywood Boulevard contracts are being supplemented by traffic detour plans that allow for full closure of streets at the station sites for installation and removal of the temporary deck structure. To assure that the Vermont Avenue detour routes have appropriate traffic capacities and control, MTA Construction has included in Contract B252 improvements to ATSAC facilities at nine intersections. On Hollywood Boulevard such signal improvements are part of a City traffic signal improvement contract.

On Vermont Avenue, temporary decking installation has been completed at Vermont/Beverly, Vermont/Santa Monica and Vermont/Sunset Stations. Work was performed using the approved Worksite Traffic Control Plans and detour plans that were included in the contract documents. The worksite detours and street closures for deck installation were implemented by a specialist traffic control subcontractor and closely coordinated with LADOT. The plan worked well. Some of the work planned was not completed on schedule, however, major traffic delays were avoided.

Design has been prepared for a second entrance at the Vermont/Sunset Station to be constructed under Contract B263. To minimize impact to traffic, B263 construction will commence following the street restoration under the station contract. Contract B263 includes WTCP and temporary traffic signals to maintain traffic circulation and pedestrian access. MTA Operations have provided requirements for the relocation of bus stops in the work zone.

On Hollywood Boulevard temporary decking has been completed at the Hollywood/Western and Hollywood/Vine Stations. Hollywood/Highland Station Contract has been awarded, and began construction in April 1994. The WTCP and detour plans prepared by LADOT and Caltrans (and included in the contract documents) have worked effectively.

- (g) Except during the limited full street closures, it will not be necessary for bus routes impacted by Segment 2 cut-and-cover construction to be detoured as decking has the capacity to take full traffic loads. However, to keep traffic flowing through the worksite traffic detours, it is not practical to maintain bus stops in the temporary timber deck area.

MTA Construction has coordinated its station design with MTA Bus Operations so that bus stops may be relocated once

Mitigation Measure C2. Develop a schedule of construction activities along Hollywood Boulevard to minimize the disruption to the area.

- A. Reference: RRTP SEIS, Page 3-15-2.
- B. Implementation: All contracts along Hollywood Boulevard.
- C. Status: The Segment 3 team has met with the Hollywood community and the CCMC to coordinate construction activities around major events and holiday schedules as indicated in the Special Provisions section of the C0301 Contract Document. Construction notices are circulated prior to work activities. A field office is operating in the construction zone to provide information and support. Baseline schedules have been prepared for the design and construction contracts.

The HCIP was reissued in its final form to the public in March 1993. The HCIP will govern construction efforts during 1993-1998. Coordination continues through the Hollywood Chamber of Commerce and Los Angeles City Council office to minimize impacts and conflicts with special events.

Metro station construction activities on Hollywood Boulevard began in the first quarter of 1994 and are scheduled to be completed on the surface by the fourth quarter of 1996. During surface construction, the Segment 3 team will continue to inform the affected residents and businesses through public meetings and printed notices. Construction will continue underground with no further surface impacts until late 1998 when the line becomes operational. See also the response to Mitigation Measure T&P2 for information on the HICP.

No revisions during this reporting period (2nd Quarter).

- D. Future Action: This measure will be closed when construction is completed in late 1998.

Mitigation Measure C4. In coordination with the L.A. City Bureau of Street Lighting, determine the procedure for removal, handling, and storage, as well as the replacement after construction of the electroliers that interfere with construction. Also, safely remove, store and replace during street restoration the sections of the Hollywood Walk of Fame that are within the construction areas.

A. Reference: RRTP SEIS, Page 3-15-2.

B. Implementation: Hollywood Boulevard segments of Segment 2.

C. Status: Street Lighting Technical Section 02790.3.1.E outlines the requirements for the mitigation measure regarding electroliers. The City of Los Angeles, Bureau of Street Lighting has prepared the plans and specifications for the rearrangement of street lighting facilities that are required to construct Red Line Stations on the Vermont Avenue and Hollywood Boulevard Segments. Engineering of the rearrangement plans have been coordinated with station proposals to assure both the temporary construction phase and permanent restoration provide adequate illumination. The Bureau's plans have been incorporated into Red Line contract documents to assure that agreed replacement procedures are implemented. The historic electroliers at B281 have all been successfully removed and stored by the Contractor during June through August 1994. Likewise, plans for the Walk of Fame have been included within the B281 contract documents (Technical Specifications 09412 and L Drawings). Based on the results of the Walk-of-Fame test conducted in January, 1993 MTA developed contract actions on removal, storage and restoration of the Walk-of-Fame. Contract B281 was awarded in December of 1993. There were 230 stars removed and crated in April 1994. An additional 10 stars in front of the former Hastings Hotel were removed in late December 1994. At Wilcox and Highland, a broken fire water main to the Pacific Theater, possibly related to B251 tunneling activities undermined portions of the Walk-Of-Fame. This necessitated the removal and temporary storage of 23 Stars. Reinstallation of the stars are scheduled after the 1994/1995 rainy season.

Due to B251 tunnel subsidence in a three block area of Hollywood Boulevard centered at Hudson Avenue, portions of the Walk-Of-Fame will be required to be rebuilt as determined by LABOE. The extent of this work was outlined/identified in November 1994, and design is underway.

Construction Notice to Proceed for Contract C0301, Hollywood/Highland Station was in May 1995. Similar procedures are included in the contract documents under Specification Section 09412 and Drawings C028 and C030.

D. Future Action: Monitor removal/replacement of electroliers for all Vermont/Hollywood Station Contracts to verify compliance with the contract documents.

Mitigation Measure C5. Work with CRA to develop specific implementation plans to minimize disruption to Hollywood Boulevard during construction and to define station entrance locations that minimize impact to cultural and historic resources and locate specific additional station entrances as Hollywood redevelopment projects mature.

- A. Reference: RRTP SEIS, Page 3-15-2.
- B. Implementation: All Hollywood Boulevard segments.
- C. Status: MTA Public Affairs continues to manage the Hollywood Construction Impact Program. The Citizens Committee on Metro Construction (CCMC) was disbanded by MTA in July 1994 after a request from Council District 13 (CD13) to change to a community meeting format for informational exchange. Two meetings have been held since disbandment of the CCMC and have proven successful in meeting the goal of data exchange and MTA mitigation response time reduction. Additionally, Public Affairs continues to operate out of the Hollywood field office five days a week to insure availability to the public during all phases of construction.

Knock-out panels have been included in the design of many locations to provide for future entrances along Hollywood Boulevard. Community meetings were held on January 31, 1991 and February 19, 1991 to make public aware of the status of the Metro Red Line Projects. A community meeting was held in late June 1992 by the Joint Development staff to secure public comments concerning locations of future access points to the B281 and C0301 Stations.

During December of 1993, MTA received approval of their construction mitigation plan for star removal and reinstallation from the Hollywood Chamber of Commerce and Historic Trust.

During the 1st Quarter of 1994, follow-up meetings were held to discuss the Walk-Of-Fame preservation with the Hollywood Chamber Of Commerce and Historic Trust and Citizens Committee on Metro Construction. Additionally, a workshop was held to develop final plan of action.

Walk-Of-Fame stars were successfully removed during a two-week period in early May by the B281 contractor. See also response to measure C4 above.

Parking, lighting, security cleaning and advertising/marketing are the key elements of the mitigation plan. Contracts have been finalized and will be contracted out by the 3rd Quarter of 1995.

C0301 Hollywood/Highland Station was awarded by the MTA Board during the 1st Quarter of 1995.

Mitigation Measure C6. General mitigation at MacArthur Park will include the following:

- (a) Community involvement and awareness as an integral part of the construction activities.
- (b) Retain and use current Segment 1 hot-line number for Segments 2 and 3, and prominently post and disseminate at a number of locations at or near the construction's staging area.
- (c) Continue public information programs which began under Segment 1. Include meetings with the local merchants, community residents and organizations, and mailings and personal deliveries of publications and notices regarding meetings and construction activities.
- (d) Refine the construction program to minimize the period of time that the Wilshire/Alvarado Station serves as an interim terminal.

A. Reference: RRTP SEIS, Pages 3-15-10, 11.

B. Implementation: Tunnel segment through MacArthur Park to the Wilshire/Vermont Station, B201 tunnel from MacArthur Park to Vermont Avenue, and B221, Vermont Avenue to Western Avenue is completely installed.

C. Status: Monthly meetings for Wilshire Chamber of Commerce & Wilshire Stakeholders were attended by staff in January, February and March, 1994. Provisions (a) and (c) are currently underway. The current "Rail hot line" is in operation and will be maintained per item (b). In compliance with provision (d), baseline schedules are presently being prepared for design and construction contracts for the Wilshire/Vermont Station. However, the Wilshire/Vermont Station will not open for operation until the Wilshire alignment to Western Avenue opens in 1996. The construction contract for Wilshire/Vermont Station Stage 2 was awarded in November 1993.

Ten separate construction notices were hand delivered to the Wilshire Boulevard area businesses, on the following dates:

Contract B201, 11-3-92, & 10-06-93;

Contract B211, 08-26-93 & 09-15-93;

Contract B221, 10-14-93 & 11-16-93; and

Contract B231, 11-12-93, 11-17-93, 11-13-93, 11-23-93 & 11-13-93.

No revisions during this reporting period (2nd Quarter).

D. Future Action: Develop specific community involvement plans and report on their implementation.

This measure will be closed out when construction of Wilshire alignment is completed and opens in 1996.

- (d) The MTA Real Estate Section has completed negotiations with the LADRP. The City has granted temporary possession of the property as of 4/24/91; compensation for the permanent and temporary easement is \$7.5 million.
- (e) Specification Section 01010.3.5.
- (f) Specification Section 11230 and Contract Drawings requires Contractor to replace the fountain and aeration system. Proposed changes to the aeration and water fountain systems have been completed and DRP has assumed responsibility for operation of the lake.
- (g) During discussion with LADRP, agreement was made on the overall construction schedule and the 33 months that the lake would be out of service.

During the 2nd Quarter a final inspection of the landscape restoration in the construction easement portion of the park was held. The Contractor has corrected landscape deficiencies and the work has been accepted by the City of Bureau of contract Administration.

The only work remaining is in the vicinity of an emergency exit hatch at the north-west corner of the park which is being used as an access point by the B610 Contractor. The need for this construction access finished in June 1995. Arrangements are underway to complete the re-landscaping around the access hatch so that the area may be returned to LADRP.

D. Future Action: MTA has requested that DRP furnish its final acceptance of the restored park facilities. This measure will be closed out upon closure of the B201 Contract.

Mitigation Measure C9. Measures for minimizing impacts to utilities during construction will be similar to those implemented for Segment 1. These include Master Cooperative Agreements with affected utilities, such as the Los Angeles Departments of Water and Power, Department of Public Works, Pacific Bell, and the Southern California Gas Company. The terms of the agreements include responsibilities for utility rearrangement design, design reviews and approvals, and/or other related work and the method of reimbursement and betterment.

- A. Reference: RRTP SEIS, Page 3-15-13.
- B. Implementation: All cut-and-cover segments in Segment 2 and 3 and other tunnel line segments as necessary.
- C. Status: Monthly coordination meetings with representatives of the agencies and utilities impacted by the project are held to apprise representatives of the status of individual design and construction contract units. The meetings provide a forum to jointly review progress, update schedules and resolve problems.

In addition to the coordination meetings, agency and utility representatives meet individually with the MTA Construction, EMC and CM to develop detailed requirements for the design and construction of facility rearrangements. As designs are completed, third party construction costs are estimated and work orders issued by MTA Construction authorizing third parties to proceed with the required work.

Contract documents include references to the California "One-Call" legislation which requires excavators to have underground utility facilities marked by their owners before starting the work. The regional notification center for Southern California is Underground Service Alert (USA). MTA Construction complied with "One-Call" requirements, a topic of the pre-bid and pre-construction meetings.

Segment 2

The initial utility rearrangements are essentially complete on Contracts B241, B252, B261, B271 and B281. Utilities are suspended beneath the temporary traffic decking. This effort was closely monitored by the utility owners representatives to assure that the utility facilities were not endangered and that work complied with utility specifications. Cost of these services is a project expense which is reimbursed under MTA Construction services work orders..

As station construction proceeds on Vermont Avenue and Hollywood Boulevard, utility work will consist of the continued monitoring of supported facilities to ensure they are not damaged by station construction. This will be followed by the restoration phase when utilities will be permanently reembedded.

For Segment 3, Hollywood Boulevard design is complete and designers will continue design review for the remaining station and will make minor relocations of some gas lines.

This measure will be monitored during construction. Close-out will occur in 1998.

MTA Construction has included the Los Angeles Police Department Noise Divisions ambient noise level readings in all of the Vermont/Hollywood and North Hollywood corridor station and tunnel contracts (Section 01566). LADP has advised MTA Construction of noise complaints so that corrective action can be taken. Remedial measures have been effective in eliminating repetition of the complaints except for Hollywood Boulevard, where HCIP limits were revised to remedy the situation.

MTA Construction Segment 3 team met with Hollywood Chamber of Commerce and residents impacted by the construction activities at the C0301 Hollywood/Highland construction sites. Work hours to limit jack hammering and similar noisy activities have been agreed upon and included by addendum in C0301 bid documents. Other measures include sound barriers at construction fencing limits.

Noise complaints have been received from residents at Wilshire Boulevard and Kenmore Avenue where Contract B610 has an access site at an emergency exit. Construction managers have directed contractor to use quieter equipment and, construction manager measured noise at work site and took additional steps to reduce noise levels. Work at this site is complete. These measures will also be incorporated into the specifications of the contract packages for the remainder of the Segment 2 Contracts, and for Segment 3 Contracts as appropriate.

As stated above, the effectiveness of the mitigation of noise impact to the community is established by the relative number of noise complaints received. The noise enforcement division of the LAPD receives the complaints and has been very helpful in responding to the complaints and working with the Construction Management Consultant and the Construction Contractor to establish ambient and allowable noise levels for on-going construction work to satisfy community noise concerns. Future Segment 2 Contracts have specified ambient noise levels on a site specific basis, as provided by the LAPD during the contract design stage, to ensure that the Construction Contractor is well aware of the allowable noise levels and can include the cost for not exceeding these levels in its bid.

Segment 3 contract document milestone submittals will continue to be reviewed for inclusion of required mitigation measures. Contracts C0301, C0311, C0321, C0331 and C0351 currently include requirements comparable to Segment 2. Contracts C0301, C0311, C0331 and C0351 have been awarded, and have incorporated a full range of noise mitigation measures in Specification Section 01566. Site preparation and fence construction is under way.

D. Future Action: MTA Construction will continue to oversee Contractor compliance with noise control specifications and will work closely with LADP to resolve specific complaints that arise.

Mitigation Measure C11. South Coast Air Quality Management District Rules and Regulations apply to the proposed project and will govern construction operations. Standards for both the amount and duration of fugitive dust emissions will be written into all construction contracts, and MTA will monitor all construction sites for compliance.

- (a) The general Air Quality impact measures are drawn from the SCAQMD Rules and Regulations (Rule #403).
 - (i) A person shall not cause or allow the emissions of fugitive dust from any transport, handling, construction or storage activity so that the presence of such dust remains visible beyond the construction site.
 - (ii) A person shall take every reasonable measure to prevent fugitive dust emissions from wrecking, excavation, grading, clearing and solid waste removal.
 - (iii) A person shall not cause or allow airborne particulate matter from exceeding 100 mg/m^3 (taken as the difference between downwind and upwind measurements).
 - (iv) A person shall take every reasonable measure to prevent visible particulate matter from being deposited on public roadways as a direct result of their actions.
 - (b) MTA requires Contractors to take the following steps to comply with SCAQMD regulations:
 - (i) Establish regular cycles and location for washing trucks;
 - (ii) Tarp loads of debris leaving sites; and
 - (iii) Water down and sweep the streets which have heavy volumes of construction traffic at least daily.
 - (c) Site watering is most commonly used to suppress dust, because it is effective if done frequently and water is generally available at construction sites. Watering will receive particular attention during waste removal and disposal.
 - (d) MTA will require Contractors to establish and maintain records of a routine maintenance program for all internal combustion engines.
- A. Reference: RRTP FEIS, Page 3-183.
- B. Implementation: All Segment 2 and 3 Contracts.
- C. Status: These measures are incorporated in the "Environmental Compliance" article of the General Conditions (e.g., GC60 in Contract B211, GC58 in Contract B251) as well as the Technical Specifications. The measures have been included in all Segment 2 and 3 Contracts.

Mitigation Measure C12. The choice of energy saving construction measures will in many cases depend on detailed design decisions that will be made during Final Design. These measures have been separated into Construction and Street Restoration measures:

- (a) Inclusion of energy conservation standards in construction contracts. Consolidation of materials deliveries. Scheduling of deliveries to non-rush hours. Institution of a routine maintenance program for all gasoline and diesel equipment. Direct hauling of material to construction sites to minimize double handling.
- (b) Use of emulsified asphalt wherever possible. To the extent possible use slip-form construction for curbs, gutters, traffic separators, barrier walls and concrete pavement. Monitoring of petroleum product delivery, disbursement, and accounting to document that usage is efficient and justified.

(Note: The underlined words were inadvertently omitted from this measure in previous editions.)

A. Reference: RRTP FEIS, Page 3-184.

B. Implementation: All construction sites and equipment.

C. Status:

- (a) General Condition Article #61 requires contractors to comply with the state energy conservation plan which implements the Energy Policy and Conservation Act (41 USC 6321 et seq.).
- (b) Design specifications do cover requirements for energy saving during construction, e.g., Specification 02512 requires use of emulsified asphalt's instead of cut-back asphalt and slip form construction where quantities and maintenance of traffic flow justify its use. However, the use of emulsified asphalt is not allowed by the City of Los Angeles when repaving streets.
- (c) Slip form construction is commonly used throughout the construction industry for large highway job and residential subdivisions where the length of slip form can justify the capital investment in the equipment and the use of the equipment will not adversely impact maintaining existing traffic flows. For most of the street restoration work on Segment 2, the distance between customized details (e.g., driveways, curb penetrations for drains, catch basins, bus pads, etc.) is short. In addition, the need to maintain traffic flow is critical and restoration work is done in small pieces consistent with a phased Worksite Traffic Control Plan (WTCP). Therefore, the opportunities to use slip forming in a practical and cost effective manner may be limited. However, contract Specification Section 02528, "Concrete Curbs, Gutters and Sidewalks," incorporates by reference the Standard Specifications for Public Works Construction (SSPWC) including subsection 303-5, which allows at the option of the Contractor and with the approval of the Engineer, the use of slip form equipment for the construction of concrete curb and gutter.

Mitigation Measure C13. Mitigation of excavation, muck handling and water and soil contamination will be similar to the procedures adopted for Segment 1 construction, including the following provisions:

- (a) Survey of structures adjacent to tunnels and station excavations to identify those requiring special construction stabilization.
- (b) Use of a shield driven ahead of the TBM to prevent caving of the tunnel during construction. A support system will be installed immediately behind the shield. In hard rock tunnels, support will be provided by rock bolts or other support systems.
- (c) Mitigation of surface stability impacts from excavation by:
 - (i) To the extent possible, surface excavations will be adjacent to vacant properties.
 - (ii) Removal of small or inexpensive buildings adjacent to excavation.
 - (iii) Where feasible, construction of temporary shoring systems to minimize earth movements and allow adjacent excavation.
 - (iv) Techniques for construction stabilization will include consideration of underpinning and alternatives to underpinning such as chemical grouting and compaction grouting.
- (d) Limitation of dewatering to the immediate construction area. Groundwater removal in accordance with the requirements of the NPDES permit.
- (e) Disposal of hazardous materials according to the procedures established in Segment 1 and contained in subsection 3-5 of Specification Section 01566, "Pollution Controls." These contain the process for identification of contaminated soils and several methods of disposal including land farming, incineration and disposal to Class I waste disposal facilities. Haul routes for disposal of contaminated materials will be subject to the approval of the City of Los Angeles.
- (f) Requirement of all contractors to immediately clean up any accidentally spilled materials, including sediment, vehicle fuels, and lubrication fluids. In addition, requirement of periodic cleaning of streets, sidewalks, and construction areas.

A. Reference: RRTP FEIS, Pages 3-15-21 through 3-15-31 and 5-3-4. FEIS, Pages 3-187, 188, 189.

B. Implementation: All Segments 2 and 3 tunnel and station segments.

C. Status:

- (a) A review of structures that might be impacted by construction is prepared for each contract. A summary of the review appears in the geotechnical design summary report for each contract and any special requirements or restrictions for construction stabilization are included in the individual contract packages in Specification Section 02156.

D. Future Action:

- (b) Address tunnel support in the hard rock under the Santa Monica Mountains in specifications and drawings for Contract C311 during final design. Final design will be complete by 3rd Quarter 1995.
- (d) Any requirement for further action identified by the environmental site assessments and pump tests will be included in the appropriate construction contract documents package during design of Segment 3 facilities in 1995.

Monitor construction activities to insure these measures are followed.

This measure will be closed out after completion of construction in 1999.

Remining by hand is being performed in a few isolated areas on Vermont Avenue and Hollywood Boulevard where tunnels are misaligned. A large sinkhole which had developed between Barnsdall Park and Edgemont on Hollywood Boulevard has been filled with lean concrete. Remining methods are being evaluated - cut/cover or by soil-freezing.

HAR tunnels have passed La Reina building, where footings were protected by compaction grouting. Negligible (less than 0.1 inch) settlements were observed. HAL tunnels have passed Hollywood/Highland Station.

Segment 3- North Extension

Tunnels and stations in the San Fernando Valley have been classified by Cal/OSHA as "potentially gassy".

Contaminated and hazardous material can be handled through the standard contract provisions for Health and Safety and handling of hazardous and contaminated material.

Crossover structure is being excavated by the open-cut method as per specification requirements.

Dewatering continues.

Geotechnical investigations for the future widening of L.A. River bridge and the 101 Freeway Caltrans bridge has been completed.

Excavation of the La Brea shaft off Hollywood Boulevard continues as specified.

D. Future Action: This measure will be closed out for Segment 2 after construction is complete in 1998.

This measure will be monitored during construction of Segment 3 North Extension. Close out after construction is complete in 1998.

located on the property of the Hollywood/Presbyterian Hospital (Contract B261 Vermont/Sunset Station). The building is a City of Los Angeles cultural monument and determined eligible for placement on the National Register. SHPO was notified of this recommendation in December 1992. In February 1993, MTA forwarded a finding of no effect to SHPO on the Hollywood Presbyterian Hospital changes as part of section 106 process. During August 1991, MTA Construction forwarded drawings for Wilshire Boulevard and Hollywood/Vine stations to SHPO.

- (b) Park personnel have reviewed the plans for construction at the park and have made extensive comments, all of which have been incorporated into the plans. See also measures C6 and C7 above.
- (c) The Hollywood/Vine Station, which lies within the Hollywood Boulevard Commercial and Entertainment District, underwent plaza and entrance enhancement redesign and was forwarded to SHPO in September 1993.

The archaeologist visited the B288 demolition project but found no artifacts or cultural resources.

- (d) Project Archaeologists and Paleontologists have attended the station contracts initial construction meetings for B215 and B241 stations held in the 4th Quarter of 1993.
- (e) Specifications have been prepared for archaeological monitoring in contracts for demolition, grading and excavation at Universal City Station.

The ENO25 Contract was awarded in April 1993. Transfer of archaeological and paleontological services for Segments 2 and 3 was complete.

On March 8 and 31, 1994, fossils from Pleistocene Epoch were discovered by the tunneling contractor SKK, who notified the project archaeologist. This represents the first fossils from this time period. Fossils were found between 47 feet-60 feet in depth and were composed of lower leg bone of an Ice Age Horse (*Equus Sp*) and a molar from a Mastodon. Later fossil remains of Bison and Camel were recovered from the tunnels. Monitors have increased their monitoring from one 3-hour inspection per week to two 3-hour inspections per week.

The Hollywood/Highland, and Station Plans were forwarded to SHPO and local agencies in the 4th Quarter 1994.

Project Archaeologists and paleontologists have been monitoring construction on all MOS-2 Contracts.

No revisions during this reporting period (2nd Quarter).

Mitigation Measure CR2.

- (a) The removal of the 1920's street lamp may be properly mitigated by its storage and replacement following construction of the new permanent park access road. It is not architecturally unique and its historic purpose is to light the access road to the park.
- (b) Removal and replacement of the approximately 100 year old olive tree near the present park entrance sign to another location in the park area is proposed.
- (c) The temporary relocation of the park entrance to the west of its present location should not significantly affect the operation of the park. The temporary access should be provided with a well marked sign to minimize confusion to visitors. This location will actually be closer to the Hollywood Boulevard entrance originally envisioned by Frank Lloyd Wright.
- (d) The temporary loss of 44 parking spaces in the Hollywood Boulevard parking lot will be mitigated by provision of replacement parking within convenient walking distance of the park facilities.
- (e) A 10 foot high sound wall will be constructed along the north edge of the proposed access road in order to reduce predicted noise effects on Residence "A". "Possibly significant" noise impacts on Residence "A" during Phase I of the project are temporary in nature, lasting for approximately eight months. To further mitigate this impact, it is recommended that an additional sound wall be constructed close to the truck activity at the eastern end of the site during Phase I activity.
- (f) Vibration monitoring equipment should be placed between Residence "A" and the project site in order to ensure that levels remain well below the threshold for damage to fragile historic buildings of 95 dB during the entire duration of the project.
- (g) The Project Archaeologist will monitor Phase I site excavation and will implement appropriate elements of the project treatment plan for archaeological and paleontological resources during construction activity.

A. Reference: Consolidated Excavation Site Mitigation Monitoring Program

B. Implementation: Contract B251. Specification & Drawings, and the Real Estate Agreement for the Project.

C. Status:

- (a) The removal of the 1920's street lamp was included in the change order to Contract B251 issued in 1st Quarter, 1993. The lamp was removed and stored as of December 15, 1992.
- (b) Drawing C207 called for removal and replacement of the 100 year old olive tree. This was not possible because the tree had multiple trunks, per LADRP. See also response to Measure B2.
- (c) Drawing C208 will include relocation of the park entrance. Contractors proposal for operating the site did not require relocating the park entrance. Contractors submittal approved on

Mitigation Measure CR3. The project as proposed is the product of extensive coordination among the MTA, local historic groups, and the Los Angeles Recreation and Parks Department. As outlined in the Historic/Cultural section above, the following mitigation measures have been incorporated into the project to prevent permanent harm to the park and to the significant historic resources in the park:

- (a) Auto access to the park will be maintained continuously throughout the construction period via the existing or relocated driveway from Hollywood Boulevard.
- (b) Certain construction activities which have the potential to create permanent structural damage to fragile historic buildings have been prohibited, including pile driving and blasting in the vicinity of the park.
- (c) Noise mitigation has been incorporated in project specifications including the use of noise walls on the south side of the site, location of construction facilities and trailers to reduce noise levels, and a noise wall along Hollywood Boulevard so that noise impacts will be below significant levels.
- (d) In addition, the land acquired from the car wash will be donated to the City of Los Angeles Recreation and Parks Department after the construction period is over. This will increase the total area of the park by about 0.5 acres and is in lieu of payment for the permanent underground easement. In addition, the MTA would compensate the City of Los Angeles for use of the Park during construction. The level of funding that the MTA has reserved for this purpose is \$6.5 million and is the subject of final negotiations between the MTA and the Los Angeles Department of Recreation and Parks.
- (e) It is agreed by both the MTA and the City of Los Angeles Department of Recreation and Parks that a portion of this compensation will be used by the City of Los Angeles to:
 - (i) Reconstruct the access to Barnsdall Park.
 - (ii) Construct a new parking lot for the Park.
 - (iii) Re-landscape the site.
 - (iv) Develop Barnsdall Park in accordance with previously established renovation needs.
 - (v) The Los Angeles Recreation and Parks Department has agreed to the temporary use of the Park for Construction purposes.

Local historic groups and homeowner groups have been contacted, and a copy of the EA/IS/DND for the consolidated Excavation Site has been forwarded to the State Historic Preservation Office and to the Federal Transit Administration (FTA -- formerly UMTA).

- A. Reference: Consolidated Excavation Site Mitigation Monitoring Program
- B. Implementation: Contract B251, Real Estate agreements and agreement with Dept. of Recreation & Parks.

LIGHT AND GLARE (L&G)Mitigation Measure L&G1.

Only shielded lamps that would control the direction of the light will be used. By focusing the lights onto the worksite, the light shinning into the surrounding areas should be minimized.

The sound walls and excavated material pile along Hollywood Boulevard and the sound walls along the new access roads should reduce the amount of light leaving the construction site. Some light may escape, but this would not be expected to substantially increase ambient light levels over those produced by street lights and nearby businesses.

- A. Reference: Consolidated Excavation Site Mitigation Monitoring Program
- B. Implementation: Contract B251
- C. Status: Special Provisions SP-14.P covers shielded lamps. SP-14.G and Contract Drawings C-204 and C-208 covers the walls and storage pile.
- The contractor has installed higher sound walls around the construction site. These will contain the light within the site.
- No revisions during this reporting period (2nd Quarter).
- D. Future Action: This measure will be closed when construction is complete in 1998.

soil. The conveyor system that distributes the excavated material onto the stock pile has been equipped with a spray curtain to wet the stream of excavated material and settle dust.

- (c) Specification Section 01566, Part 3.3 covers dust control methods. The requirement to clean the paved site by wet sweepers has not yet been included in the pollution control specifications. However, Specification Section 01566-0 3.3.B requires wetting of site and sweeping as dust control technology. This satisfies the requirement for wet sweeping. The contractor has obtained a sweeping service that sweeps the roadway on-site and the portion of Hollywood Boulevard, used for a hauling route during loading operations each night. This sweeping and concurrent sprinkling reduces the dust emitted.
- (d) Specification Section 01566, Part 3.3.B.3 covers washing the wheels of trucks before they leave the site. The weather conditions have not created situations where wheels have required cleaning.
- (e) Specification Section 01566, Part 3.3.B.1 requires covered truck beds and Special Provisions 14.M covers clean up of Hollywood Boulevard.

Contractor has agreed to comply with this requirement for covering trucks and has equipped his fleet of excavation trucks with tarpaulins.
- (f) The issue of removing odoriferous materials is covered in Technical Specification Part J "Contaminated Materials Management. Contractor has encountered some contaminated material and has moved them to disposal areas quickly. There have been no complaints about odors, probably because the materials have not been very odoriferous.
- (g) See response to measures AQ1 through AQ11 in the MOS-1 MMSR.
- (h) Reduction in daytime truck traffic is covered in Part C, Special Provision SP-14.D. MTA Construction Staff and LAUSD have negotiated and obtained approval for a revised agreement for truck traffic during midday that would prohibit semitrailers and concrete trucks from 7:00 to 9:00 AM and 2:00 to 4:00 PM. It would limit the semitrailers and concrete trucks to five per hour from 9:00 AM to 2:00 PM.
- (i) Dust monitoring, as agreed between MTA Construction and LAUSD, is being performed. During December 1993 airborne concentrations of PM10 exceeded the state standard of 50 mg/m³ at LFES on six of 12 days that monitoring was done. On all 12 of these days monitored, PM10 levels at EMM were higher than that at LFES. Prevailing winds from the east and north blew construction dust away from LFES. However, high concentrations at both EMM and LFES on six days may indicate that dust

HYDROLOGY AND GROUNDWATER (H&G)Mitigation Measure H&G1.

- (a) At the appropriate locations, the tunnels will be "dewatered" by pumping the water back up the tunnel or station excavation to a settling tank on the project site. Soil particles can then settle, and the water can be discharged into existing storm drains in accordance with the provision of the project National Pollutant Discharge Elimination System (NPDES) permit obtained by the MTA. (Consistent with the 1989 Final SEIS/SEIR, a project NPDES permit has been obtained by the MTA.) Discharges will be monitored for hazardous constituents and treated if necessary. Possible methods for treatment include adding hydrogen peroxide for sulfides and using activated charcoal filters for hydrocarbon removal.
- (b) No uncontrolled storm runoff will be allowed. The contractor will be required to design a system to catch storm water, process it, and discharge it into the storm drain system, in accordance with the provisions of the project NPDES permit.

A. Reference: Consolidated Excavation Site Mitigation Monitoring Program.

B. Implementation: All Segment 2 and 3 Contracts.

C. Status: Dewatering has been reduced to a minimum on the Wilshire segment. Treatment is no longer required and has been discontinued. Water discharge, including stormwater, from the project sites conforms to the provisions of the NPDES permit for wastewater discharge. All discharge monitoring and reporting takes place under the direction of the NPDES Monitoring and Reporting Program.

The Segment 2 and 3 NPDES Permit is applicable through 1998. Dewatering on Segment 2 for Vermont and Hollywood continues. Treatment for hydrocarbons for current dewatering has been completed. Contractor continues to treat for excessive solids at Barnsdall Park in conformance with NPDES. Dewatering has begun on Segment 3 at Universal City to support the C311 contract.

D. Future Action: This measure can be closed out after construction of Segments 2 and 3 in 1999. When revenue operations begin, NPDES requirements will be met by the rail operating element during the life of the project.

workers that have field duties requiring OSHA hazardous waste operations training will be continued. A site specific health and safety plan has been prepared by the general contractor to be executed throughout duration of the work.

(d) See also the response to measure SSC3.

No revisions during this reporting period (2nd Quarter).

D. Future Action: This measure can be closed out after completion of construction, in 1995 for the Wilshire Branch, by 1997 for the Vermont Avenue to the Hollywood/Vine leg, and by 2000 for Segment 3.

APPENDIX - GLOSSARY OF ACRONYMS

ACHP	Advisory Council on Historic Preservation
ADA	Americans with Disabilities Act
ATSAC	Automated Traffic Signal and Controls
CAC	California Administrative Code
CAC	Citizens Advisory Committee
CAD	Computer Aided Design
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Occupational Safety and Health Administration
CBD	Central Business District
CCF	Central Control Facility
CCR	California Code of Regulations
CCTV	Close Circuit Television
CCMC	Citizens Committee on Metro Construction
CD	Council District
CDC	Community Development Corporation
CDD	County Development Department
CEQA	California Environmental Quality Act
CM	Construction Management
CMP	Congestion Management Program
COF	Clarifications of Findings
CELP	Construction Enhancement Loan Program
CRA	Community Redevelopment Agency
CRWQCB	California Regional Water Quality Control Board
CTS	Commuter Transportation Services
DRP	Department of Recreation and Parks
DWP	Department of Water and Power
EA	Environmental Assessment
EA/IS/ND	Environmental Assessment/Initial Study/Negative Declaration
E&H	Elderly & Handicap
EMC	Engineering Management Consultant
EMM	Edgemont Mini Mall
EMP	Environmental Management Panel
FAR	Floor Area Ratio
Fed/EPA	Federal Environmental Protection Agency
FEIS	Final Environmental Impact Statement
FFC	Full Funding Contract
FFGA	Full Funding Grant Agreement
FTA	Federal Transit Administration
GEC	General Environmental Consultant
HAL	Hollywood Alignment Left
HAR	Hollywood Alignment Right
HBD	Hollywood Boulevard District
HCIP	Hollywood Construction Impact Program
HDPE	High-Density Polyethylene
LABOE	Los Angeles Bureau of Engineering
LACTC	Los Angeles County Transportation Commission
LADOT	Los Angeles Department of Transportation
LADOP	Los Angeles Department of Planning
LACDRP	Los Angeles County Department of Regional Planning
LAFT	Los Angeles Fire Department