

Table 5-4. Potential Underground Emphasis LRT Alternative Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-16	A. Sperl Building	Listed	Listed	LTS		X	
7-17	3+ story commercial building, Daimora Hotel	Listed	Listed	LTS		X	
7-18	Far East Café Building	Listed	Listed	LTS		X	
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	LTS		X	
7-20	Aoyama Tree	Not Eligible	Listed	LTS	X		
7-26	Koyasan Buddhist Temple, Koyasan Church, Koyasan Temple	Eligible	Eligible	LTS		X	
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	SI Resource demolished during construction	X		
7-35	John A. Roebling's Sons Co., Robert Arranaga & Company, Incorporated	Eligible	Eligible	LTS		X	

Table 5-4. Potential Underground Emphasis LRT Alternative Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-2	<i>Los Angeles Times</i> Building	Eligible	Listed	LTS		X	
8-3	The <i>Mirror</i> Building (Site of Butterfield Stage Station), <i>Los Angeles Times-Mirror</i> Annex, <i>Times</i> Building South, <i>Mirror-News</i> Building	Eligible	Eligible	LTS		X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	LTS	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	LTS		X	
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	LTS		X	
9-R6	J.R. Newberry Company Building	Eligible	Eligible	LTS		X	
9-R7	1 st Street Viaduct (Bridge #53C-1166)	Eligible	Eligible	LTS		X	

Key for CEQA Impacts

LTS = Less Than Significant impact, no mitigation required

SI = Significant Impact that can be mitigated to less than significant

SU = Significant and Unavoidable impact

5.4.4 Potential Effects to Section 4(f) Resources

The Underground Emphasis LRT Alternative would require the acquisition of a subsurface easement beneath the Cathedral of St. Vibiana Rectory (APE Map #8-13). The subsurface easement would extend approximately five feet beyond the north (2nd Street side) property line of the building. The easement acquisition is a requirement of the project to provide a buffer between subsurface project facilities and at-grade structures. No project facilities would use any portion of the Rectory building or adversely affect the characteristics that make it eligible for the NRHP. Contingent upon consultation with the California SHPO and the Advisory Council on Historic Preservation (if the ACHP participates in consultation) and their respective concurrence, a *de minimus* impact finding would be consistent with FTA's *Guidance for Determining De Minimus Impacts to Section 4(f) Resources*.

5.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

5.5.1 Construction Impacts

The following discussion describes potential effects in the APE due to construction activities for the Fully Underground LRT Alternative – Little Tokyo Variation 1. Table 5-5 lists the effects/impacts for each NRHP property/CRHR resource.

5.5.1.1 Temporary Dirt/Unintended Damage

Potential effects and impacts from dirt and unintended damage to historic properties and historical resources from the construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be similar to those previously described for the Underground Emphasis LRT Alternative.

5.5.1.2 Traffic Congestion/Parking/Access

Potential effects and impacts from changes in access, parking, and traffic patterns to historic properties and historical resources from the construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be similar to those described for the Underground Emphasis LRT Alternative

5.5.1.3 Visual

Potential visual effects and impacts to historic properties and historical resources from the construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be similar to those described for the Underground Emphasis LRT Alternative.

5.5.1.4 Demolition, Partial Takes or Alteration of a Property

Potential impacts to historical resources under this alternative from demolition or property acquisitions would be identical to those described for the Underground Emphasis LRT Alternative.

5.5.1.5 Station Construction

For the Fully Underground LRT Alternative - Little Tokyo Variation 1 a station would be constructed beneath Flower Street between 5th and 4th Streets. This would require demolition of a portion of the CRHR eligible Belmont Tunnel (APE Map #3-4). The Belmont Tunnel is not eligible for the NRHP. Another station would be constructed at the intersection of 2nd Street and Broadway. The effects of these construction activities on the NRHP eligible LA Mirror Building would be similar to those described for the Underground Emphasis LRT Alternative.

A proposed station would be constructed under Flower Street between 5th and 4th Streets. Although still conceptual and preliminary, the potential designs for station entrances would be modest glass canopies supported on steel frames. Largely transparent, the new entrances would not significantly alter views to the Los Angeles Central Library or the California Club.

Another proposed station would be constructed underground southwest of the intersection of 2nd and Hope Streets. The National Register eligible Walt Disney Concert Hall (APE Map #4-4) is located on the hill above the proposed station. The preliminary conceptual designs would be compatible with the contemporary forms, materials, and massing of this historical resource. The station is also near the NRHP eligible 2nd Street Tunnel (APE Map #4-3).

A fourth station would be constructed at 2nd Street and Central Avenue. This underground station may also include a small building at ground level on the southwest corner of 1st and Alameda Streets to house ventilation fans. If the entrances are similar to those proposed for the other stations, the changes would not result in a significant effect to the NRHP eligible John A. Roebling's Sons Co. Building (APE Map #7-35). While the station would also be near the CRHR eligible S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports (APE Map #7-30), this building would be removed as a result of the open cut method of construction in this portion of the alignment.

Section 106 Effects Analysis for Historic Properties

Construction of proposed stations would create effects to the Los Angeles Central Library, Walt Disney Concert Hall, California Club, and the John A. Roebling Sons Co Buildings. However, the effects on these historic properties would not be considered adverse because the potential changes would not diminish the integrity of the properties' location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Construction of proposed stations would not constitute a substantial adverse change that would impair the significance of the Los Angeles Central Library, California Club, John A. Roebling Sons Co building, or the 2nd Street Tunnel, or the Disney Concert Hall. Implementation of MM-BE-1 would reduce any potential impact to the CRHR-eligible Belmont

Tunnel to a less than significant level. Potential changes in setting created by stations would not diminish the integrity of the resources' significant historic features. The Fully Underground LRT Alternative – Little Tokyo Variation 1, therefore, would have a less than significant impact upon historical resources.

The property acquisition and subsequent demolition of the S. Kamada Restaurant, Atomic Café, Senor Fish, and Coast Imports building would constitute a substantial adverse change that would impair the significance of the historical resource. However, implementation of MM-BE-1 and MM-BE-5 would reduce impacts to a less than significant level.

5.5.1.6 Portals

For this alternative two portals would be constructed. One portal would be located northeast of the Little Tokyo/Arts District Station and tracks. There are no historical resources or historic properties in the vicinity of this portal.

The second portal would be located within 1st Street between Alameda and Vignes Streets. The NRHP eligible J.R. Newberry Company Building (APE Map #9-6R) is located just east of the intersection of 1st Street and Vignes Street but would not be affected by this alternative.

Section 106 Effects Analysis for Historic Properties

The NRHP eligible J.R. Newberry Company Building (APE Map #9-6R) would be affected by the construction of a portal. No adverse effect would occur because the changes would not directly alter the setting of the historic property in a manner that would diminish the integrity of the historic property.

CEQA Impact Analysis for Historical Resources

Construction of a portal would not constitute a substantial adverse change that would impair the significance of the J.R. Newberry Company Building (APE Map #9-6R). The change in setting created by the portal would not diminish the integrity of the property's significant historic features. This alternative, therefore, would have a less than significant impact upon historical resources.

5.5.1.7 Noise and Vibration

Potential effects and impacts to historic properties and historical resources caused by noise and vibration would be the same as those discussed for the Underground Emphasis LRT Alternative. Implementation of mitigation measures MM-BE-2 and MM-BE-3 would avoid adverse effects to historic properties and reduce potential impacts to historical resources to a less than significant level.

Table 5-5. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	SI			X	
2-3	Fine Arts Building, Global Marine House	Eligible	Listed	LTS			X	
2-5	Engine Company No. 28	Listed	Listed	LTS			X	
2-7	Roosevelt Building	Listed	Listed	SI			X	
2-10	811 Wilshire building, Tishman 615 building, Wilflower building	Eligible	Listed	LTS			X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	SI			X	
2-13	Superior Oil Company Building	Listed	Listed	SI			X	
3-1	The California Club	Eligible	Listed	SI			X	
3-2	Los Angeles Central Library	Listed	Listed	SI			X	

Table 5-5. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	SI		X		
4-3	2 nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	LTS		X		
4-4	Walt Disney Concert Hall	Eligible	Eligible	SI			X	
5-1 thru 5-13, 6-1 thru 6-7, 6-12	Los Angeles Civic Center Historic District	Eligible	Eligible	LTS			X	
5-1	Los Angeles Department of Water and Power Building, John Ferraro Office Building	Eligible	Eligible	LTS		X		
5-2	Ahmanson Theatre	Eligible	Eligible	LTS		X		

Table 5-5. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-3	Mark Taper Forum	Eligible	Eligible	LTS		X		
5-4	Dorothy Chandler Pavilion	Eligible	Eligible	LTS		X		
5-5	Los Angeles County Hall of Administration, Kenneth Hahn Hall of Administration	Eligible	Eligible	LTS		X		
5-6	El Paseo de los Pobladores de Los Angeles	Eligible	Eligible	LTS		X		
5-7	Los Angeles County Courthouse, Stanley Mosk Los Angeles County Courthouse	Eligible	Eligible	LTS		X		
5-8	County of Los Angeles Central Heating and Refrigeration Plant	Eligible	Eligible	LTS		X		
5-9	Los Angeles County Hall of Records	Eligible	Eligible	LTS		X		
5-10	Court of Historic American Flags	Eligible	Eligible	LTS		X		

Table 5-5. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-11	Los Angeles County Law Library, Mildred L. Lillie Building	Eligible	Eligible	LTS		X		
5-12	Hall of Justice, Los Angeles County Jail	Eligible	Eligible	LTS		X		
5-13	Clara Shortridge Foltz Criminal Justice Center	Eligible	Eligible	LTS		X		
6-1	U.S. Post Office and Court House Building, Federal Building	Listed	Listed	LTS			X	
6-2	Los Angeles City Hall	Eligible	Eligible	LTS			X	
6-3	Site of the <i>Los Angeles Star</i> Fletcher Bowron Square, Los Angeles Mall, Triforium, Bella Union Hotel site	Not Eligible	Listed California Historical Landmark	LTS		X		
6-4	City Health Building, City Hall South	Eligible	Eligible	LTS			X	

Table 5-5. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
6-5	Federal Building, North Los Angeles Field office	Eligible	Eligible	LTS			X	
6-6 6-7	The Police Facilities Building, Parker Center, Motor Transport Division	Eligible	Eligible	LTS			X	
6-8	City of Los Angeles Parking Lot 3, “Tinkertoy” Parking Structure	Not Eligible	Eligible	LTS		X		
7-1	Dorner & Hinz Saloon, Nelson Hotel, Red Wing Shoes, California Floral Company	Not Eligible	Eligible	LTS		X		
7-7 thru 7-9, 7-11, 7-14 thru 7- 19	Little Tokyo Historic District	Listed National Historic Landmark	Listed	LTS			X	

Table 5-5. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-7	Japanese Union Church of Los Angeles	Listed	Listed	LTS			X	
7-8	San Pedro Firm Building	Listed	Listed	LTS			X	
7-9	Mark Kuwata Real Estate	Eligible	Eligible	LTS			X	
7-11	1-3 story commercial building, Anzen Hardware	Listed	Listed	LTS			X	
7-14	1-3 story commercial building, Little Tokyo Hotel	Listed	Listed	LTS			X	
7-15	1-3 story commercial building, Ace Japanese Restaurant,	Listed	Listed	LTS			X	
7-16	A. Sperl Building	Listed	Listed	LTS			X	
7-17	3+ story commercial building, Daimora Hotel	Listed	Listed	LTS			X	

Table 5-5. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-18	Far East Café Building	Listed	Listed	LTS			X	
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	SI			X	
7-20	Aoyama Tree	Not Eligible	Listed	LTS		X		
7-26	Koyasan Buddhist Temple, Koyasan Church, Koyasan Temple	Eligible	Eligible	LTS			X	
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	SI Resource demolished during construction	X	X		
7-35	John A. Roebling’s Sons Co., Robert Arranaga & Company, Incorporated	Eligible	Eligible	LTS			X	
8-2	<i>Los Angeles Times</i> Building	Eligible	Listed	SI			X	

Table 5-5. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-3	The <i>Mirror</i> Building (Site of Butterfield Stage Station), <i>Los Angeles Times-Mirror</i> Annex, <i>Times</i> Building South, <i>Mirror-News</i> Building	Eligible	Eligible	SI			X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	SI	X (subsurface easement)	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	SI			X	
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	SI	X (Subsurface Easement)		X	
9-R6	J.R. Newberry Company Building	Eligible	Eligible	LTS			X	

Table 5-5. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
9-R7	1 st Street Viaduct (Bridge #53C-1166)	Eligible	Eligible	LTS			X	

Key for CEQA Impacts

LTS = Less Than Significant impact, no mitigation required

SI = Significant Impact that can be mitigated to less than significant

SU = Significant and Unavoidable impact

5.5.1.8 Differential Settlement

Potential effects and impacts to historic properties and historical resources caused by differential settlement would be the same as those discussed in the Underground Emphasis LRT Alternative. Implementation of mitigation measures MM-BE-2, MM-BE-3, and MM-BE-4 (when applicable), would avoid adverse effects to historic properties and lower impacts to historical resources to a less than significant level.

5.5.2 Operational Impacts

Potential operational effects and impacts of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be the same to historic properties and historical resources as those discussed for the Underground Emphasis LRT Alternative, except that a proposed switch, located at 1st and Alameda for the Underground Emphasis LRT Alternative, would instead be located at the intersection of 1st and Vignes Streets. Operation of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would result in a moderate noise impact at this location. This switch is located near the NRHP eligible J.R. Newberry Company Building (APE Map #9R-6) and the 1st Street Viaduct (APE Map #9R-7). Moderate noise effects/impacts do not exceed the FTA Noise Impact Criteria, therefore no adverse effects to historic properties and no significant impacts to historical resources are anticipated from project operations. Table 5-6 lists potential effects and impacts by resource.

5.5.3 Cumulative and Indirect Impacts

There are no anticipated indirect impacts from the Fully Underground LRT Alternative – Little Tokyo Variation 1.

Cumulative effects and impacts include short-term effects during construction such as noise, dirt, changes in setting from the use or storage of equipment, or lack of access due to congestion or revisions in traffic patterns. Cumulative effects may also result from long-term effects such as additional traffic generated by an increase in density as new buildings are constructed. Taken collectively, the reasonably foreseeable projects in the project area do not appear to have additional effects upon historic properties or impacts upon historical resources that are affected by the Fully Underground LRT Alternative - Little Tokyo Variation 1.

5.5.4 Potential Effects to Section 4(f) Resources

The Fully Underground LRT Alternative - Little Tokyo Variation 1 would require the acquisition of a subsurface easement situated on one NRHP-eligible property; Cathedral of Saint Vibiana Rectory (APE Map # 8-13). No adverse effects would occur to the Rectory building as a result of the easement. This acquisition would result in a Section 4(f) *de minimus* finding.

Table 5-6. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	LTS		X	
2-3	Fine Arts Building, Global Marine House	Eligible	Listed	LTS		X	
2-5	Engine Company No. 28	Listed	Listed	LTS		X	
2-7	Roosevelt Building	Listed	Listed	LTS		X	
2-10	811 Wilshire building, Tishman 615 building, Wilflower building	Eligible	Listed	LTS		X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	LTS		X	
2-13	Superior Oil Company Building	Listed	Listed	LTS		X	
3-1	The California Club	Eligible	Listed	LTS		X	
3-2	Los Angeles Central Library	Listed	Listed	LTS		X	
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	LTS	X		

Table 5-6. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
4-3	2 nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	LTS	X		
4-4	Walt Disney Concert Hall	Eligible	Eligible	LTS		X	
5-1 thru 5-13, 6-1 thru 6-7, 6-12	Los Angeles Civic Center Historic District	Eligible	Eligible	LTS		X	
5-1	Los Angeles Department of Water and Power Building, John Ferraro Office Building	Eligible	Eligible	LTS	X		
5-2	Ahmanson Theatre	Eligible	Eligible	LTS	X		
5-3	Mark Taper Forum	Eligible	Eligible	LTS	X		
5-4	Dorothy Chandler Pavilion	Eligible	Eligible	LTS	X		
5-5	Los Angeles County Hall of Administration, Kenneth Hahn Hall of Administration	Eligible	Eligible	LTS	X		

Table 5-6. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-6	El Paseo de los Pobladores de Los Angeles	Eligible	Eligible	LTS	X		
5-7	Los Angeles County Courthouse, Stanley Mosk Los Angeles County Courthouse	Eligible	Eligible	LTS	X		
5-8	County of Los Angeles Central Heating and Refrigeration Plant	Eligible	Eligible	LTS	X		
5-9	Los Angeles County Hall of Records	Eligible	Eligible	LTS	X		
5-10	Court of Historic American Flags	Eligible	Eligible	LTS	X		
5-11	Los Angeles County Law Library, Mildred L. Lillie Building	Eligible	Eligible	LTS	X		
5-12	Hall of Justice, Los Angeles County Jail	Eligible	Eligible	LTS	X		
5-13	Clara Shortridge Foltz Criminal Justice Center	Eligible	Eligible	LTS	X		
6-1	U.S. Post Office and Court House Building, Federal Building	Listed	Listed	LTS		X	

Table 5-6. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
6-2	Los Angeles City Hall	Eligible	Eligible	LTS		X	
6-3	Site of the <i>Los Angeles Star</i> Fletcher Bowron Square, Los Angeles Mall, Triforium, Bella Union Hotel site	Not Eligible	Listed California Historical Landmark	LTS	X		
6-4	City Health Building, City Hall South	Eligible	Eligible	LTS		X	
6-5	Federal Building, North Los Angeles Field office	Eligible	Eligible	LTS		X	
6-6 6-7	The Police Facilities Building, Parker Center, Motor Transport Division	Eligible	Eligible	LTS		X	
6-8	City of Los Angeles Parking Lot 3, “Tinkertoy” Parking Structure	Not Eligible	Eligible	LTS	X		
7-1	Dorner & Hinz Saloon, Nelson Hotel, Red Wing Shoes, California Floral Company	Not Eligible	Eligible	LTS	X		

Table 5-6. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-7 thru 7-9, 7-11, 7-14 thru 7-19	Little Tokyo Historic District	Listed National Historic Landmark	Listed	LTS		X	
7-7	Japanese Union Church of Los Angeles	Listed	Listed	LTS		X	
7-8	San Pedro Firm Building	Listed	Listed	LTS		X	
7-9	Mark Kuwata Real Estate	Eligible	Eligible	LTS		X	
7-11	1-3 story commercial building, Anzen Hardware	Listed	Listed	LTS		X	
7-14	1-3 story commercial building, Little Tokyo Hotel	Listed	Listed	LTS		X	
7-15	1-3 story commercial building, Ace Japanese Restaurant,	Listed	Listed	LTS		X	
7-16	A. Sperl Building	Listed	Listed	LTS		X	

Table 5-6. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-17	3+ story commercial building, Daimora Hotel	Listed	Listed	LTS		X	
7-18	Far East Café Building	Listed	Listed	LTS		X	
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	LTS		X	
7-20	Aoyama Tree	Not Eligible	Listed	LTS	X		
7-26	Koyasan Buddhist Temple, Koyasan Church, Koyasan Temple	Eligible	Eligible	LTS		X	
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	SI Demolished under this alternative	X		
7-35	John A. Roebling's Sons Co., Robert Arranaga & Company, Incorporated	Eligible	Eligible	LTS		X	
8-2	<i>Los Angeles Times</i> Building	Eligible	Listed	LTS		X	

Table 5-6. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-3	The <i>Mirror</i> Building (Site of Butterfield Stage Station), <i>Los Angeles Times-Mirror</i> Annex, <i>Times</i> Building South, <i>Mirror-News</i> Building	Eligible	Eligible	LTS		X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	LTS	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	LTS		X	
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	LTS		X	
9-R6	J.R. Newberry Company Building	Eligible	Eligible	LTS		X	
9-R7	1 st Street Viaduct (Bridge #53C-1166)	Eligible	Eligible	LTS		X	

Key for CEQA Impacts

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SI = Significant Impact that can be mitigated to less than significant

SU = Significant and Unavoidable impact

5.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

The Fully Underground LRT Alternative - Little Tokyo Variation 2 would provide four new stations and a direct connection from 7th Street/Metro Center Station to the existing Metro Gold Line tracks to the north and east of 1st and Alameda Streets.

5.6.1 Construction Impacts

The following sections describe potential effects that may occur to historic properties in the APE due to construction activities for the Fully Underground LRT Alternative – Little Tokyo Variation 2. Table 5-7 lists the construction effects/impacts for each NRHP property/CRHR resource.

5.6.1.1 Temporary Dirt/Unintended Damage

Potential effects and impacts from dirt and unintended damage to historic properties and historical resources from the construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be similar to those previously described for the Underground Emphasis LRT Alternative.

5.6.1.2 Traffic Congestion/Parking/Access

Potential effects and impacts from changes in access, parking, and traffic patterns to historic properties and historical resources from the construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be similar to those described for the Underground Emphasis LRT Alternative.

5.6.1.3 Visual

Potential visual effects and impacts to historic properties and historical resources from construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be similar to those described for the Underground Emphasis LRT Alternative.

5.6.1.4 Portals

As part of the Fully Underground LRT Alternative – Little Tokyo Variation 2 new portals would be constructed to connect the proposed tracks to the Metro Gold Line tracks heading north to Azusa and east towards I-605. One portal containing the northbound and southbound tracks would be located northeast of the Little Tokyo/Arts District Station and tracks. There are no historical resources or historic properties within the APE that would be impacted by this new portal.

Two additional portals, each containing one track, would rise to the east within the widened median of 1st Street to allow a connection to the Metro Gold Line tracks towards I-605. The portal containing the westbound track would be located between Alameda and Garey Streets. The portal containing the eastbound track would be located adjacent to the westbound track

between Hewitt and Vignes Streets. The NRHP eligible J.R. Newberry Company Building (APE Map #9R-6) is located at the east side of the intersection of 1st Avenue and Vignes Street.

Section 106 Effects Analysis for Historic Properties

There would be an effect, but no adverse effect, to the J.R. Newberry Company Building (APE Map #9R-6). No adverse effect would occur to this historic property because potential changes would not directly alter the setting in a manner that would diminish its integrity.

CEQA Impact Analysis for Historical Resources

Construction of the portals would not constitute a substantial adverse change that would impair the significance of the J.R. Newberry Company Building. The change in setting created by the portals would not diminish the integrity of the resource's significant historic features. This alternative, therefore, would have a less than significant impact upon historical resources.

5.6.1.5 Station Construction

Potential effects/impacts from construction of proposed stations would be similar to those described for Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.6.1.6 Demolition, Partial Takes or Alteration of a Property

Potential impacts to historical resources from this alternative due to demolition or property acquisitions would be identical to those described for the Underground Emphasis LRT Alternative.

5.6.1.7 Noise and Vibration

Potential effects and impacts to historic properties and historical resources caused by noise and vibration would be the same as those discussed for the Underground Emphasis LRT Alternative and the Fully Underground Emphasis LRT Alternative - Little Tokyo Variation 1. Implementation of mitigation measures MM-BE-2 and MM-BE-3 would avoid adverse effects to historic properties and reduce potential impacts to historical resources to a less than significant level.

5.6.1.8 Differential Settlement

Potential effects and impacts to historic properties and historical resources caused by differential settlement would be the same as those discussed for the Underground Emphasis LRT Alternative and the Fully Underground Emphasis LRT Alternative - Little Tokyo Variation 1. Implementation of mitigation measures MM-BE-2, MM-BE-3, and when applicable MM-BE-4, would avoid adverse effects to historic properties and reduce potential impacts to historical resources to a less than significant level. Table 5-7 lists the potential effects and impacts for construction for the Fully Underground LRT Alternative – Little Tokyo Variation 2.

Table 5-7. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	SI			X	
2-3	Fine Arts Building, Global Marine House	Eligible	Listed	LTS			X	
2-5	Engine Company No. 28	Listed	Listed	LTS			X	
2-7	Roosevelt Building	Listed	Listed	SI			X	
2-10	811 Wilshire building, Tishman 615 building, Wilflower building	Eligible	Listed	LTS			X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	SI			X	
2-13	Superior Oil Company Building	Listed	Listed	SI			X	
3-1	The California Club	Eligible	Listed	SI			X	
3-2	Los Angeles Central Library	Listed	Listed	SI			X	

Table 5-7. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	SI		X		
4-3	2 nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	LTS		X		
4-4	Walt Disney Concert Hall	Eligible	Eligible	SI			X	
5-1 thru 5-13, 6-1 thru 6-7, 6-12	Los Angeles Civic Center Historic District	Eligible	Eligible	LTS			X	
5-1	Los Angeles Department of Water and Power Building, John Ferraro Office Building	Eligible	Eligible	LTS			X	

Table 5-7. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-2	Ahmanson Theatre	Eligible	Eligible	LTS		X		
5-3	Mark Taper Forum	Eligible	Eligible	LTS		X		
5-4	Dorothy Chandler Pavilion	Eligible	Eligible	LTS		X		
5-5	Los Angeles County Hall of Administration, Kenneth Hahn Hall of Administration	Eligible	Eligible	LTS		X		
5-6	El Paseo de los Pobladores de Los Angeles	Eligible	Eligible	LTS		X		
5-7	Los Angeles County Courthouse, Stanley Mosk Los Angeles County Courthouse	Eligible	Eligible	LTS		X		
5-8	County of Los Angeles Central Heating and Refrigeration Plant	Eligible	Eligible	LTS		X		
5-9	Los Angeles County Hall of Records	Eligible	Eligible	LTS		X		

Table 5-7. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-10	Court of Historic American Flags	Eligible	Eligible	LTS		X		
5-11	Los Angeles County Law Library, Mildred L. Lillie Building	Eligible	Eligible	LTS		X		
5-12	Hall of Justice, Los Angeles County Jail	Eligible	Eligible	LTS		X		
5-13	Clara Shortridge Foltz Criminal Justice Center	Eligible	Eligible	LTS		X		
6-1	U.S. Post Office and Court House Building, Federal Building	Listed	Listed	LTS			X	
6-2	Los Angeles City Hall	Eligible	Eligible	LTS			X	
6-3	Site of the <i>Los Angeles Star</i> Fletcher Bowron Square, Los Angeles Mall, Triforium, Bella Union Hotel site	Not Eligible	Listed California Historical Landmark	LTS		X		

Table 5-7. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
6-4	City Health Building, City Hall South	Eligible	Eligible	LTS			X	
6-5	Federal Building, North Los Angeles Field office	Eligible	Eligible	LTS			X	
6-6 6-7	The Police Facilities Building, Parker Center, Motor Transport Division	Eligible	Eligible	LTS			X	
6-8	City of Los Angeles Parking Lot 3, “Tinkertoy” Parking Structure	Not Eligible	Eligible	LTS		X		
7-1	Dorner & Hinz Saloon, Nelson Hotel, Red Wing Shoes, California Floral Company	Not Eligible	Eligible	LTS		X		

Table 5-7. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-7 thru 7-9, 7-11, 7-14 thru 7-19	Little Tokyo Historic District	Listed National Historic Landmark	Listed	LTS			X	
7-7	Japanese Union Church of Los Angeles	Listed	Listed	LTS			X	
7-8	San Pedro Firm Building	Listed	Listed	LTS			X	
7-9	Mark Kuwata Real Estate	Eligible	Eligible	LTS			X	
7-11	1-3 story commercial building, Anzen Hardware	Listed	Listed	LTS			X	
7-14	1-3 story commercial building, Little Tokyo Hotel	Listed	Listed	LTS			X	

Table 5-7. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-15	1-3 story commercial building, Ace Japanese Restaurant,	Listed	Listed	LTS			X	
7-16	A. Sperl Building	Listed	Listed	LTS			X	
7-17	3+ story commercial building, Daimora Hotel	Listed	Listed	LTS			X	
7-18	Far East Café Building	Listed	Listed	LTS			X	
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	SI			X	
7-20	Aoyama Tree	Not Eligible	Listed	LTS		X		
7-26	Koyasan Buddhist Temple, Koyasan Church, Koyasan Temple	Eligible	Eligible	LTS			X	

Table 5-7. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	SI Resource demolished during construction	X	X		
7-35	John A. Roebling's Sons Co., Robert Arranaga & Company, Incorporated	Eligible	Eligible	LTS			X	
8-2	<i>Los Angeles Times</i> Building	Eligible	Listed	SI			X	
8-3	The <i>Mirror</i> Building (Site of Butterfield Stage Station), <i>Los Angeles Times-Mirror</i> Annex, <i>Times</i> Building South, <i>Mirror-News</i> Building	Eligible	Eligible	SI			X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	SI		X		

Table 5-7. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	SI			X	
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	SI	X (Sub surface Easement)		X	
9-R6	J.R. Newberry Company Building	Eligible	Eligible	LTS			X	
9-R7	1 st Street Viaduct (Bridge #53C-1166)	Eligible	Eligible	LTS			X	

Key for CEQA Impacts

LTS = Less Than Significant impact, no mitigation required

SI = Significant Impact that can be mitigated to less than significant

SU = Significant and Unavoidable impact

5.6.2 Operational Impacts

Potential operational impacts of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be largely the same on historic properties and historical resources as those described for the Underground Emphasis LRT Alternative, except that a proposed switch, located at 1st and Alameda for the Underground Emphasis LRT Alternative, would instead be located at the intersection of 1st and Vignes Streets. Operation of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would result in a moderate noise impact at this location. This switch is located near the NRHP eligible J.R. Newberry Company Building (APE Map #9R-6) and the 1st Street Viaduct (APE Map #9R-7). Moderate noise effects/impacts do not exceed the FTA Noise Impact Criteria, therefore no adverse effects to historic properties and no significant impacts to historical resources are anticipated from project operations. Table 5-8 lists the potential effects and impacts for operation for the Fully Underground LRT Alternative - Little Tokyo Variation 2.

5.6.3 Cumulative and Indirect Impacts

There would be no expected indirect impacts from the Fully Underground LRT Alternative – Little Tokyo Variation 2.

Cumulative effects and impacts include short-term effects during construction such as noise, dirt, changes in setting from the use or storage of equipment, or lack of access due to congestion or revisions in traffic patterns. Cumulative effects may also result from long-term effects such as additional traffic generated by increased density created as new buildings are constructed. Taken collectively, the reasonable foreseeable projects do not appear to have additional effects upon historic properties or impacts upon historical resources that would be affected by the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.4 Potential Effects to Section 4(f) Resources

The Fully Underground LRT Alternative - Little Tokyo Variation 2 would require the acquisition of a subsurface easement situated on one NRHP-eligible property; Cathedral of Saint Vibiana Rectory (APE Map #8-13). No adverse effects would occur to the Rectory building as a result of the easement. This acquisition would result in a Section 4(f) *de minimus* finding.

Table 5-8. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	LTS		X	
2-3	Fine Arts Building, Global Marine House	Eligible	Listed	LTS		X	
2-5	Engine Company No. 28	Listed	Listed	LTS		X	
2-7	Roosevelt Building	Listed	Listed	LTS		X	
2-10	811 Wilshire building, Tishman 615 building, Wilflower building	Eligible	Listed	LTS		X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	LTS		X	
2-13	Superior Oil Company Building	Listed	Listed	LTS		X	
3-1	The California Club	Eligible	Listed	LTS		X	
3-2	Los Angeles Central Library	Listed	Listed	LTS		X	
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	LTS	X		

Table 5-8. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
4-3	2 nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	LTS	X		
4-4	Walt Disney Concert Hall	Eligible	Eligible	LTS		X	
5-1 thru 5-13, 6-1 thru 6-7, 6-12	Los Angeles Civic Center Historic District	Eligible	Eligible	LTS		X	
5-1	Los Angeles Department of Water and Power Building, John Ferraro Office Building	Eligible	Eligible	LTS		X	
5-2	Ahmanson Theatre	Eligible	Eligible	LTS		X	
5-3	Mark Taper Forum	Eligible	Eligible	LTS		X	
5-4	Dorothy Chandler Pavilion	Eligible	Eligible	LTS		X	
5-5	Los Angeles County Hall of Administration, Kenneth Hahn Hall of Administration	Eligible	Eligible	LTS		X	

Table 5-8. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-6	El Paseo de los Pobladores de Los Angeles	Eligible	Eligible	LTS		X	
5-7	Los Angeles County Courthouse, Stanley Mosk Los Angeles County Courthouse	Eligible	Eligible	LTS		X	
5-8	County of Los Angeles Central Heating and Refrigeration Plant	Eligible	Eligible	LTS		X	
5-9	Los Angeles County Hall of Records	Eligible	Eligible	LTS		X	
5-10	Court of Historic American Flags	Eligible	Eligible	LTS		X	
5-11	Los Angeles County Law Library, Mildred L. Lillie Building	Eligible	Eligible	LTS		X	
5-12	Hall of Justice, Los Angeles County Jail	Eligible	Eligible	LTS		X	
5-13	Clara Shortridge Foltz Criminal Justice Center	Eligible	Eligible	LTS		X	
6-1	U.S. Post Office and Court House Building, Federal Building	Listed	Listed	LTS		X	

Table 5-8. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
6-2	Los Angeles City Hall	Eligible	Eligible	LTS		X	
6-3	Site of the <i>Los Angeles Star</i> Fletcher Bowron Square, Los Angeles Mall, Triforium, Bella Union Hotel site	Not Eligible	Listed California Historical Landmark	LTS	X		
6-4	City Health Building, City Hall South	Eligible	Eligible	LTS		X	
6-5	Federal Building, North Los Angeles Field office	Eligible	Eligible	LTS		X	
6-6 6-7	The Police Facilities Building, Parker Center, Motor Transport Division	Eligible	Eligible	LTS		X	
6-8	City of Los Angeles Parking Lot 3, “Tinkertoy” Parking Structure	Not Eligible	Eligible	LTS	X		
7-1	Dorner & Hinz Saloon, Nelson Hotel, Red Wing Shoes, California Floral Company	Not Eligible	Eligible	LTS	X		

Table 5-8. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-7 thru 7-9, 7-11, 7-14 thru 7-19	Little Tokyo Historic District	Listed National Historic Landmark	Listed	LTS		X	
7-7	Japanese Union Church of Los Angeles	Listed	Listed	LTS		X	
7-8	San Pedro Firm Building	Listed	Listed	LTS		X	
7-9	Mark Kuwata Real Estate	Eligible	Eligible	LTS		X	
7-11	1-3 story commercial building, Anzen Hardware	Listed	Listed	LTS		X	
7-14	1-3 story commercial building, Little Tokyo Hotel	Listed	Listed	LTS		X	
7-15	1-3 story commercial building, Ace Japanese Restaurant,	Listed	Listed	LTS		X	
7-16	A. Sperl Building	Listed	Listed	LTS		X	

Table 5-8. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-17	3+ story commercial building, Daimora Hotel	Listed	Listed	LTS		X	
7-18	Far East Café Building	Listed	Listed	LTS		X	
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	LTS		X	
7-20	Aoyama Tree	Not Eligible	Listed	LTS	X		
7-26	Koyasan Buddhist Temple, Koyasan Church, Koyasan Temple	Eligible	Eligible	LTS		X	
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	SI Resource demolished during construction	X		
7-35	John A. Roebling’s Sons Co., Robert Arranaga & Company, Incorporated	Eligible	Eligible	LTS		X	
8-2	<i>Los Angeles Times</i> Building	Eligible	Listed	LTS		X	

Table 5-8. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-3	The <i>Mirror</i> Building (Site of Butterfield Stage Station), <i>Los Angeles Times-Mirror</i> Annex, <i>Times</i> Building South, <i>Mirror-News</i> Building	Eligible	Eligible	LTS		X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	LTS	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	LTS		X	
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	LTS		X	
9-R6	J.R. Newberry Company Building	Eligible	Eligible	LTS		X	
9-R7	1 st Street Viaduct (Bridge #53C-1166)	Eligible	Eligible	LTS		X	

Key for CEQA Impacts

LTS = Less Than Significant impact, no mitigation required

SI = Significant Impact that can be mitigated to less than significant

SU = Significant and Unavoidable impact

5.7 Locally Preferred Alternative (LPA)

5.7.1 Construction Impacts

Construction activities were analyzed using the Criteria of Adverse Effect (discussed in Section 3.2.1) for their potential to impact historic properties. The following discussion describes potential effects in the APE due to construction activities for the LPA. Table 5-9 lists the effects/impacts for each NRHP property/CRHR resource.

Short-term effects from construction typically result from dirt, changes in the visual environment, or alteration to access. Other types of construction effects may be related to specific construction activities or locations. Operational effects are discussed in Section 5.7.2.

5.7.1.1 Temporary Dirt/Unintended Damage

Properties in the APE would be affected by construction activities including dirt and unintended damaged. Metro would employ BMPs to ensure that these effects are short-term.

Section 106 Effects Analysis for Historic Properties

Dirt and other damage from construction would affect, but not adversely affect, historic properties in the APE because the potential effects would be short-term. The potential effects would not directly alter characteristics of historic properties in a manner that would diminish the integrity of the properties' location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Dirt and other unintended damage during construction would not constitute a substantial adverse change that would impair the significance of historical resources. The impacts would be short-term and the majority of the resources' features would remain to convey their significance. The LPA, therefore, would have a less than significant impact upon historical resources.

5.7.1.2 Traffic Congestion/Parking/Access

Changes in access to properties and resources within the APE may result from road closures, use of equipment, and other construction activities. Metro would employ BMPs to minimize these changes and keep the public and property owners informed of potential issues.

Section 106 Effects Analysis for Historic Properties

Potential effects, but no adverse effects, would result from changes in access during construction. The effects would be short-term and would not alter characteristics of historic properties in a manner that would diminish the integrity of the properties' location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Changes in access resulting from congestion and loss of parking during construction would not constitute a substantial adverse change that would impair the significance of historical resources. Potential impacts would be short-term and the majority of the resources' features would remain to convey their significance. The LPA therefore, would have a less than significant impact upon historical resources.

5.7.1.3 Visual

Visual changes may result from the storage and operation of equipment, cuts in the road, and signage used during construction. Metro would employ BMPs to minimize these changes and they should be short term.

Section 106 Effects Analysis for Historic Properties

Visual changes during construction would affect, but not adversely affect, historic properties because the effects would be short-term. The changes would not directly alter characteristics of historic properties in a manner that would diminish the integrity of the properties' location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Visual changes during construction would not constitute a substantial adverse change that would impair the significance of historical resources. The impacts would be short-term and the resources' character-defining features would remain to convey their significance. The LPA. therefore, would have a less than significant impact upon historical resources.

5.7.1.4 Demolition, Partial Takes or Alteration of a Property

To construct the LPA, one parcel that contains a historical resource would be acquired. The S. Kamada Restaurant, Atomic Café, Senior Fish, and Coast Imports (APE Map #7-30) is a CRHR-eligible (not NRHP eligible) commercial building built in 1913. The entire parcel is anticipated to be acquired for station construction.

A subsurface easement would be acquired for the Higgins Building (APE Map #8-11). The easement would extend approximately five feet beyond the property line for the CRHR-eligible Higgins Building (not NRHP eligible). No project-related construction would affect the Higgins Building.

The LPA., would also require the acquisition of a subsurface easement beneath the NRHP Eligible Cathedral of St. Vibiana Rectory (APE Map #8-13). The subsurface easement would extend approximately five feet beyond the north (2nd Street side) property line of the building. The easement acquisition is a requirement of the project to provide a buffer between subsurface project facilities and at-grade structures.

Section 106 Effects Analysis for Historic Properties

The subsurface easement for the area beneath the Cathedral of St. Vibiana Rectory would affect, but not adversely affect, the historic property. No project facilities would use any portion of the Rectory building or adversely affect the characteristics that make it eligible for the NRHP.

CEQA Impact Analysis for Historical Resources

The subsurface easement acquisitions that would extend five feet beyond the north (2nd Street side) property lines of the Higgins Building and the Cathedral of St. Vibiana Rectory would not constitute a substantial adverse change that would impair the significance of the historical resources, as no other project-related construction or use would directly affect the buildings. Due to the proximity of proposed project facilities to the buildings, indirect effects such as differential settlement and project related vibration have the potential to affect the structures (see Differential Settlement, Section 5.5.1.8, and Noise and Vibration, Section 5.5.1.7).

The property acquisition and subsequent demolition of the S. Kamada Restaurant, Atomic Café, Senor Fish, and Coast Imports building would constitute a substantial adverse change that would impair the significance of the historical resource. However, implementation of MM-BE-1 and MM-BE-5 would reduce impacts to a less than significant level.

5.7.1.5 Station Construction

For the LPA, a station is proposed to be constructed underground southwest of the intersection of 2nd and Hope Streets. The National Register eligible Walt Disney Concert Hall (APE Map #4-4) is located on the hill above the proposed station. The preliminary conceptual designs would be compatible with the contemporary forms, materials, and massing of this historical resource. However, noise and vibration from the construction of the station of the LRT would affect the use of the historic property as a concert hall and recording facility. The station is also near the NRHP eligible 2nd Street Tunnel (APE Map #4-3). This would require demolition of a portion of the CRHR eligible Belmont Tunnel (APE Map #3-4). The Belmont Tunnel is not eligible for the NRHP.

There will also be a station on 2nd Street between Broadway and Spring Street. Entrances will be located in the property currently used as a surface parking lot on the south side of 1st Street between Broadway and Spring Streets. A portion of the property located on the northwest corner of 2nd and Broadway will be used for access and other ancillary facilities. The construction of the station and other facilities are in the vicinity of the Los Angeles Mirror Building (APE #8-3).

A new underground station would be constructed to serve the Little Tokyo/ Arts District. The station is located under Central Avenue, Alameda Street and privately held properties on the south side of 1st Street behind Central Avenue. This station may include a small building at

ground level on the southwest corner of 1st and Alameda Streets to house ventilation fans. This shallow station may potentially be built without a roof or mezzanine, leaving the below-grade platform level exposed. The property currently contains the California Register Eligible S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports (APE Map #7-30), this building would be removed as part of construction for the LPA.

Section 106 Effects Analysis for Historic Properties

Construction of proposed stations would create effects to the Walt Disney Concert Hall (APE Map #4-4), and Los Angeles Mirror Building (APE Map #8-3). However, the effects on these historic properties would not be considered adverse because the potential changes would not diminish the integrity of the properties' location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Construction of proposed stations would not constitute a substantial adverse change that would impair the significance of the Walt Disney Concert Hall or Los Angeles Mirror Building (APE Map #8-3). I. Implementation of MM-BE-1 would reduce any potential impact to the CRHR-eligible Belmont Tunnel to a less than significant level. Potential changes in setting created by stations would not diminish the integrity of the resources' significant historic features. The Locally Preferred Alternative, therefore, would have a less than significant impact upon these historical resources.

The property acquisition and subsequent demolition of the S. Kamada Restaurant, Atomic Café, Senior Fish, and Coast Imports building would constitute a substantial adverse change that would impair the significance of the historical resource. However, implementation of MM-BE-1, MM-BE-5, MM-BE6, and MM-BE7 would reduce impacts to a less than significant level.

5.7.1.6 Portals

For this alternative two portals would be constructed. One would be located north of Temple Street, northeast of the existing at-grade Little Tokyo/Arts District Station and Metro Gold Line Tracks. There are no historic properties or historical resources within the vicinity of the portal.

The second portal would be located within 1st Street between Alameda and Gatey Streets. Tracks would rise to the east within this second portal and connect at-grade to the existing Metro Gold Line Tracks toward 1-605. 1st Street would be widened to the north to accommodate this second portal and maintain the existing number of through lanes. This portal would be within the viewshed of two historic properties, the Little Tokyo National Historic Landmark Historic District and the NRHP eligible John A. Roebling Sons Co. Building (APE MAP #7-35). However, the portal is not encompassed within the boundary of a historic property, historical resource, or a contributing element to the significance of either property.

Section 106 Effects Analysis for Historic Properties

No adverse effect would occur to the Little Tokyo National Historic Landmark District or the John A. Roebling Sons Co Building from the construction of the portal. Potential effects would not alter the setting of historic properties in a manner that would diminish the integrity of the historic district.

CEQA Impact Analysis for Historical Resources

Construction of the portal would not constitute a substantial adverse change that would impair the significance of historical resources. The change in setting created by the portal would not diminish the integrity of the resources' significant historic features. The LPA, therefore, would have a less than significant impact upon historical resources.

5.7.1.7 Noise and Vibration

According to the Noise and Vibration Technical Memorandum, construction activities with the most potential for noise impacts include the cut and cover tunnel under Flower Street, proposed underground cut and cover stations at Flower/6th/5th Streets and 2nd/Hope Street, and the junction at Temple and Alameda Streets, which includes lowering Alameda Street. To ensure potential noise impacts are minimized during construction, all construction activities would conform to the provisions in Section 41.40(a) of the City of Los Angeles Code. Furthermore, BMPs would be employed to reduce any potential noise effects to historic properties to result in a “no adverse effect” finding and/or minimize potential impacts to historical resources to a less than significant level.

Noise levels for the tunnel boring machine (TBM) were not evaluated as a part of the Noise and Vibration Technical Memorandum because the TBM “is underground and produces little to no noise that reaches the surface land uses.” Operations at the portal/launch site for the TBM, where bored material is hauled out, treated, and removed, also would not impact historic properties and historical resources as noise levels from these activities would not exceed ambient noise levels.

For the LPA, pre-augering of soldier piles at cut and cover sections would eliminate the need for impact pile driving. This would leave “Large Bulldozer” and “Drill Rigs” as the main sources of construction vibration. If these large pieces of equipment are not used within 21 feet of a historic property or historical resource, there would be no adverse effects and significant impacts to historic properties and historical resources from GBV would not occur. Properties that are close to the project work zone and which may be affected by construction-related vibration include Barker Brothers (APE Map #2-1), Roosevelt Building (APE Map #2-7), General Petroleum-Mobil Oil Building (APE Map #2-12), Superior Oil Building (APE Map #2-13), California Club (APE Map #3-1), Los Angeles Central Library (APE Map #3-2), 2nd Street Tunnel (APE Map #4-3), Mirror Building (APE Map #8-3), Higgins Building (APE Map

#8-11), Cathedral of Saint Vibiana (APE Map #8-12), and Cathedral of Saint Vibiana Rectory (APE Map #8-13).

The TBM would not cause vibratory effects or impacts to historic properties or historical resources because the TBM performs a slow moving drilling process that generates very little vibration to the surrounding areas. Studies have measured TBM vibration to be in the range of 0.0024 to 0.0394 inches per second PPV at a distance at 33 feet. The proposed TBM tunnels on 2nd Street would vary in depth due to the existing topography, as well as vertical curves in the alignment. The tunnel would range from about 140 feet below the surface (distance from street level to the top of the tunnel) to about 40 feet below the surface. The vibratory potential of the TBM is minimal and would be well below the FTA threshold for Category IV buildings (buildings extremely susceptible to vibration damage) of 0.12 inches per second PPV.

Section 106 Effects Analysis for Historic Properties

There would be an effect, but no adverse effect, to the Barker Brothers, Roosevelt, General Petroleum Mobil Oil Building, Superior Oil Building, California Club, Los Angeles Central Library, 2nd Street Tunnel, Walt Disney Concert Hall, Mirror Building, Cathedral of Saint Vibiana, and the Cathedral of Saint Vibiana Rectory, from noise and vibration-induced damage from construction, if measures MM-BE-2, MM-BE-3, MMBE-5, and MMBE-8 are implemented. If these measures are properly implemented, construction of this alternative would not diminish the integrity of the historic properties' location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

The potential for construction-related vibration could cause a substantial adverse change that would impair the Barker Brothers, Roosevelt, General Petroleum Mobil Oil Building, Superior Oil Building, California Club, Los Angeles Central Library 2nd Street Tunnel, Mirror Building, Cathedral of Saint Vibiana, the Cathedral of Saint Vibiana Rectory, or the Higgins Building. The implementation of MM-BE-2, MM-BE-3, and MM-BE-8 would reduce the potential impacts to a less than significant level.

5.7.1.8 Differential Settlement

According to the Description of Construction, some of the buildings situated near cut and cover excavation would be susceptible to differential settlement. Differential settlement is defined as “unequal settling of material; gradual downward movement of foundations due to compression of soil which can lead to damage if settlement is uneven” (Allaby 1999). Differential settlement occurs when a building or feature's shape is twisted, or is raised and lowered in different places, sometimes imperceptibly. Differential settlement can cause foundations to settle and crack, floors to buckle and go out of level, walls to shift out of plumb and plane, and roofs to twist and deform. The resulting changes in structural systems and

cladding or finish materials, including wood and masonry, floor tiles, wood flooring, concrete floors, plaster, marble, and other decorative wall and ceiling treatments, and adobe, stucco, and wood-framed walls can be cracks, fractures, and other noticeable (as well as long term, not immediately visible) deformations and damage. Since historically significant buildings often have archaic construction and finish attachment systems, including unreinforced masonry, those building types are usually more susceptible to the effects of ground-borne vibration than more recently constructed buildings.

According to the Description of Construction, at least eight NRHP and/or CRHR eligible properties could be potentially affected by tunneling (TBM operation) and cut and cover construction. They include the Superior Oil Building/Standard Hotel (APE Map #2-13), California Club (APE Map #3-1), Walt Disney Concert Hall (APE Map #4-4), 2nd Street Tunnel (APE Map #4-3), former Nishi Hongwanji Buddhist Temple (APE Map #7-19), Los Angeles Times Building (APE Map #8-2), Higgins Building (APE Map #8-11), and St. Vibiana's Cathedral (APE Map #8-12). Implementation of mitigation measures MM-BE-2, MM-BE-3, and MM-BE-4 (when applicable) would avoid potential adverse effects to historic properties and reduce potential impacts to historical resources to a less than significant level.

Section 106 Effects Analysis for Historic Properties

Implementation of measures to protect and stabilize the ground near the Standard Hotel (APE Map #2-13), California Club (APE Map #3-1), 2nd Street Tunnel (APE Map #4-3), Walt Disney Concert Hall (APE Map #4-4), former Nishi Hongwanji Buddhist Temple (APE Map #7-19), Los Angeles Times Building (APE Map #8-2), and St. Vibiana's Cathedral (APE Map #8-12) noted in MM-BE-2, MM-BE-3, and MM-BE-5, would avoid adverse effects to all properties under this alternative. If these measures are properly implemented, differential settlement would not directly alter characteristics of historic properties in a manner that would diminish the integrity of each property's location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

The potential for differential settlement could constitute a substantial adverse change that would impair the significance of any or all of the historical resources noted in this section. Implementation of MM-BE-2, MM-BE-3, and MM-BE-5 would reduce potential impacts to a less than significant level.

Table 5-9. LPA Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	SI			X	
2-3	Fine Arts Building, Global Marine House	Eligible	Listed	LTS			X	
2-5	Engine Company No. 28	Listed	Listed	LTS			X	
2-7	Roosevelt Building	Listed	Listed	SI			X	
2-10	811 Wilshire building, Tishman 615 building, Wilflower building	Eligible	Listed	LTS			X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	SI			X	
2-13	Superior Oil Company Building	Listed	Listed	SI			X	
3-1	The California Club	Eligible	Listed	SI			X	
3-2	Los Angeles Central Library	Listed	Listed	SI			X	

Table 5-9. LPA Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	SI		X		
4-3	2 nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	LTS		X		
4-4	Walt Disney Concert Hall	Eligible	Eligible	SI			X	
5-1 thru 5-13, 6-1 thru 6-7, 6-12	Los Angeles Civic Center Historic District	Eligible	Eligible	LTS			X	
5-1	Los Angeles Department of Water and Power Building, John Ferraro Office Building	Eligible	Eligible	LTS		X		
5-2	Ahmanson Theatre	Eligible	Eligible	LTS		X		

Table 5-9. LPA Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-3	Mark Taper Forum	Eligible	Eligible	LTS		X		
5-4	Dorothy Chandler Pavilion	Eligible	Eligible	LTS		X		
5-5	Los Angeles County Hall of Administration, Kenneth Hahn Hall of Administration	Eligible	Eligible	LTS		X		
5-6	El Paseo de los Pobladores de Los Angeles	Eligible	Eligible	LTS		X		
5-7	Los Angeles County Courthouse, Stanley Mosk Los Angeles County Courthouse	Eligible	Eligible	LTS		X		
5-8	County of Los Angeles Central Heating and Refrigeration Plant	Eligible	Eligible	LTS		X		
5-9	Los Angeles County Hall of Records	Eligible	Eligible	LTS		X		
5-10	Court of Historic American Flags	Eligible	Eligible	LTS		X		

Table 5-9. LPA Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-11	Los Angeles County Law Library, Mildred L. Lillie Building	Eligible	Eligible	LTS		X		
5-12	Hall of Justice, Los Angeles County Jail	Eligible	Eligible	LTS		X		
5-13	Clara Shortridge Foltz Criminal Justice Center	Eligible	Eligible	LTS		X		
6-1	U.S. Post Office and Court House Building, Federal Building	Listed	Listed	LTS			X	
6-2	Los Angeles City Hall	Eligible	Eligible	LTS			X	
6-3	Site of the <i>Los Angeles Star</i> Fletcher Bowron Square, Los Angeles Mall, Triforium, Bella Union Hotel site	Not Eligible	Listed California Historical Landmark	LTS		X		
6-4	City Health Building, City Hall South	Eligible	Eligible	LTS			X	

Table 5-9. LPA Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
6-5	Federal Building, North Los Angeles Field office	Eligible	Eligible	LTS			X	
6-6 6-7	The Police Facilities Building, Parker Center, Motor Transport Division	Eligible	Eligible	LTS			X	
6-8	City of Los Angeles Parking Lot 3, “Tinkertoy” Parking Structure	Not Eligible	Eligible	LTS		X		
7-1	Dorner & Hinz Saloon, Nelson Hotel, Red Wing Shoes, California Floral Company	Not Eligible	Eligible	LTS		X		
7-7 thru 7-9, 7-11, 7-14 thru 7- 19	Little Tokyo Historic District	Listed National Historic Landmark	Listed	LTS			X	

Table 5-9. LPA Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-7	Japanese Union Church of Los Angeles	Listed	Listed	LTS			X	
7-8	San Pedro Firm Building	Listed	Listed	LTS			X	
7-9	Mark Kuwata Real Estate	Eligible	Eligible	LTS			X	
7-11	1-3 story commercial building, Anzen Hardware	Listed	Listed	LTS			X	
7-14	1-3 story commercial building, Little Tokyo Hotel	Listed	Listed	LTS			X	
7-15	1-3 story commercial building, Ace Japanese Restaurant,	Listed	Listed	LTS			X	
7-16	A. Sperl Building	Listed	Listed	LTS			X	
7-17	3+ story commercial building, Daimora Hotel	Listed	Listed	LTS			X	

Table 5-9. LPA Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-18	Far East Café Building	Listed	Listed	LTS			X	
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	SI			X	
7-20	Aoyama Tree	Not Eligible	Listed	LTS		X		
7-26	Koyasan Buddhist Temple, Koyasan Church, Koyasan Temple	Eligible	Eligible	LTS			X	
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	SI Resource demolished during construction	X	X		
7-35	John A. Roebling’s Sons Co., Robert Arranaga & Company, Incorporated	Eligible	Eligible	LTS			X	
8-2	<i>Los Angeles Times</i> Building	Eligible	Listed	SI			X	

Table 5-9. LPA Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-3	The <i>Mirror</i> Building (Site of Butterfield Stage Station), <i>Los Angeles Times-Mirror</i> Annex, <i>Times</i> Building South, <i>Mirror-News</i> Building	Eligible	Eligible	SI			X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	SI	X (subsurface easement)	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	SI			X	
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	SI	X (Subsurface Easement)		X	
9-R6	J.R. Newberry Company Building	Eligible	Eligible	LTS			X	

Table 5-9. LPA Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
9-R7	1 st Street Viaduct (Bridge #53C-1166)	Eligible	Eligible	LTS			X	

Key for CEQA Impacts

LTS = Less Than Significant impact, no mitigation required

SI = Significant Impact that can be mitigated to less than significant

SU = Significant and Unavoidable impact

5.7.2 Operational Impacts

Operation of the LPA could cause noise and vibration at the Walt Disney Concert Hall (Ape Map 4-4). For this resource the implementation of mitigation measures MM-BE-9 would reduce the adverse effects. Moderate noise effects/impacts from other project activities do not exceed the FTA Noise Impact Criteria, therefore no adverse effects to historic properties and no significant impacts to historical resources are anticipated from project operations. Table 5-10 lists potential effects and impacts by resource.

5.7.3 Cumulative and Indirect Impacts

There are no anticipated indirect impacts from the LPA. Cumulative effects and impacts include short-term effects during construction such as noise, dirt, changes in setting from the use or storage of equipment, or lack of access due to congestion or revisions in traffic patterns. Cumulative effects may also result from long-term effects such as additional traffic generated by an increase in density as new buildings are constructed. Taken collectively, the reasonably foreseeable projects in the project area do not appear to have additional effects upon historic properties or impacts upon historical resources that are affected by the LPA.

5.7.4 Potential Effects to Section 4(f) Resources

The LPA would require the acquisition of a subsurface easement situated on one NRHP-eligible property; Cathedral of Saint Vibiana Rectory (APE Map # 8-13). No adverse effects would occur to the Rectory building as a result of the easement. This acquisition would result in a Section 4(f) *de minimus* finding.

Table 5-10. LPA Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	LTS		X	
2-3	Fine Arts Building, Global Marine House	Eligible	Listed	LTS		X	
2-5	Engine Company No. 28	Listed	Listed	LTS		X	
2-7	Roosevelt Building	Listed	Listed	LTS		X	
2-10	811 Wilshire building, Tishman 615 building, Wilflower building	Eligible	Listed	LTS		X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	LTS		X	
2-13	Superior Oil Company Building	Listed	Listed	LTS		X	
3-1	The California Club	Eligible	Listed	LTS		X	
3-2	Los Angeles Central Library	Listed	Listed	LTS		X	
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	LTS	X		

Table 5-10. LPA Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
4-3	2 nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	LTS	X		
4-4	Walt Disney Concert Hall	Eligible	Eligible	LTS		X	
5-1 thru 5-13, 6-1 thru 6-7, 6-12	Los Angeles Civic Center Historic District	Eligible	Eligible	LTS		X	
5-1	Los Angeles Department of Water and Power Building, John Ferraro Office Building	Eligible	Eligible	LTS	X		
5-2	Ahmanson Theatre	Eligible	Eligible	LTS	X		
5-3	Mark Taper Forum	Eligible	Eligible	LTS	X		
5-4	Dorothy Chandler Pavilion	Eligible	Eligible	LTS	X		
5-5	Los Angeles County Hall of Administration, Kenneth Hahn Hall of Administration	Eligible	Eligible	LTS	X		

Table 5-10. LPA Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-6	El Paseo de los Pobladores de Los Angeles	Eligible	Eligible	LTS	X		
5-7	Los Angeles County Courthouse, Stanley Mosk Los Angeles County Courthouse	Eligible	Eligible	LTS	X		
5-8	County of Los Angeles Central Heating and Refrigeration Plant	Eligible	Eligible	LTS	X		
5-9	Los Angeles County Hall of Records	Eligible	Eligible	LTS	X		
5-10	Court of Historic American Flags	Eligible	Eligible	LTS	X		
5-11	Los Angeles County Law Library, Mildred L. Lillie Building	Eligible	Eligible	LTS	X		
5-12	Hall of Justice, Los Angeles County Jail	Eligible	Eligible	LTS	X		
5-13	Clara Shortridge Foltz Criminal Justice Center	Eligible	Eligible	LTS	X		
6-1	U.S. Post Office and Court House Building, Federal Building	Listed	Listed	LTS		X	

Table 5-10. LPA Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
6-2	Los Angeles City Hall	Eligible	Eligible	LTS		X	
6-3	Site of the <i>Los Angeles Star</i> Fletcher Bowron Square, Los Angeles Mall, Triforium, Bella Union Hotel site	Not Eligible	Listed California Historical Landmark	LTS	X		
6-4	City Health Building, City Hall South	Eligible	Eligible	LTS		X	
6-5	Federal Building, North Los Angeles Field office	Eligible	Eligible	LTS		X	
6-6 6-7	The Police Facilities Building, Parker Center, Motor Transport Division	Eligible	Eligible	LTS		X	
6-8	City of Los Angeles Parking Lot 3, “Tinkertoy” Parking Structure	Not Eligible	Eligible	LTS	X		
7-1	Dorner & Hinz Saloon, Nelson Hotel, Red Wing Shoes, California Floral Company	Not Eligible	Eligible	LTS	X		

Table 5-10. LPA Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-7 thru 7-9, 7-11, 7-14 thru 7-19	Little Tokyo Historic District	Listed National Historic Landmark	Listed	LTS		X	
7-7	Japanese Union Church of Los Angeles	Listed	Listed	LTS		X	
7-8	San Pedro Firm Building	Listed	Listed	LTS		X	
7-9	Mark Kuwata Real Estate	Eligible	Eligible	LTS		X	
7-11	1-3 story commercial building, Anzen Hardware	Listed	Listed	LTS		X	
7-14	1-3 story commercial building, Little Tokyo Hotel	Listed	Listed	LTS		X	
7-15	1-3 story commercial building, Ace Japanese Restaurant,	Listed	Listed	LTS		X	
7-16	A. Sperl Building	Listed	Listed	LTS		X	

Table 5-10. LPA Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-17	3+ story commercial building, Daimora Hotel	Listed	Listed	LTS		X	
7-18	Far East Café Building	Listed	Listed	LTS		X	
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	LTS		X	
7-20	Aoyama Tree	Not Eligible	Listed	LTS	X		
7-26	Koyasan Buddhist Temple, Koyasan Church, Koyasan Temple	Eligible	Eligible	LTS		X	
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	SI Demolished under this alternative	X		
7-35	John A. Roebling's Sons Co., Robert Arranaga & Company, Incorporated	Eligible	Eligible	LTS		X	
8-2	<i>Los Angeles Times</i> Building	Eligible	Listed	LTS		X	

Table 5-10. LPA Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-3	The <i>Mirror</i> Building (Site of Butterfield Stage Station), <i>Los Angeles Times-Mirror</i> Annex, <i>Times</i> Building South, <i>Mirror-News</i> Building	Eligible	Eligible	LTS		X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	LTS	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	LTS		X	
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	LTS		X	
9-R6	J.R. Newberry Company Building	Eligible	Eligible	LTS		X	
9-R7	1 st Street Viaduct (Bridge #53C-1166)	Eligible	Eligible	LTS		X	

Key for CEQA Impacts

LTS = Less Than Significant impact, no mitigation required

SI = Significant Impact that can be mitigated to less than significant

SU = Significant and Unavoidable impact

6.0 POTENTIAL MITIGATION MEASURES

Consistent with 36 CFR 800.6(a), federal agencies are required to develop and evaluate alternatives that could avoid, minimize, or mitigate adverse effects on historic properties. Since the proposed Regional Connector project has the potential for adverse effects, this report outlines measures to mitigate the potential effects. The mitigation measures presented in this section are also intended to assist Metro in reducing the project's potential impacts on historical resources to a less than significant level.

The only National Register eligible historic property that would be adversely affected by any of the project alternatives would be the 2nd Street Tunnel. Proposed mitigation measures for the adverse effects to this property are listed in Table 6-2.

There are 14 historical resources where construction activities could significantly impact the resource. These resources are listed in Table 6-1. The resources and measures proposed as mitigation to reduce potential impacts to a less than significant level are listed in Table 6-3.

Table 6-1. Historical Resources Potentially Affected by Construction

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	Impact
2-7	Roosevelt Building	Listed	Listed	Vibration
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	Vibration
2-13	Superior Oil Company Building	Listed	Listed	Vibration Settlement
3-1	The California Club	Eligible	Listed	Vibration Settlement
3-2	Los Angeles Central Library	Listed	Listed	Vibration
3-4	Belmont Tunnel	Not Eligible	Eligible	Partial Removal
4-3	2 nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	Vibration
4-4	Walt Disney Concert Hall	Eligible	Eligible	Vibration Settlement
7-19	former Nishi Hongwanji Buddhist Temple	Listed (NHL)	Listed	Settlement

Table 6-1. Historical Resources Potentially Affected by Construction

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	Impact
8-2	<i>Los Angeles Times</i> Building	Eligible	Listed	Settlement
8-3	The <i>Mirror</i> Building (Site of Butterfield Stage Station), <i>Los Angeles Times-Mirror</i> Annex, <i>Times</i> Building South, <i>Mirror-News</i> Building	Eligible	Eligible	Vibration
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	Vibration Settlement
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	Vibration Settlement
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	Vibration

Table 6-2. Mitigation Measures for Resources Adversely Affected Under Section 106 of the NHPA

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	Adverse Effect	Proposed Mitigation	Project Alternative
4-3	2 nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	Partial Demolition/ Alteration	MM_BE-1 MM-BE-5	AGELRT ¹

¹ AGELRT = At-Grade Emphasis LRT Alternative

Table 6-3. Mitigation Measures to Reduce Impacts on Historical Resources to a Less-Than-Significant Level

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	Impact	Proposed Mitigation	Project Alternative
2-7	Roosevelt Building	Listed	Listed	Vibration	MM-BE-2, MM-BE-3, MM-BE-5	AGELRT UELRT FULRT (Var. 1&2) FUG
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	Vibration	MM-BE-2, MM-BE-3, MM-BE-5	AGELRT UELRT FULRT (Var. 1&2) FUG
2-13	Superior Oil Company Building	Listed	Listed	Vibration Settlement	MM-BE-2, MM-BE-3, MM-BE-5 MM-BE-4	AGELRT UELRT FULRT (Var. 1&2) FUG
3-1	The California Club	Eligible	Listed	Vibration Settlement	MM-BE-2, MM-BE-3, MM-BE-5 MM-BE-4	AGELRT UELRT FULRT (Var. 1&2) FUG

Table 6-3. Mitigation Measures to Reduce Impacts on Historical Resources to a Less-Than-Significant Level

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	Impact	Proposed Mitigation	Project Alternative
3-2	Los Angeles Central Library	Listed	Listed	Vibration	MM-BE-2, MM-BE-3, MM-BE-5	AGELRT UELRT FULRT (Var. 1&2) FUG
3-4	Belmont Tunnel	Not Eligible	Eligible	Partial Removal	MM-BE-1	AGELRT UELRT FULRT (Var. 1&2) FUG
4-3	2 nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	Vibration	MM-BE-2, MM-BE-3, MM-BE-5	AGELRT UELRT FULRT (Var. 1&2) FUG

Table 6-3. Mitigation Measures to Reduce Impacts on Historical Resources to a Less-Than-Significant Level

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	Impact	Proposed Mitigation	Project Alternative
4-4	Walt Disney Concert Hall	Eligible	Eligible	Vibration Settlement	MM-BE-2, MM-BE-3, MM-BE-5 MM-BE-4 MM-BE-8 MM-BE-9	AGELRT UELRT FULRT (Var. 1&2) FUG
7-19	Former Nishi Hongwanji Buddhist Temple	Listed (NHL)	Listed	Settlement	MM-BE-4	UELRT FULRT (Var. 1&2) FUG
8-2	<i>Los Angeles Times</i> Building	Eligible	Listed	Settlement	MM-BE-4 MM-BE-5	AGELRT UELRT FULRT (Var. 1&2) FUG
8-3	The <i>Mirror</i> Building (Site of Butterfield Stage Station), <i>Los Angeles Times-Mirror</i> Annex, <i>Times</i> Building South, <i>Mirror-News</i> Building	Eligible	Eligible	Vibration	MM-BE-2, MM-BE-3, MM-BE-5	AGELRT UELRT FULRT (Var. 1&2) FUG

Table 6-3. Mitigation Measures to Reduce Impacts on Historical Resources to a Less-Than-Significant Level

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	Impact	Proposed Mitigation	Project Alternative
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	Vibration Settlement	MM-BE-2, MM-BE-3, MM-BE-4	AGELRT UELRT FULRT (Var. 1&2) FUG
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	Vibration Settlement	MM-BE-2, MM-BE-3, MM-BE-5 MM-BE-4	AGELRT UELRT FULRT (Var. 1&2) FUG
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	Vibration	MM-BE-2, MM-BE-3, MM-BE-5	AGELRT UELRT FULRT (Var. 1&2) FUG

AGELRT = At-Grade Emphasis LRT Alternative

UELRT = Underground Emphasis LRT Alternative

FULRT (Var. 1&2) = Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2

LPA = Locally Preferred Alternative

6.1 Proposed Construction Impact Mitigation Measures

MM-BE-1 Historic Properties/Historical Resources Documentation

Documentation of historic properties and historical resources adversely affected by the project would consist of the development of individual Historic American Building Survey/Historic American Engineering Record (HABS/HAER) submissions. The HABS/HAER documents would be prepared so that the original archival-quality documentation could be donated for inclusion in the Library of Congress if the National Park Service accepts these materials. Archival copies of the documentation would also be offered for donation to local repositories, including the Los Angeles Central Library and the Los Angeles Conservancy. The appropriate level of recordation would be established in consultation with the California SHPO and formalized as a part of MM-BE-5.

MM-BE-2 Pre-construction baseline survey and geo-technical investigations

A survey of historic properties and/or historical resources within 21 feet of vibration producing construction activity would be conducted to assess the building category and the potential for GBV to cause damage. The survey would also be used to establish baseline, pre-construction conditions for historic properties and historical resources.

During preliminary and final design of the project, subsurface (geotechnical) investigations would be undertaken under this measure to evaluate soil, groundwater, seismic, and environmental conditions along the alignment. This analysis would assist in the development of appropriate support mechanisms for cut and fill construction areas. The subsurface investigation would also identify areas that could experience differential settlement as a result of using a tunnel boring machine in close proximity to historic properties and/or historical resources. An architectural historian or historical architect who meets the Secretary of the Interior's Professional Qualification Standards would provide input and review of final design documents prior to implementation of measures (36 CFR Part 61).

MM-BE-3 Building Protection Measures, Geotechnical and Vibration Monitoring, and Post Construction Survey

For those historic properties and historical resources that have the potential to be affected or impacted by ground borne vibrations and/or differential settlement, Metro would use building protection measures such as underpinning, soil grouting, or other forms of ground improvement, as well as lower vibration equipment and/or construction techniques. These techniques, combined with a geotechnical and vibration monitoring program, would help protect identified historic properties and historical resources. The historic property and historical resource protection measures as well as the geotechnical and vibration monitoring program would be reviewed by an architectural historian or historical architect who meets the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61) to ensure that the measures would adequately protect the properties/resources. A post construction survey

would also be undertaken to ensure that no adverse effects or significant impacts had occurred to historic properties and historical resources.

MM-BE-4 TBM Specifications/Requirements near Historic Properties and Historical Resources

For those historic properties and historical resources that have the potential to be affected or impacted by differential settlement caused by TBM construction, a contractor would be required to develop and use an earth pressure balance or slurry shield tunnel boring machine. The method of machine operation would be based on the anticipated ground conditions near historic properties and historical resources. These construction methods and machinery types would reduce the potential for differential settlement near historic properties and historical resources.

MM-BE-5 Memorandum of Agreement

For those historic properties and that would be anticipated to experience adverse effects, a memorandum of agreement would be developed to resolve those adverse effects consistent with 36 CFR 800. This agreement, developed by FTA and Metro in consultation with the CA SHPO and other consulting parties would resolve and/or avoid, minimize, or mitigate potential effects to historic properties and/or historical resources. The agreement would include stipulations that outline the specific requirements for consultation and decision making between the lead federal agency and consulting parties, specify the level of HABS/HAER recordation, outline specific requirements for pre- and post- construction surveys, geotechnical investigations, building protection measures, and TBM specifications.

MM-BE-6 Relocation of Señor Fish Building

The Señor Fish/Atomic Café building (to be removed) shall be offered for a period of one year following certification of the Final EIS/EIR for the price of \$1 to any party willing to move it off of the 1st/Central Avenue station site at their own expense. Should no parties come forward, Metro shall incorporate materials from the building into the project facilities.

MM-BE-7 Interpretive Programs for Señor Fish Building

Metro shall explore keeping portions of the building intact for use in the 1st/Central Avenue station. Metro shall also offer to provide an exhibit commemorating the building at the Japanese American National Museum, the 1st/Central Avenue station site, or other suitable location. An individual Historic American Building Survey/Historic American Engineering Record (HABS/HAER) submission shall be developed. MM-BE-8 Mitigation for effects from noise and vibration during operation to the Walt Disney Concert Hall.

Metro shall conduct additional evaluations during the preliminary engineering phases to verify the appropriate criteria for recording activities and to verify initial estimates. If necessary, Metro shall specify that the contractor will employ high compliance resilient

fasteners, floating slab trackbed or other appropriate measures to reduce operational groundborne noise impact during operation.

6.2 Operation Impacts Mitigation Measures

The implementation of the following mitigation measures would reduce the effects on the Walt Disney Concert Hall from the operation of the LRT.

MM-BE-9 Mitigation for effects from noise and vibration during construction to the Walt Disney Concert Hall

During construction Metro shall provide monitoring for groundborne noise at the Walt Disney Concert Hall and the Roy and Edna Disney/CalArts Theater (REDCAT). LACMTA shall also provide advance notification to Walt Disney Concert Hall and the Roy and Edna Disney/CalArts Theater (REDCAT) regarding schedules for tunneling and other activities.

7.0 CONCLUSIONS

7.1 No Build Alternative

7.1.1 NEPA Findings

This alternative would not include capital improvements, and thus the No Build Alternative would be expected to result in no adverse construction or implementation-related effects on historic properties in the project APE.

7.1.2 CEQA Determination

The No Build Alternative does not include the introduction of any new improvements that would be expected to result in construction or operational impacts to historical resources in the project APE. The No Build Alternative would not be expected to result in cumulative impacts to historical resources, other than potential impacts on resources through continued high and escalated levels of vehicular traffic, unabated by additional mass transit options. The No Build Alternative would not contribute to a cumulative impact on these resources.

7.1.3 Section 4(f) Effects

The No Build Alternative would not result in any Section 4(f) impacts.

7.2 Transportation System Management (TSM) Alternative

7.2.1 NEPA Findings

Project construction and operation would not result in any direct or indirect adverse effects to historic properties.

7.2.2 CEQA Determination

Construction and operation of the TSM Alternative would not result in any direct or indirect significant impacts on historical resources.

7.2.3 Section 4(f) Effects

The TSM Alternative would not result in the use of any Section 4(f) resources.

7.3 At-Grade Emphasis LRT Alternative

7.3.1 NEPA Findings

Construction of the At-Grade Emphasis LRT Alternative would be expected to result in one direct adverse effect. Alteration of the 2nd Street Tunnel (APE Map #4-3) during construction to accommodate the At-Grade Emphasis LRT Alternative would require the implementation of MM-BE-1 and MM-BE-5. Consistent with 36 CFR 800, consultation with the California SHPO

and other consulting parties would need to be completed before project construction could begin.

7.3.2 CEQA Determination

Construction of the At-Grade Emphasis LRT Alternative would potentially result in one direct significant impact and 14 indirect significant impacts to historical resources. All of these potential impacts could result in a substantial adverse change to a historical resource. Implementation of mitigation measures MM-BE-1 through MM-BE-5 would reduce these potential impacts to a less than significant level. Project operation is not expected to cause direct or indirect impacts. Refer to Table 7-2 for additional information.

7.3.3 Section 4(f) Effects

The At-Grade Emphasis LRT Alternative would require the acquisition and/or use of property associated with five NRHP-eligible properties: Los Angeles Civic Center Historic District, Los Angeles Police Motor Transport Building (APE Map #6-7), City of Los Angeles Parker Center Police Department Building (APE Map #6-6), City Hall South (APE Map #6-4) as well as the 2nd Street Tunnel (APE Map #4-3). Four of these acquisitions would result in a Section 4(f) *de minimus* finding. The 2nd Street Tunnel alterations could only occur if 1) there is no prudent and feasible alternative to using the resource; and 2) the project includes all possible planning to minimize harm to the tunnel from the use. Additional analysis of project alternatives and consultation with the California SHPO would be required.

7.4 Underground Emphasis LRT Alternative

7.4.1 NEPA Findings

Construction and operation of the Underground Emphasis LRT Alternative would be expected to result in no direct or indirect adverse effects to historic properties.

7.4.2 CEQA Determination

Construction of the Underground Emphasis LRT Alternative would result in one direct significant impact and 14 indirect significant impacts to historical resources. Implementation of mitigation measures MM-BE-1 through MM-BE-5 would reduce these potential impacts to a less than significant level. Project operation would not be expected to cause direct or indirect impacts. Refer to Table 7-3 for additional information.

Table 7-1. At-Grade Emphasis LRT Alternative Expected Effects to Historic Properties

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
4-3	2 nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	SI				X

SI = Significant impact that can be mitigated to a less than significant level

Table 7-2. At-Grade Emphasis LRT Alternative Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	SI			X	
2-7	Roosevelt Building	Listed	Listed	SI			X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	SI			X	
2-13	Superior Oil Company Building	Listed	Listed	SI			X	
3-1	The California Club	Eligible	Listed	SI			X	
3-2	Los Angeles Central Library	Listed	Listed	SI			X	
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	SI		X		
4-3	2 nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	SI				X

Table 7-2. At-Grade Emphasis LRT Alternative Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
4-4	Walt Disney Concert Hall	Eligible	Eligible	SI			X	
7-19	Former Nishi Hongwanji Buddhist Temple	Listed (NHL)	Listed	SI			X	
8-2	<i>Los Angeles Times</i> Building	Eligible	Listed	SI			X	
8-3	<i>Mirror</i> Building	Eligible	Eligible	SI			X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	SI	X	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	SI			X	
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	SI			X	

SI = Significant impact that can be mitigated to a less than significant level

Table 7-3. Underground Emphasis LRT Alternative Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect- Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	SI			X	
2-7	Roosevelt Building	Listed	Listed	SI			X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	SI			X	
2-13	Superior Oil Company Building	Listed	Listed	SI			X	
3-1	The California Club	Eligible	Listed	SI			X	
3-2	Los Angeles Central Library	Listed	Listed	SI			X	
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	SI		X		
4-4	Walt Disney Concert Hall	Eligible	Eligible	SI			X	

Table 7-3. Underground Emphasis LRT Alternative Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect- Not Adverse	Adverse Effect
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	SI			X	
7-30	S. Kamada Restaurant, Atomic Café, Senor Fish, and Coast Imports	Not Eligible	Eligible	SI	X Property would be acquired and building demolished	X		
8-2	<i>Los Angeles Times</i> Building	Eligible	Listed	SI			X	
8-3	Mirror Building	Eligible	Eligible	SI			X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	SI	X (Subsurface Easement)	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	SI			X	

Table 7-3. Underground Emphasis LRT Alternative Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	SI	X (Subsurface easement)		X	

SI = Significant impact that can be mitigated to a less than significant level

7.4.3 Section 4(f) Effects

The Underground Emphasis LRT Alternative would require the acquisition of a subsurface easement situated on one NRHP-eligible property; Cathedral of Saint Vibiana Rectory (APE Map #8-13). No adverse effects would occur to the Rectory building as a result of the easement. This acquisition would result in a Section 4(f) *de minimus* finding.

7.5 Fully Underground LRT Alternative - Little Tokyo Variation 1

7.5.1 NEPA Findings

Construction and operation of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would be expected to potentially result in no direct or indirect adverse effects to historic properties.

7.5.2 CEQA Determination

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would potentially result in one direct significant impact and 14 indirect significant impacts to historical resources. Implementation of mitigation measures MM-BE-1 through MM-BE-5 would reduce these potential impacts to a less than significant level. Project operation is not expected to cause direct or indirect impacts. Refer to Table 7-4 for additional information.

7.5.3 Section 4(f) Effects

The Fully Underground LRT Alternative - Little Tokyo Variation 1 would require the acquisition of a subsurface easement situated on one NRHP-eligible property; Cathedral of Saint Vibiana Rectory (APE Map #8-13). No adverse effects would occur to the Rectory building as a result of the easement. This acquisition would result in a Section 4(f) *de minimus* finding.

7.6 Fully Underground LRT Alternative - Little Tokyo Variation 2

7.6.1 NEPA Findings

Construction and operation of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would be expected to result in no potential direct or indirect adverse effects to historic properties.

7.6.2 CEQA Determination

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would potentially result in one direct significant impact and 14 indirect significant impacts to historical resources. Implementation of mitigation measures MM-BE-1 through MM-BE-5, would reduce these potential impacts to a less than significant level. Project operation would not be expected to cause direct or indirect impacts. Refer to Table 7-5 for additional information.

Table 7-4. Fully Underground LRT Alternative - Little Tokyo Variation 1 Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Effect	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	SI			X	
2-7	Roosevelt Building	Listed	Listed	SI			X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	SI			X	
2-13	Superior Oil Company Building	Listed	Listed	SI			X	
3-1	The California Club	Eligible	Listed	SI			X	
3-2	Los Angeles Central Library	Listed	Listed	SI			X	
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	SI		X		
4-4	Walt Disney Concert Hall	Eligible	Eligible	SI			X	

Table 7-4. Fully Underground LRT Alternative - Little Tokyo Variation 1 Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Effect	Effect-Not Adverse	Adverse Effect
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	SI			X	
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	SI	X	X		
8-2	<i>Los Angeles Times</i> Building	Eligible	Listed	SI			X	
8-3	Mirror Building	Eligible	Eligible	SI			X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	SI	X (Subsurface Easement)	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	SI			X	
8-13	Cathedral of Saint Vibiana, Rectorry	Eligible	Eligible	SI	X (Subsurface easement)		X	

SI = Significant impact that can be mitigated to a less than significant level

Table 7-5. Fully Underground LRT Alternative - Little Tokyo Variation 2 Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	SI			X	
2-7	Roosevelt Building	Listed	Listed	SI			X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	SI			X	
2-13	Superior Oil Company Building	Listed	Listed	SI			X	
3-1	The California Club	Eligible	Listed	SI			X	
3-2	Los Angeles Central Library	Listed	Listed	SI			X	
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	SI		X		
4-4	Walt Disney Concert Hall	Eligible	Eligible	SI			X	

Table 7-5. Fully Underground LRT Alternative - Little Tokyo Variation 2 Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	SI			X	
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	SI	X	X		
8-2	<i>Los Angeles Times</i> Building	Eligible	Listed	SI			X	
8-3	Mirror Building	Eligible	Eligible	SI			X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	SI	X (Subsurface Easement)	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	SI			X	

Table 7-5. Fully Underground LRT Alternative - Little Tokyo Variation 2 Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	SI	X (Subsurface easement)		X	

SI = Significant impact that can be mitigated to a less than significant level

7.7 Locally Preferred Alternative

7.7.1 NEPA Findings

Construction and operation of the LPA would be expected to result in no potential direct or indirect adverse effects to historic properties.

7.7.2 CEQA Determination

Construction of the LPA would potentially result in one direct significant impact and 14 indirect significant impacts to historical resources. Implementation of mitigation measures MM-BE-1 through MM-BE-9, would reduce these potential impacts to a less than significant level. Project operation would not be expected to cause direct or indirect impacts. Refer to Table 7-6 for additional information.

7.7.3 Section 4(f) Effects

The LPA would require the acquisition of a subsurface easement situated on one NRHP-eligible property; Cathedral of Saint Vibiana Rectory (APE Map #8-13). No adverse effects would occur to the Rectory building as a result of the easement. This acquisition would result in a Section 4(f) *de minimus* finding.

Table 7-6. LPA Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	SI			X	
2-7	Roosevelt Building	Listed	Listed	SI			X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	SI			X	
2-13	Superior Oil Company Building	Listed	Listed	SI			X	
3-1	The California Club	Eligible	Listed	SI			X	
3-2	Los Angeles Central Library	Listed	Listed	SI			X	
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	SI		X		
4-4	Walt Disney Concert Hall	Eligible	Eligible	SI			X	

Table 7-6. LPA Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	SI			X	
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	SI	X	X		
8-2	<i>Los Angeles Times</i> Building	Eligible	Listed	SI			X	
8-3	Mirror Building	Eligible	Eligible	SI			X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	SI	X (Subsurface Easement)	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	SI			X	

Table 7-6. LPA Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	SI	X (Subsurface easement)		X	

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APPENDIX A

PROJECT AREA OF POTENTIAL EFFECTS

APPENDIX B

RECORDS SEARCH RESULTS

APPENDIX C

COORDINATION WITH LOCAL HISTORIC GROUPS/LOCAL GOVERNMENT

APPENDIX D

CALIFORNIA DEPARTMENT OF PARKS & RECREATION SERIES 523 FORMS

APPENDIX E

PROJECT-RELATED FTA/SHPO CORRESPONDENCE

APPENDIX F

CALIFORNIA HISTORICAL RESOURCE STATUS CODES
