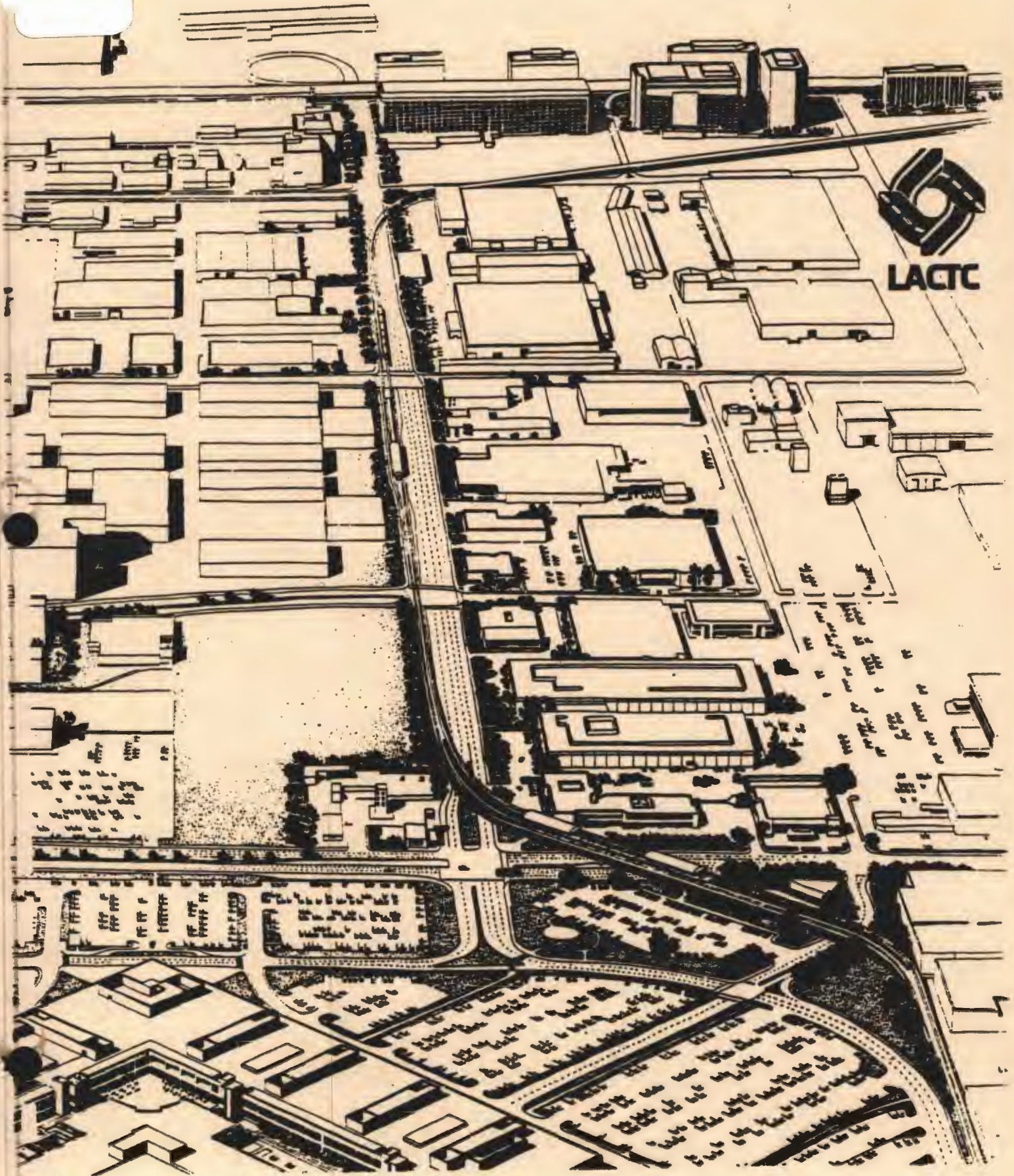


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Final Environmental Impact Report Century-EI Segundo Extension Rail Transit Project

Los Angeles County Transportation Commission, 403 West 8th Street, Suite 500 Los Angeles, California 90014 (213) 626-0370



Final Environmental Impact Report

(SCH NO. 86030514)

Century-El Segundo Extension Rail Transit Project

NOVEMBER 1986

Los Angeles County Transportation Commission
In Association With

GANNETT FLEMING TRANSPORTATION ENGINEERS, INC.
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ABSTRACT

This Final Environmental Impact Report (FEIR) presents the revised project and impacts for the proposed Century-El Segundo Extension Rail Transit Project. Based on public comments received, the project would begin at the Century Rail Line Aviation Station and end at a rail yard site in Hawthorne. Within this 2.9 mile route, stations are proposed at Mariposa Avenue, El Segundo Boulevard, Douglas Street, and Compton Boulevard. Both at-grade and aerial Nash Street options are being cleared as part of this FEIR, from just south of Mariposa Avenue to just north of El Segundo Boulevard.

This FEIR includes revisions to the project description and impacts; responses to comments received on the DEIR; a list of agencies, organizations and persons commenting on the DEIR; and revised plans and profiles. The DEIR is incorporated by reference as part of this FEIR. For further information on the FEIR or to obtain a copy of the DEIR, contact:

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1.0 SUMMARY

The Draft Environmental Impact Report (DEIR) for the Century/El Segundo Extension Rail Transit Project was released to the public on July 3, 1986, beginning the formal review period, which closed August 25, 1986. The DEIR evaluated a baseline project and several options. A public hearing was held August 12, 1986. Comments given at this meeting plus additional written comments are included in this Final EIR (FEIR) and can be summarized as follows:

Nash Street Options

All respondents stating a preference preferred the aerial option on Nash Street over the at-grade alignment. The City of El Segundo, Rockwell, Kilroy, the El Segundo Employers Association (ESEA) and others have particular concern about the at-grade crossing of Nash Street.

Rail Yard and Length Options

All respondents stating a preference preferred the Hawthorne Rail Yard and Length Option over the El Segundo Rail Yard. Respondents felt that the Hawthorne length option and yard site provided better transit service to a larger number of employees in the southern end of the employment center. In addition, Allied Chemical expressed concerns over the proximity of their chemical facilities to the proposed El Segundo yard site and warned of the need to maintain an adequate buffer around the facility in the event of an accident, a concern which was supported by others.

Compton Boulevard Station Alternatives

A consensus has been reached regarding the two Compton Boulevard Station alternatives identified in the DEIR. In several meetings held with TRW, the ESEA, Southern California Edison (SCE) and the City of Hawthorne, a Compton Boulevard Station plan agreeable to all parties has been identified. (See Drawing Number BL-6 in Section 4.0). The station platform, as planned, is located north of the tracks into the yard, providing optimal operational efficiency. Busbays, shuttle and auto drop-off spaces and short-term parking spaces are proposed south of the platform on SCE substation property and a park-and-ride lot is proposed under an SCE utility easement north and east of the platform.

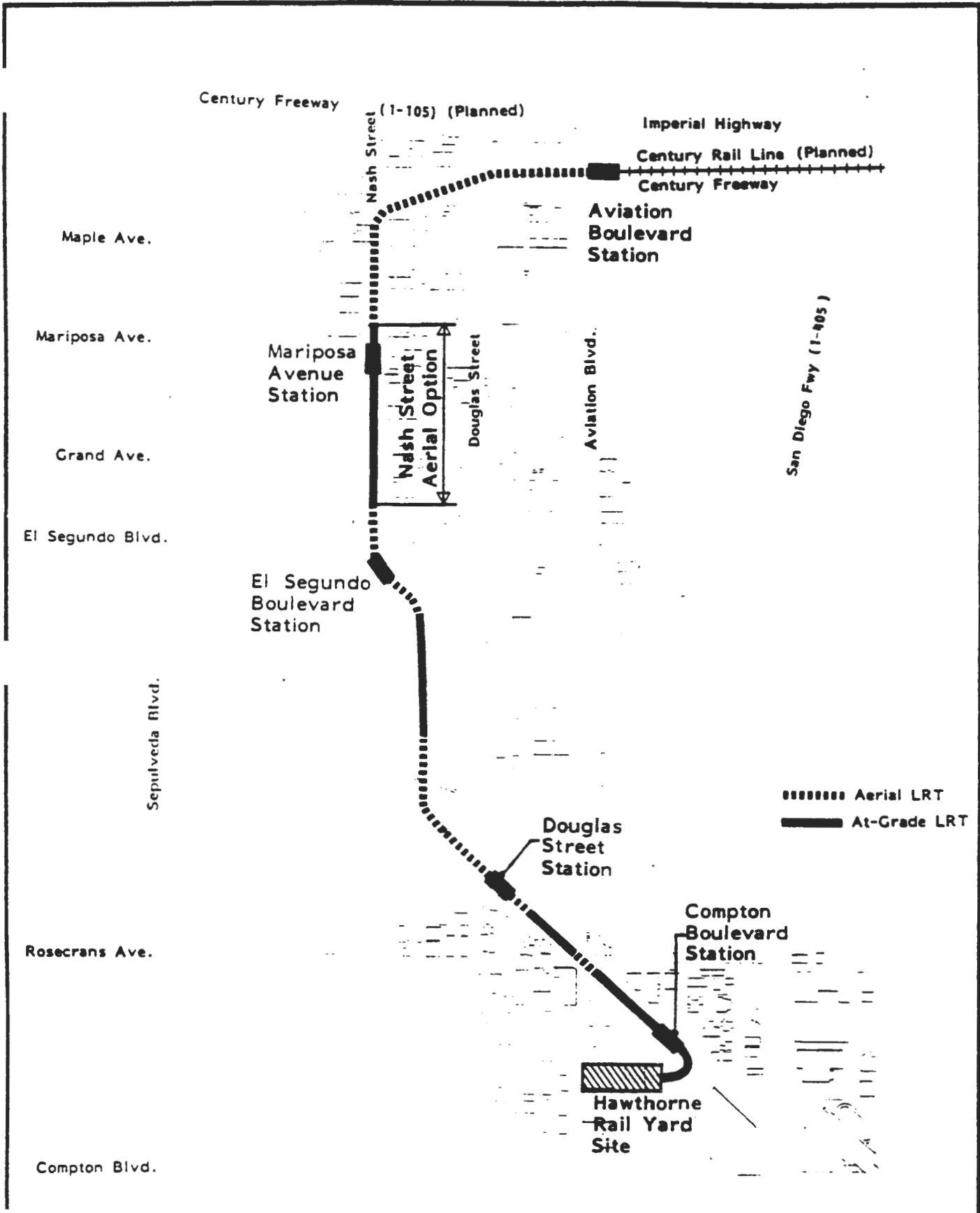
On September 24, 1986 LACTC selected the following options for final environmental clearance:

- o The Baseline At-Grade Route from Aviation Station to

the Hawthorne Yard with a modification to eliminate at-grade crossings of Nash Street and Maple Avenue. The LRT would be fully grade-separated over Northrop and Rockwell Corporation properties, cross over Nash Street and Maple Avenue, drop to ground level and cross Mariposa and Grand Avenues at-grade, and then rise to cross over El Segundo Boulevard.

- o Nash Street Aerial Option - Although the Baseline At-Grade Route has been modified to include grade-separations at Nash Street and at Maple Avenue, this option would provide for an aerial configuration along the entire length of Nash Street.
- o Hawthorne Rail Yard Site and Length Option - The El Segundo Rail Yard Site has been eliminated from further consideration and the initial route length will extend 2.9 miles to the Compton Boulevard Station.
- o Compton Boulevard Station North Site - The southern site will be eliminated from further consideration in favor of the modified north site. (See Drawing Number BL-6 in Section 4.0).

The FEIR Baseline Project is summarized in FEIR Figure 1 and FEIR Table 1.



**CENTURY-EL SEGUNDO EXTENSION
RAIL TRANSIT PROJECT**

LOS ANGELES COUNTY TRANSPORTATION COMMISSION

FEIR Figure 1
BASELINE ROUTE



**FEIR Table 1
CENTURY-EL SEGUNDO EXTENSION RAIL TRANSIT PROJECT
SUMMARY OF PROJECT CHARACTERISTICS**

ROUTE CHARACTERISTICS

Limits The Baseline Route runs from the Aviation Boulevard Station of the Century Rail Line to a rail storage and maintenance yard in the City of Hawthorne. Stations are provided at Mariposa Avenue, El Segundo Boulevard, Douglas Street (near Rosecrans Avenue) and at Compton Boulevard.

OPERATING PLAN

Frequency 7 days a week-6 minute headway during peak hours; 20 minute headway during off peak hours.

Hours of Service 5:30 a.m. - 1:30 a.m.

Vehicles 3 car trains

Average Speed (in study area) 25-35 mph

Maximum Speed 55 mph

Capacity (three car train) 228 seated passengers & 483 standees.

ACCESS

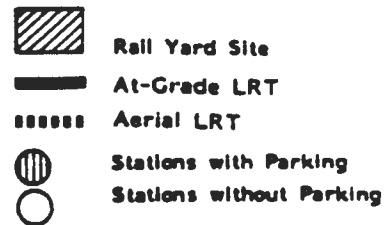
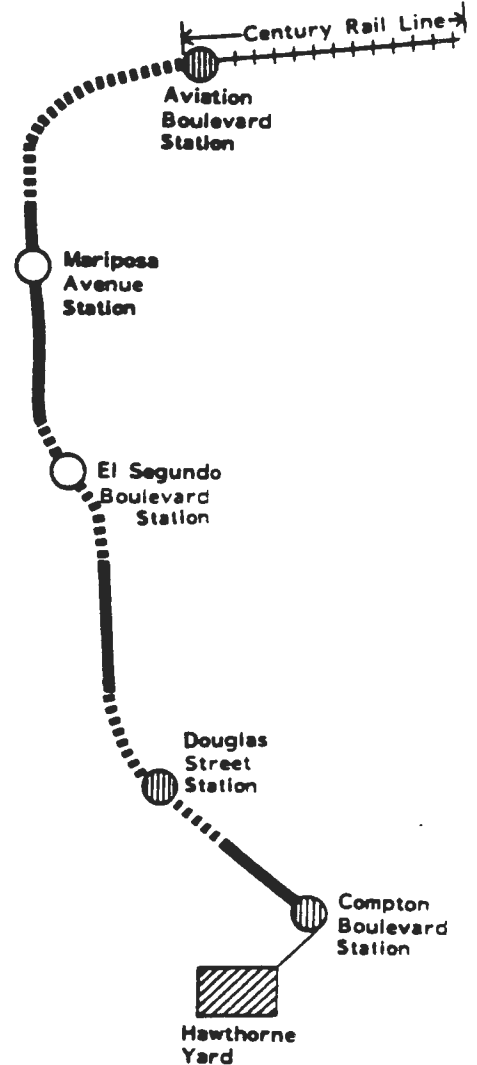
Stations High Level Platforms
 *Mariposa-At-Grade
 *El Segundo-Aerial with elevator and stairs
 *Douglas-Aerial with elevator and stairs
 *Compton-At-Grade

Parking Douglas Station-100+ cars
 Compton Station-350+ cars

Bus/Shuttle At All Stations

ADJACENT LAND USES

	<u>Linear Distance</u>		
	<u>West</u>	<u>East</u>	<u>%</u>
Office, Light Industry	1.6 mi.	1.0 mi.	45%
Heavy Industry	0.5 mi.	0.8 mi.	22%
Utility, Railroad, Public	0.4 mi.	1.1 mi.	26%
Undeveloped	0.4 mi.	0	6%
Residential	0	0.03 mi.	1/2%
	2.9 mi.	2.9 mi.	100%



As a result of environmental concern and engineering refinements, the following modifications have been made to the route:

- Alignment Shift at Nash Street and El Segundo Boulevard
As a result of concerns over parking loss and proximity of the aerial guideway to the Westbay Plaza project, the alignment of the guideway has been shifted slightly to the west in this area as shown in Drawing Number BL-3. This slightly changes the layout of the El Segundo Boulevard Station and reduces loss of parking from Westbay Plaza from 15 to 4 spaces.

- Douglas Street Station Shift - As shown in Drawing Number BL-5, the Douglas Street Station has been moved approximately 400 feet south in response to concerns of the City of El Segundo that future extensions of Douglas Street would be blocked by a station in the previous location. Moving the Douglas Street Station will also allow a direct tie-in to the proposed Continental Development, again at the request of the City of El Segundo. This shift necessitates moving the proposed park-and-ride lot south allowing possible future increase in the space available for parking. It is envisioned that the municipal parking lot in this area would remain and LACTC would construct its park-and-ride lot adjacent to the city lot until an extension of Douglas Street is constructed.

- Joint LRT/Freight Rail Bridge at Rosecrans/Aviation
LACTC will consider proposals for a jointly developed freight rail/light rail overcrossing at this intersection if: 1) such proposals can be made in a timely manner so as not to delay the light rail construction schedule; and 2) such proposal results in no additional project costs or significant environmental impacts.

- Compton Boulevard Station Redesign - As shown in Drawing Number BL-6, the Compton Boulevard Station has been redesigned. Features include the following:
 - * A 40-foot roadway from Compton Boulevard north to the station.
 - * A bus/shuttle van loading area south of the yard leads.
 - * A platform north of the yard leads.
 - * No impacts to TRW property or buildings.
 - * Station facilities located on SCE property.

FEIR Table 2 Summarizes the Revised Project's Environmental Impacts and Findings of Significance. This document also includes

the detailed responses to comments received during the environmental review period, and the revised plan and profile sheets reflecting the above modifications to the DEIR.

**FEIR TABLE 2
CENTURY-EL SEGUNDO EXTENSION
RAIL TRANSIT PROJECT
SUMMARY OF IMPACTS AND SIGNIFICANCE**

ENVIRONMENTAL IMPACT CATEGORY	IMPACTS	FINDINGS
Land Use -Acquisition & Taking	ROW acquisition requires 11.6 acres of privately held property, and 2.5 acres of existing public roadway. About 109 employee parking spaces would be displaced however, 80 new spaces would be constructed behind Nash Street and more than 400 new park and ride spaces would be created.	Unavoidable Impact- Private land takings have been minimized as well as the number of parking spaces displaced. All alternatives studied involved more private land takings. No other feasible alternatives exist.
-Property Access	Exclusive at-grade ROW on Nash St. will block access to properties on the west side between El Segundo Blvd. and Maple Ave.	Significant- Mitigation feasible through construction of a new access roadway which would be constructed by LACTC north of Mariposa Avenue. If the at-grade alternative were constructed south of Mariposa, access would be developed as a part of site development when these parcels are developed.
Traffic Circulation	Exclusive at-grade LRT on Nash St. will narrow ROW for use of traffic. Traffic will be attracted to Park and Ride lots.	Not Significant- Mitigation feasible through planned one-way traffic couplet system on Nash & Douglas Streets and modest intersection flaring to accommodate additional turning lanes. Increased traffic in vicinity of station areas is not significant.
-Conformity with Adopted Plans	The project conflicts with planned extension of Douglas St. in the Circulation Element of the El Segundo General Plan.	Not Significant- Station has been moved south to allow for an at-grade extension of Douglas beneath aerial guideway.
Freight Rail	Design of the Douglas Street on-ramp to the Century Freeway around which the LRT alignment has been planned, requires modification of an existing spur line.	Not Significant- Existing spur tracks are not in use. If freight service is reinstated, the spur can be reconfigured to provide access to all facilities.

Noise and Vibration	Rail line passes in close proximity to two sensitive receptors.	Not Significant- Noise and vibration impacts are within existing ambient levels at these locations. Further studies have been conducted at two office locations and reveal no adverse impacts.
Visual	Aerial structures will block vistas and cause shadows along sidewalks, streets and some adjacent structures.	Not Significant
Construction	Minor disruption of traffic flow would occur on Nash, Maple, Mariposa, Grand, Douglas, El Segundo, Rosecrans and Aviation during the construction of tracks and aerial structures. Minor noise-related disruption would also occur for residences in Holly Glen. Dust effects may result from grading, excavation, and hauling activities. Numerous underground and overhead utility relocations will be required.	Significant-But temporary Construction phasing will be programmed to minimize impacts, however some streets will require temporary restrictions, half the street at a time. Construction activities will be governed by city and county codes.
Municipal Services	Station areas, particularly during off-peak hours of operation may require police assistance and patrol. A potential fire station location on Chevron property along Nash St. may be affected by rail vehicle movements on the at-grade rail line.	Not Significant- Local police will be supported by transit security patrols. If the Fire Station is relocated to Nash Street, the LRT will stop at times of emergency response.
Air Quality	Transit improvements are an integral part of the Regional Air Quality Management Plan. Any shift from auto to transit would be beneficial. Small Park and Ride lots at the Douglas and Compton Stations, as well as shuttle van zone at all stations would attract vehicle trips to these locations.	Overall Beneficial Impact- At the local level Park and Ride lots would have an insignificant effect on air quality. Construction impacts would be governed by standard industry codes and practices as well as Federal, State and local laws regarding air quality.
Earth	No active earthquake faults are crossed and there are no below grade sections.	Not Significant

Water	Modest increases in impervious surface area would be created by the construction of parking lots. Relocation of certain major utilities will be required.	Not Significant
Transportation Services	Existing RFD, South Bay Shuttle, ESEA Commuter Shuttles and other local carriers will have their routes altered to serve Rail Station locations.	Beneficial Impact
Risk of Upset	Potential for rail/auto collisions exists at at-grade crossings. Potential for Rail Transit/Freight Rail collisions exists in the event of derailment.	Not Significant- Signage and signals will reduce the potential for rail/auto accidents. Design of rail transit line will minimize the potential for transit/freight rail collision.
Energy	Some reduction in energy use will result from reduced auto trips. This savings may be offset by energy requirements of construction and operation of the rail system.	Not Significant
Growth Inducement	Construction of the rail extension project would generate short-term employment. Operation of the system would create a moderate number of full-time jobs. Construction of rail transit may increase the development potential of some sites near station areas.	Not Significant- The rail project would increase the potential number of trips into the area by all transportation modes. However, land uses are controlled by local government.
Ecological	No Impacts Anticipated	Not Significant
Historical and Cultural	No Impacts Anticipated	Not Significant



2.0 RESPONSES TO COMMENTS

TRAFFIC CIRCULATION IMPACTS

Comment 1: The Draft EIR indicates the baseline dropping to grade before crossing Nash Street. The Draft EIR glaringly omits the A.M. peak-period traffic analysis for Nash Street. The at-grade crossing at Nash Street will create significant traffic congestion in light of the fact that the I-105 Freeway off-ramp will be located less than 1,000 feet north of the crossing (Kilroy, ESEA, City of El Segundo).

Response: We have reevaluated our traffic data and concur that the peak period for Nash Street will be in the morning hours as opposed to the P.M. which was used in the analysis for level of service in the D.E.I.R. (Table 5 - page 75). Using A.M. peak hour traffic counts for Nash Street decreases the level of service at the intersection of Nash and Hughes Way north to an unacceptable level with an at-grade rail crossing. For this reason the LACTC has modified its at-grade option to exclude the at-grade crossings of Nash Street. The modified at-grade alignment crosses over Rockwell's property on aerial structure and doesn't descend to grade until after it crosses Nash Street and Maple Avenue.

Under the one-way Nash Street scenario, the remaining at-grade intersections at Mariposa and Grand Avenues would operate at a level of service B without the LRT, and levels of service D with the LRT during the AM peak period.

AM Peak Period

<u>Intersections</u>	<u>At-grade LRT 1-Way Traffic</u>	<u>Aerial LRT 1-Way Traffic</u>
Nash/Mariposa	0.81 D	0.64 B
Nash/Grand	0.86 D	0.69 B

Comment 2: The at-grade alignment will result in trespass, vandalism, and accidental injuries costing the Commission much more than the \$12 million saved on construction (D'Amato & Lynch).

Response: The Commission is building numerous sections of its light rail system at-grade. Light rail systems worldwide utilize similar designs without the level of impact indicated in this comment.

Comment 3: An at-grade system will not travel much faster than a bus on Nash Street (D'Amato & Lynch).

Response: Since the distance of at-grade operation on Nash has been reduced significantly, there should be little travel time difference between the at-grade and aerial alternatives. The at-grade alternative will run within a separate right-of-way and will likely have signal pre-emption at any grade crossings giving it a free flow through the at-grade segment.

Comment 4: The rail line should proceed down the back of the buildings along Nash Street instead of in front of them. Such an alignment would not only eliminate the access problems to the properties fronting on Nash Street, but would also conveniently serve the office structures and hotels that are presently being built south of Mariposa Street and west of Nash. This alignment would also preserve the Nash Street frontage of the valuable Chevron property (Westbay Plaza).

Response: This alternative was discussed at length during the Route Refinement Study with the City of El Segundo, Chevron, and the El Segundo Employers Association. The overwhelming consensus was to have the rail line along Nash Street, preferably on aerial structure. This discussion is noted in Chapter 2 of the DEIR.

Comment 5: The description of Nash Street as a "secondary arterial roadway which serves as a discontinuous feeder route to the regional transportation network" is, in our view, misleading. The City of El Segundo Traffic Circulation Element of the General Plan estimates average daily traffic on Nash Street in the year 2000 at 33,000 vehicles. From a traffic standpoint, Nash Street serves as a major arterial.

(On page 59, the DEIR indicates that grade separations will be utilized at major arterials such as Aviation Boulevard, El Segundo Boulevard, and Rosecrans Avenue, which have daily traffic volumes in the range of 30,000 to 44,000 vehicles per day.)

Although Nash Street and Douglas Street are classified as secondary arterials in the City of El Segundo Circulation Element, it should be noted that by the year 2000 the daily traffic volume on both streets will be in the range of 30,000 to 40,000 vehicles per day. Therefore, from a traffic standpoint, both streets are expected to serve as major traffic arterials (ESEA).

Response: LACTC has dropped the at-grade crossing of Nash Street from further consideration.

Comment 6: We are unclear on the meaning of the statement: "Overall transportation benefits will be planned so as to not create traffic 'hot spots' around station areas." Also, what assurances can the LACTC give that this in fact will happen? (ESEA)

Response: LACTC has included conceptual station plans in the DEIR and has reviewed these plans with major property owners, the cities and other agencies having jurisdiction over their layout and design.

During the Draft EIR circulation and comment period, further refinements have been made to these station plans as a result of particular concerns of the City of Hawthorne, the City of El Segundo and several property owners. A paramount concern during these review sessions was that adequate traffic circulation in and around station sites be provided and that planned city improvements be coordinated with construction and operation of the LRT stations. These revised station plans are included in Section 4.0 of this FEIR.

Comment 7: The DEIR states that: "The DeLeuw Cather Study also reviewed the proposed Nash/Douglas one-way couplet and determined that such a change was desirable and should be implemented along with either of the two preferred on-ramp configurations." In fact, the study concluded that: "Analyses indicates that one-way traffic flows are not supported for the Caltrans ramp (alternative)." [Emphasis added.] The report goes on to say: "If the Caltrans alternative is implemented, it is recommended that one-way traffic flow could be accommodated and should be considered.

This is a critical issue since the LACTC will make its decision on whether Nash Street will be at-grade or aerial prior to Caltrans making a decision about which ramp alternative to build. A decision to build at-grade LRT on Nash Street presupposes a one-way couplet. If this supposition turns out to be wrong, and if the DeLeuw, Cather report is correct, the result would be substantial conflicts between auto traffic and LRT on Nash Street. (ESEA)

Response: The traffic analysis was done on the assumption that the preferred ramp alternative would be implemented. The traffic analysis did not consider the possibility of permanent two-way traffic on Nash Street and Douglas Street with the original Caltrans on-ramp. It is true that such a situation would not be workable with an at-grade LRT crossing of Nash Street.

LACTC has agreed to elevate the rail line above Douglas Street, Nash Street and Maple Avenue in order to avoid the

impacts that would occur if the original Caltrans ramp were to be constructed and two-way traffic flow were to remain on Nash Street and Douglas Street.

Comment 8: The DEIR states that: "The analysis presumes that if LRT Station generated trips have an insignificant impact on this intersection [i.e. Rosecrans/Aviation], then there will be no significant impacts at any other project area intersections." We don't see how this necessarily follows (ESEA).

Response: The Rosecrans/Aviation intersection is located midway between the only two LRT stations on this line which have park-and-ride lots. Park-and-ride lots are the major source of vehicle trips along the rail line and therefore this particular intersection would be impacted by traffic from both the Douglas Street and Compton Boulevard Stations. No other project area intersections are impacted to this degree.

Comment 9: In the comparison of Nash Street LRT at-grade and aerial options, Table 7 does not even mention interference with auto traffic for the at-grade option. (ESEA)

Response: Table 7 was included in Section 4.2 of the DEIR titled Land Use Impacts and because of this did not mention traffic impacts in the comparison of aerial and at-grade Nash Street comparisons. These comparisons were discussed in Section 4.1 titled Traffic Circulation.

Comment 10: On page 23, the DEIR states that "The Baseline route begins at Aviation Boulevard and runs westerly within the AT & SF Railroad right-of-way on an aerial structure....The line descends to at-grade just before crossing Nash Street and runs in an exclusive at-grade right-of-way on the west side of Nash Street."

The transition from an aerial structure to an at-grade right-of-way just east of Nash Street represents a change from the route description contained in the September 1985 Route Refinement Study. This change would add two at-grade crossings, one at Nash Street and another at Maple Avenue. The DEIR states that all of the at-grade crossings would have signal pre-emption. It should be noted that under the recommended DeLeuw, Cather & Company Douglas Street I-105 ramp alternative, a new traffic signal would be required at the intersection of the proposed Hughes Way north/I-105 ramp road and Nash Street. Therefore, there would be three traffic signals within a distance of only 400 feet. The DEIR should discuss in greater detail how the various signals along Nash Street with the LRT at-grade option would operate without creating unreasonable traffic delays and LRT system operating speeds. (City of El Segundo)

Response: LACTC has modified the configuration in this area to be aerial as it crosses Nash Street and Maple Avenue and would therefore have no effect on signal phasing in this area.

Comment 11: On page 27, the DEIR states that "Should the Hawthorne rail yard be determined to be the most feasible site, then the initial route alignment would proceed south...beneath the Southern California Edison 66 kv high towers which would be raised by 25-30 feet ... then over the AT & SF LA Harbor mainline tracks to the elevated Douglas Street station."

The proposed LRT structure over the AT & SF Railroad tracks would preclude the extension of Douglas Street over the tracks and would limit any future extensions to either an at-grade crossing or an underpass. In either case, the Douglas Street extension would need to be located east of the AT & SF tracks. The present design of the Douglas Street station would make it difficult to include the extension due to proposed park-and-ride and pedestrian access facilities. The DEIR should, therefore, review the design of the Douglas Street station such that it would not preclude a future extension of Douglas Street at-grade or underpass.

Furthermore, the Douglas Street station should be shifted southerly such that it can be better integrated with the Continental Park Phase V project. The developer has agreed to provide a point of connection to the platform and pedestrian access across the site, as well as a contribution of up to \$50,000 for a bridge from the platform to the site. These contributions will not be required for the station location shown in the Draft EIR. (City of El Segundo)

Response: We concur with the City of El Segundo's concerns. As illustrated in the revised plans (Drawing Number BL-5) we have shifted the Douglas Street Station south to allow a direct connection into the Continental Park Phase V project. Furthermore, the LRT structure will not preclude either an at-grade crossing or underpass of Douglas Street with the Santa Fe rail line.

LAND USE AND DEVELOPMENT IMPACTS

Comment 1: The Mariposa Avenue Station should be shifted north to Maple Avenue because the existing density along Imperial exceeds that contemplated for the Mariposa location (Kilroy, Hughes).

Response: The City of El Segundo states in their comments to the D.E.I.R., "Memorandum dated July 26, 1986 from ESEA to its members reiterated a preference for a station north of Maple Avenue on Nash Street instead of the station south

of Mariposa Avenue. The primary advantage of the Maple Avenue site is that it would better serve the major employment centers such as Hughes Aircraft Company. While this is an important factor, the Mariposa Avenue station also has several positive features, including: 1) it is more equally spaced between the Aviation Boulevard and El Segundo stations; 2) it is more easily reached by the residents of El Segundo west of Sepulveda Boulevard, 3) it would require less land-taking since Nash Street is wider south of Mariposa Avenue; and 4) it is located adjacent to the Chevron development area, which will have a large employment population in the future." LACTC concurs with the City's position.

Comment 2: We are distressed that the rail system is planned to be flush against our property thereby diminishing the value of the property (D'Amato & Lynch).

Response: Your property on the southwest corner of Nash Street and Maple Avenue is currently used for warehousing purposes. With an at-grade alignment on Nash Street it will be necessary to access the property from Maple. LACTC is proposing to construct a new access road from Maple to Mariposa on the 50' wide Santa Fe right-of-way behind this property. In addition to the roadway LACTC will construct up to 40 parking spaces behind this facility. These spaces could be deeded to the property. LACTC feels that these improvements as well as regional rail access provided by the Mariposa Station will not decrease, and should increase your property values over existing levels.

Comment 3: The DEIR states that the rail transit project will require the taking of 5,400 square feet of our property resulting in the loss of 15 parking spaces. The loss of the parking, in particular could place in jeopardy the future viability of our property as an office building. In addition, the plan shows the track as coming unnecessarily close to our building, posing a serious noise and light pollution problem. We see no reason why the alignment can't use the fire station property across the street (Westbay Plaza).

Response: At the Westbay Plaza property owners' request, LACTC staff in conjunction with Gannett Fleming Transportation Engineers undertook a detailed analysis of four alignment options for the El Segundo Boulevard Station. These four options are detailed in technical memorandum to Westbay Plaza property owners and Hughes' EDSG - the two parties affected - and are summarized below:

Option One was presented in the DEIR. This option took 5,400 square feet including 15 parking spaces from Westbay

Plaza for a station entrance on the northeast corner of El Segundo Boulevard and Nash Street.

Option Two moves the alignment as far off Westbay Plaza as possible while still maintaining a station entrance on that corner. The amount of Westbay property required under this option is reduced from 5,400 square feet to 2,100 square feet with a corresponding reduction in lost parking from 15 to 4 spaces. It is LACTC's contention that a station entrance on the corner of Westbay Plaza will increase the value of this property over and above any decrease associated with the proximity of the LRT. This option does not change the impacts to Hughes' EDSG.

Option Three removes the aerial structure from Westbay Plaza but still requires a 6-8 foot column on the corner of their property. This option requires tight curves at both ends of the El Segundo Boulevard Station and restricts the length of tangent between the curves and edge of platform to below design criteria standards. It also precludes any future potential to lengthen the platform to allow a 4-car train as planned for the Century Line. Lastly, although the station platform would have to be constructed over El Segundo Boulevard no access to the north side of that street would be possible. This option does not change the impacts to Hughes' EDSG.

Option Four eliminates all impacts to Westbay Plaza but requires the removal of Hughes' helipad and an additional 215 EDSG parking spaces over and above the other three options. This option also requires LACTC to acquire an additional 2 acres of prime real estate from the EDSG over the other three options.

In summary, Option One was unacceptable to Westbay Plaza owners; Option Three is unacceptable to LACTC; and Option Four is unacceptable to Hughes. Because Option Two reduces property taking impacts to Westbay Plaza by 73 percent and reduces parking loss from 15 to 4 spaces over Option One, LACTC supports Option Two for final environmental clearance.

Environmental impacts resulting from Option two have been evaluated. The edge of the rail transit structure is approximately 80 feet away from the nearest edge of the Westbay Plaza building. A consultant was retained to determine whether any noise or vibration impacts would occur as a result of this proximity. The results are summarized below.

Noise measurements were taken at this location during the hour starting at 1600 on 23 September. The peak noise level measured as L_{10} was 72 dBA while the Leq was 70 dB. The

measurement location was about 75 feet from the proposed LRT line. At this location the noise due to LRT operations will be lower than usual since the trains will be running slowly as they arrive and depart the station above El Segundo Boulevard. Noise levels due to LRT operations will be below the measured traffic noise at this location. Vibration levels will also be much lower here due to slower speeds. No adverse vibration impact will be experienced by personnel in nearby buildings even if the LRT was operating at the 40 mph planned speed.

In regards to light pollution, the LACTC will work with station designers to minimize any glare that could impact your building during the evening hours.

Lastly, the LACTC cannot use the fire station property across the street from Westbay Plaza for station facilities because the LRT alignment is turning southeast at this point and locating a station on the northwest corner of El Segundo Boulevard and Nash Street is impossible from an engineering point of view.

Comment 4: TRW is concerned about the proposed kiss-and-ride and shuttle drop-off zone that would impact one of their classified buildings. The design of the station facilities are unacceptable as drawn in the DEIR. (TRW, Continental)

Response: Since the DEIR was released LACTC staff has met with TRW, ESEA, SCE, the City of Hawthorne, Andrex, and the U.S. Air Force to identify a mutually acceptable plan. On August 27, 1986 such a plan was approved by all parties. The revised Compton Blvd. Station is illustrated in Drawing Number BL-6. The revised plan does not impact TRW's classified building.

Comment 5: Allied Corporation objects to the use of its property for the El Segundo Rail Vehicle Storage yard because of its need to maintain a buffer around its chemical manufacturing plant and because it plans to expand its facilities (Allied Corporation).

Response: The El Segundo Yard Site has been dropped from further consideration.

Comment 6: If the surface rail transit alternative were implemented Chevron estimates their loss in property values would be approximately 30% of current market value. This 30% includes 15% for additional internal circulation and 15% for impaired land use. For this reason Chevron recommends the Nash Street Aerial Option (Chevron).

Response: LACTC has located a station directly adjacent to Chevron's undeveloped land holdings. This station, whether

aerial or at-grade, will greatly increase the value of Chevron's property by providing a direct link to a regional rail network thereby making this property more accessible and more desirable than a similar property without regional rail access. Because of the size of Chevron's holdings it is likely that internal circulation elements would be required under any circumstances. Since no formal plans have yet been approved, Chevron's land planners should have no trouble accessing this property from Mariposa and Grand if an at-grade alignment is chosen. LACTC feels that the alleged 30 percent loss in property value is unwarranted and believes the property would increase in value whether the LRT is at-grade or aerial.

Comment 7: LACTC is planning a column line directly adjacent to Rockwell property between Lapham and Douglas. Rockwell is concerned that these columns will preclude access to their building during construction of the Century Freeway (Rockwell).

Response: LACTC will work closely with Rockwell to maintain access to their facilities during the construction of the LRT and the Century Freeway.

Comment 8: Rockwell is distressed about the at-grade alignment across their property. The at-grade alignment will significantly impact parking areas and block access to Rockwell facilities (Rockwell).

Response: As a result of traffic impacts associated with the at-grade crossing of Nash Street we have modified our at-grade alignment. This modification results in a fully grade-separated alignment across Rockwell's property thereby eliminating any parking or access impacts.

Comment 9: On page 87, the DEIR states that park-and-ride spaces will mitigate lost employee parking. This statement is not entirely correct since some park-and-ride lots will serve a different user. The DEIR should carefully evaluate the significance of the loss of parking spaces, provide information on the percent of total spaces lost by employers and anticipated percent reduction in parking demand attributed to transit users. (City of El Segundo)

Response: The FEIR modified route will displace 109 parking spaces - 105 from Hughes's EDSG, and 4 from Westbay Plaza. That is a 75 percent reduction from the DEIR maximum displaced parking of 400 spaces. Furthermore, LACTC could construct up to 80 new employee parking spaces in conjunction with the new roadway behind the industrial building fronting on Nash Street. Although more than 400 park and ride spaces will be constructed it is agreed that the new spaces created in park and ride lots would not serve

project area employees, but would most likely serve residents of the area and the South Bay who would drive to the stations to proceed to locations outside of the area. The argument is rather that the rail transit line would allow employees to commute to work by transit and would therefore more than mitigate any loss of parking by reduced demand for parking.

For example, Hughes Aircraft Company would lose approximately 105 existing parking spaces for the construction of the El Segundo Boulevard Station. Based on computer tabulation done by Hughes of their El Segundo employees' zip codes, it was determined by Hughes that nearly 8,000 of their 30,000 employees in El Segundo could find the Century-El Segundo Rail line a convenient means of commuting to work. LACTC's patronage estimates for boardings at the El Segundo Boulevard Station (based on conservative employment projections) forecast between 3,200-4,200 daily boardings at the El Segundo Boulevard Station in the year 2000. (See Table 3 of DEIR)

LACTC has minimized the amount of taking required of existing employee parking spaces and has attempted to provide park and ride lots at station locations. The impact on the overall employee parking situation is anticipated to be a significantly positive impact in spite of a reduction in absolute number of spaces used by employees.

Comment 10: With the Nash Street at-grade option, the DEIR implies on pages 13, 88 and 95 that the LACTC is not obligated to replace the loss of access to abutting properties but instead such access can be provided when the parcels are developed by "others".

The DEIR should address in greater detail alternative measures to mitigate the loss of access prior to the development of the parcels during additional study of the Nash Street at-grade option. Also, the DEIR should include a discussion on the cost of damages for loss of access, and should be revised to reflect that responsibility to replace access lies with LACTC. (City of El Segundo)

Response: LACTC proposes to pay for the construction of a new driveway within the Santa Fe right-of-way behind the industrial buildings on the west side of Nash Street between Maple and Mariposa Avenues under the at-grade alternative. This roadway will be 30 feet wide allowing two-way traffic to all parcels. Furthermore, the LACTC would be willing to construct up to 80 new parking spaces for these businesses adjacent to the new roadway within the existing 50 foot Santa Fe right-of-way. None of these improvements would be constructed with the aerial option.

Comment 11: On page 97, the DEIR contains Table 7, a comparison of advantages of the aerial vs. at-grade Nash Street options.

The Table is incomplete and, furthermore, would be more appropriately located in the Introduction and Summary. Other issues which should be added to the Table are traffic circulation and damages for loss of access. (City of El Segundo)

Response: The Nash Street Aerial Option is described on page 10 of the Introduction and Summary and the reader is referred to the Environmental Impact chapters dealing with Traffic Circulation, Land Use, and Municipal Service Impacts for further description.

Table 7 is included in Section 4.2: Land Use Impacts and deals only with a comparison of land use impacts that would occur from either the aerial or the at-grade alternative. Traffic circulation impacts that would result from the two options are discussed in Section 4.1. Loss of access impacts are itemized for each property along the route in Table 6, however estimating damages for loss of access is beyond the scope of the EIR. Mitigation for loss of access has been discussed however on pages 88-96.

VISUAL IMPACTS

Comment 1: The City must be involved in the design review of visual impacts and maintain continuous interaction with the LACTC. (City of El Segundo)

Response: LACTC will work closely with the City of El Segundo to identify ways of reducing visual impacts associated with LRT construction.

NOISE AND VIBRATION IMPACTS

Comment 1: No noise, vibration, or visual impact analysis was provided for the Aviation/Rosecrans Center Building. It is our contention that each of these issues will have a significant negative impact on the value of our property. (Damon Lawrence)

Response: LACTC hired a noise and vibration specialist to ascertain the level of these impacts to the property on the southwest corner of Aviation and Rosecrans Boulevards. The results of this analysis are summarized below:

Background traffic noise measurements were taken at the property line of this location on 23 September 1986 during the hour starting at 1700. The peak noise level of L₁₀ was 73 dBA and the Leq was 71 dBA for this time period. This compares to a measured hourly Leq of 65 dBA in the Stocker backyard, on the northeast corner of Rosecrans and Aviation,

(over 200 feet from the intersection). Accordingly, when one assumes consistency of traffic noise, a CNEL of 70 dB due to traffic noise is obtained by adding the measured Leq differential to the measured CNEL at the Stocker residence.

It is predicted that passbys of the LRT at this location will generate a CNEL of 62 dBA, well below the LACTC criteria. In addition, the vibrations due to LRT operations at 100 feet will be acceptable for occupants of nearby buildings.

In summary, no noise or vibration impacts will result from LRT operations over existing levels created by auto and truck traffic at the intersection of Rosecrans and Aviation. Visual impacts to the property resulting from the LRT bridge over this intersection will be negligible because there is already an existing freight rail bridge crossing this intersection. The nearest edge of the LRT bridge as planned will be 60 feet away from the nearest edge of the building. If local jurisdictions can fund the incremental differences in cost of a joint LRT/freight bridge, then the structure could be moved an additional 20 feet away from the building.

Lastly, this building will be located within a short walk of the Douglas Street Station located behind the Continental Development across Rosecrans Boulevard. The proximity of your building to the regional transit network should increase the leaseability of your property to tenants who value accessibility for their employees.

CONSTRUCTION IMPACTS

Comment 1: The proposed route could extensively impact Edison's overhead and underground distribution facilities. Major relocations of the facilities may be required including the conversion of existing overhead lines underground to avoid conflicts (SCE).

Response: LACTC will work closely with SCE to determine the extent of utility impacts. LACTC will pay for any modifications of SCE facilities required by LRT construction.

Comment 2: Edison has met with representatives of the El Segundo Employers Association, TRW, the City of Hawthorne, and LACTC to discuss the partial utilization of Edison's El Nido Substation site to accommodate station facilities (SCE).

Response: LACTC revised Compton Blvd. Station plan (Drawing Number BL-6) utilizes the northern portion of SCE's El Nido Substation as agreed upon at a meeting held at SCE offices

August 27, 1986. Park and Ride facilities are also located under SCE transmission wires at both the Compton Blvd. Station and the Douglas Street Station.

Comment 3: Department of Public Works' records indicate several unmet drainage needs within the proposed project area. Coordination with the DPW is necessary if the proposed project requires connection, extension, enlargement, or modification to any storm drains. The disposal of hazardous and non-hazardous wastes generated during construction of project should be addressed. In addition, any water discharged to County storm drains from the yard and shop areas must meet State water quality requirements. (Department of Public Works, County of Los Angeles).

Response: Existing major utilities which would require relocation are itemized in Table 10, page 113 of the DEIR. Future projects of the Los Angeles Department of Public Works or others will be considered during the Final Engineering design of the Rail Transit Project. Coordinated efforts in the construction of these facilities will be considered at that time. It cannot be expected, however, that LACTC will rebuild utilities it does not immediately affect.

Any hazardous and non-hazardous wastes generated as a result of construction of the rail transit line will be disposed of in accordance with the Los Angeles County Building Code.

Water quality impacts and mitigation are discussed on page 130 of the DEIR.

Comment 4: On page 109 the DEIR concludes that: "... no adverse vibration impact within Hughes EDSG Building is expected." This applies to operation of the LRT. Has a similar analysis been done regarding vibration impacts during construction? (ESEA)

Response: LACTC has maintained contact with Hughes Aircraft Company throughout the planning and environmental clearance phases of the project and has responded to specific concerns of the Company regarding noise and vibration impacts to their facilities. In their comments on the Draft Environmental Impact Report for the Century-El Segundo Rail Extension, the Company stated that they were "satisfied that the incremental vibration resulting from a rail line in the vicinity of sensitive testing facilities will cause no noticeable adverse impacts."

Vibration studies done for Hughes were for long-term operation of the line only. No studies were done for temporary effects due to construction noise. It can be stated however that distances from the Hughes Electro-

Optical and Data Systems Group Facility and the proposed rail line are approximately the same as to other potential building sites along El Segundo Boulevard and similar construction methods as would be used for office building construction (including pile driving) would be used for the rail transit line. LACTC will continue to work with Hughes to make certain no unacceptable vibration impacts during construction will be generated.

Comment 5: On page 14, the DEIR states that construction impacts are not significant. Any obstruction of right-of-way during peak traffic periods will have a significant effect on traffic circulation. Therefore, this finding should be changed to "significant but temporary" with respect to traffic impacts. (City of El Segundo)

Response: As discussed on page 111 of the DEIR, the construction phase of the project will require partial closure of Nash Street, half the street at a time, for relocating underground utilities and constructing the line. Also, Douglas Street, El Segundo Boulevard, and Rosecrans Avenue at Aviation Boulevard will require partial closings for construction of overcrossings.

These temporary closures were not considered significant as they would occur prior to the opening of the Century Freeway and prior to the construction of many of the planned projects in the study area that are included in the year 2000 traffic projections.

However, to the extent that they do require street closure, they are "significant-but temporary" with respect to traffic impacts and will be coordinated with similar construction impacts of the Century Freeway Project to insure that traffic detours and/or delays are minimized.

Comment 6: The DEIR should disclose where pile-driving construction will be used. The City has experienced noise complaints from nearby office workers during this type of construction.

Response: Pile driving may be necessary for the construction of aerial guideways although the decision of whether to use piles or spread footings is dependent upon subsurface conditions which cannot be determined until the final engineering design phase of the project.

FREIGHT RAIL IMPACTS

Comment 1: A preliminary review indicates the amount of clearance provided between the proposed light rail tracks and the Santa Fe tracks may be insufficient in several locations. Our engineers are currently defining the amount of clearance needed (Santa Fe).

Response: LACTC is confident that in most areas where LRT is planned adjacent to freight rail that the 100 foot right-of-way will be sufficient to accommodate both facilities. However, if the Santa Fe requires a maintenance road between freight rail and light rail activities then it may be necessary for LACTC to relocate the freight rail track within the 100 foot Santa Fe right-of-way.

Comment 2: On page 30, the DEIR states that as the LRT "alignment continues southeast along the AT & SF right-of-way, it spans the intersection of Aviation Boulevard and Rosecrans on a new bridge located west of the existing freight rail bridge." The City of El Segundo has requested the California Public Utilities Commission to include the Aviation Boulevard/Rosecrans Avenue railroad bridge in the State Grade Separation Priority List to enable the City to widen the intersection as recommended in the City Circulation Element.

The construction of a new LRT bridge presents an opportunity to design a structure that would be used by both the light rail as well as for freight instead of having two structures. Such a joint-use bridge could receive more favorable consideration by the PUC and improve the priority rating. In any case, the DEIR should not overlook the possibility of designing a single joint-use structure. (City of El Segundo, ESEA, Damon Lawrence).

Response: The DEIR in no way precludes a joint-bridge over the Rosecrans Aviation intersection. As planned, the rail transit alignment crosses the intersection on a bridge constructed for its own use. However, a joint bridge could be designed with little change to the LRT alignment as planned. The ESEA has suggested that it would take the lead in identifying the potential to construct a joint bridge and funds to pay for the cost of the structure over and above the costs associated with a separate LRT bridge. The LACTC would have no objections to contributing the cost of a separate LRT bridge towards the cost of a joint bridge.

MUNICIPAL SERVICE IMPACTS

Comment 1: We question the finding that the impact on municipal services is "not significant." In particular, we find the comment that "Alternate Fire Station locations [to the proposed

Chevron property location] exist: to be incomplete - what other locations are there? (ESEA)

Response: See Municipal Service Comment 2.

Comment 2: There would be no impact to fire services with the aerial option. For the at-grade option, impacts on Fire Department service delivery center around three issues: 1) impact on emergency response times due to additional traffic problems and traffic delays caused by ground-level crossings of the rapid transit cars at the intersections of Nash and Maple, Nash and Mariposa, and Nash and Grand; 2) delays caused by train cars passing in front of the existing location for a planned fire station; and 3) the added impacts of intermittently stopping traffic during peak periods that would possibly domino to other intersections.

Specifically, the Fire Department is not convinced that signal pre-emption is a viable solution. There are conflicting statements in the DEIR as to whether all necessary signals will have an emergency override pre-emption. Additionally, the Department would require that fire/life safety systems for the entire line within El Segundo comply with Section 28, Fire/Life Safety, of the LACTC system design criteria.

Without additional analysis, the City cannot support a finding of no significant impact on emergency response and fire services for the at-grade option (page 14). (City of El Segundo, ESEA)

Response: The aerial LRT option along Nash Street has no impact to existing or future fire service response times in the study area. The at-grade LRT option has no impact to existing fire service response times in the project area. The question raised here is whether the at-grade LRT would have an impact on future fire service response times if a future fire station were to be sited along Nash Street or along Mariposa Street in the project area.

The El Segundo Fire Department has identified two potential sites for a future Fire Station in the at-grade segment of the rail transit line. The first site is located on the west side of Nash Street mid-block between Mariposa Avenue and Grand Avenue. The second site is located on the south side of Mariposa Avenue mid-block between Nash Street and Continental Boulevard.

If the first site were to be selected as a Fire Station location, the rail transit line would pass in front of the driveway of the Fire Station. In times of a fire alarm, as is typically the case, red lights would stop traffic on Nash Street to allow fire trucks to exit the fire station and proceed onto Nash Street. Just as automobile and bus

traffic would stop to allow fire service vehicles to leave the fire station, so also would rail transit vehicles stop until all emergency response vehicles had exited the fire station.

If the second potential site were to be selected for the location of a Fire Station, emergency response vehicles would exit the fire station onto Mariposa Avenue and proceed either west or east. There would be no impact on Fire Service vehicles proceeding to the west. Fire service vehicles responding to the east would cross the LRT line at the intersection of Nash Street and Mariposa Avenue. In these instances, the Fire Station alarm would trigger a signal pre-emption at the Nash-Mariposa intersection which would stop all traffic on Nash Street including LRT vehicles. Fire response vehicles would then proceed through the intersection.

LACTC has studied traffic circulation impacts in the EIR and has included signal pre-emption as a factor in ICU calculations for Nash Street intersections.

It was found that both Nash/Mariposa and Nash/Grand intersections would improve from a Level of Service D to either a Level of Service C or B during the PM Peak Hour. (Pages 59-81). The assumptions going into this traffic analysis were reviewed with the City of El Segundo both prior and during traffic circulation analyses to assure that city concerns were addressed within the study. Additionally, LACTC has agreed to grade-separate the transit line at Douglas Street, Nash Street and at Maple Avenue as a further reduction of traffic circulation impacts.

Comment 3: The Police Department feels that the statement on page 121 that "the overwhelming majority of ... police service would be responded to by transit personnel" is misleading. While transit security may invoke a visible presence along the line, the jurisdiction of the El Segundo Police Department remains paramount. Consequently, all criminal investigations, traffic matters, routine preventative patrol and related activities will be handled by members of this Department. To downplay the impact that this project will create upon this Police Department is an inaccuracy which should be acknowledged. (City of El Segundo)

Response: Neither LACTC nor their consultants intended to downplay the importance of the role of the El Segundo Police Department in the safe and secure operation of the rail transit line. A close working relationship between transit security personnel and the El Segundo Police Department is of paramount importance.

TRANSPORTATION SERVICE IMPACTS

Comment 1: The bus system presented in Table 11 on Page 124 should be changed as follows (RTD).

Route SCRTD #125 Rosecrans Avenue, reroute through Douglas Street Station + 0.5 mile.

Route SCRTD #126 Manhattan Beach Blvd. Reroute through Compton Blvd. Station + 0.5 mile.

Response: Table 11 has been modified to reflect these changes (See page 28).

Comment 2: On page 23, the DEIR states that the Mariposa station would have only on-street shuttle, van and bus zone facilities since it is expected that this station will be used mostly by walk-ins working within a 5-7 minute walking distance. While this statement is true, the DEIR should also address the needs of the residents of El Segundo west of Sepulveda Boulevard. It is likely that some residents will prefer to drive their car to the Mariposa Avenue station and park their vehicle while using the station to destinations in central Los Angeles. The DEIR should, therefore, consider the inclusion of a small 10-15 vehicle park-and-ride lot for use by El Segundo residents. The alternative would be to reach the station by bus, which would require a transfer. (City of El Segundo)

Response: The Mariposa Avenue Station will be a destination station for riders on the Century Line to access their places of employment in the City of El Segundo. Bus, shuttle, van, and auto drop-off and pick-up areas will be made available at curbside on both Nash Street and Mariposa Avenue. No long-term parking is provided at this station. Transit users wishing to drive personal autos to access the rail system will have available 1,000 parking spaces at the Aviation Station one mile away from the Mariposa station. In addition, 120+ parking spaces will be available at the Douglas Street Station. Since the transit user is accessing the line by personal auto it is not unreasonable to expect them to drive slightly further to a planned park-and-ride lot, a transfer (car-to-rail) would be required in either case.

OTHER NEGLIGIBLE IMPACTS - RISK OF UPSET, ACCIDENTS

Comment 1: We question the finding that the potential for rail/auto collisions at at-grade crossings is "not significant."

Response: The potential for rail-auto collisions at at-grade crossings was considered insignificant since such

Table 11
 POTENTIAL SERVICE MODIFICATIONS TO
 PROJECT AREA TRANSIT SERVICES
 CENTURY-EL SEGUNDO RAIL TRANSIT PROJECT - EXTENDED LENGTH OPTION

<u>Route</u>	<u>Potential Modification</u>	<u>Route Length Change</u>
<u>SCR TD</u>		
# 120 Imperial Highway	No Change-Will serve Aviation Sta.	0
# 124 El Segundo Blvd.	Will serve El Segundo Station	0
# 125 Rosecrans Avenue	Reroute through Douglas St. Sta.	+0.5 mile
# 126 Manhattan Beach Bl.	Reroute through Compton Blvd Sta.	+0.5 mile
# 42 LA-Westchester- Redondo Beach	No Change-Will serve Aviation Station	0
# 232 Sepulveda Blvd.	Reroute through El Segundo Station	+1 mile
# 439 Douglas Street	Reroute thru Compton Blvd Station	+0.5 mile
# 225/226 Douglas Street	Reroute thru Compton Blvd Station	+0.5 mile
<u>Other Public Carriers</u>		
Torrance Transit	Possible future line to Compton Blvd. Station and LAX-lot B or C	
Lawndale Trolley	Possible future connection to Compton Blvd. Station	
El Segundo Dial-A-Ride (proposed)	Possible service to project stations	
<u>Private Carriers</u>		
TRW Hughes Rockwell Northrop Aerospace Xerox	Employee shuttle services could be extended to LRT Stations	
<u>Other Services</u>		
Airport Shuttles Taxi Services Hotel Shuttles	Services could be extended to LRT Stations	

Source: SCR TD, ESEA

grade crossings are common practice in many cities including San Diego and San Francisco. Adequate lighting and signage are generally sufficient to insure that adequate safety is maintained.

Comment 2: The DEIR states that: "...in order to mitigate possible LRT/vehicular or LRT/pedestrian accidents at at-grade street crossings, publicity and driver education programs coupled with highly visible signage and signal systems would be implemented in order to reduce the possibility of these hazards. Local police would then be required in the event of any accidents involving LRT trains and other vehicles."

Is the LACTC proposing to conduct driver education programs for the 50,000+ workers in the El Segundo employment area plus the 25,000 additional workers expected in the coming decade? We question the adequacy of this response. (ESEA)

Response: The driver education program would include a public awareness and safety campaign for employees in the El Segundo Employment areas. Immediately prior to opening the line, an intense orientation and safety program would be undertaken in the areas surrounding at-grade crossings. LACTC expects ESEA assistance in this program.

FINANCIAL RESOURCES

Comment 1: The Commission should go one step further and clear environmentally the entire route length for an aerial structure (Hughes)

Response: The Commission's goal is to build low-cost, cost-effective facilities adequate to meet desired quality of service. Along the east property line of the Hughes' EDSG facility the Commission is able to proceed at-grade at a cost savings of about \$ 3.6 million. If the Hughes Corporation wishes to pay the difference between the at-grade and aerial alternative, LACTC would certainly be willing to build the aerial alternative. Should such a request be forthcoming, nothing in this document would preclude such a change nor lead one to believe there would be a significant change in environmental impact. The Commission would expect to clear this change either through a Negative Declaration or, at most, a supplemental EIR.

Comment 2: The DEIR states that the aerial alignment would cost an extra \$12 million to build. However, when you take into account not simply the square footage which would be taken but also the impacts associated with reduced development values and the need for a parking structure to replace lost parking under the at-grade alternatives, the net costs would be less for the aerial option. (ESEA, KILROY)

Response: The Commission has modified its proposed at-grade alignment by excluding at-grade crossings of Nash Street and Maple Avenue. This drops our estimated additional cost for the aerial option along Nash Street from \$ 12 million more to \$ 8 million over the cost of the at-grade alternative. This cost difference is associated primarily with the higher unit cost of constructing an aerial guideway and station as opposed to much lower construction costs for at-grade facilities. Under the modified at-grade alignment the only property take required is a 6' strip of Chevron property adjacent to the Mariposa Avenue Station and a 2'4" strip of Rockwell property along the east side of Nash Street. Admittedly, some properties along the west side of Nash Street will lose access from that street. However, the Commission proposes to restore access to parcels between Maple Avenue and Mariposa Avenue on the west side of Nash Street by purchasing the unused Santa Fe property running behind those properties and constructing not only a new 30-foot roadway but also up to 80 new parking spaces. Since Chevron property is undeveloped and no plans have been submitted to the City of El Segundo, any development on this property could be designed to take access from Mariposa and Grand Avenues, rather than Nash Street. The Commission staff feels that the construction of a new roadway between Maple and Mariposa and more significantly the location of a rail transit station providing regional access on Chevron's property compensates for any loss perceived from an at-grade alignment on Nash Street. With a station located within walking distances of all parcels fronting on the at-grade alignment it can be expected that their development values will go up. Secondly, it is not necessary to remove any parking under either scenario. Therefore, it is felt that \$8 million is an appropriate cost difference between the at-grade and aerial alignments.

Comment 3: Also related to this point, LACTC staff has on numerous occasions implied that the aerial option would be feasible only if a significant share of the cost (assuming it does cost more) were paid by the City or businesses in the area. To our knowledge, the LACTC has no adopted policy on this. Moreover, even if this is the LACTC policy, we question whether it is consistent with policies (adopted or implicit) in effect for the L.A.-to-Long Beach LRT project. (ESEA)

Response: The LACTC has adopted goals in support of low-cost, cost-effective rail transit which minimizes overbuilding of facilities. The baseline project with an at-grade section along Nash Street supports these goals. Any improvement beyond this level of design and service should be paid for, in part, by those requesting the improvement.

The LACTC has taken this same position on the Los Angeles-to-Long Beach light rail line.

MISCELLANEOUS

Comment 1: We were never contacted with respect to the proposal before we received the Draft EIR. (D'Amato & Lynch, Damon Lawrence, Westbay Plaza).

Response: LACTC met with community leaders and major employers in the project area. Public meetings held prior to undertaking the formal environmental impact report process were promoted in the press and by individual letters. Mailings were made to property owners, or their representatives, as listed in the Los Angeles Assessor's Tax Rolls. One of the partners of Westbay Plaza hosted the first open house in the Spring of 1985, in the lobby of a building his firm manages. The Draft Environmental Impact Report was mailed to all known property owners adjacent to the right-of-way. We are by law only required to send copies of the draft EIR to affected parties. We are not required to contact all affected parties before the draft is released.

Comment 2: The D.E.I.R. does not address the use of landscaping to screen views, noise or light. Parking areas do not show vegetation to enhance the quality of the environment for the transit user. Construction of the LRT will require some landscaping to be removed (County of Los Angeles - Fire Department, D'Amato and Lynch.)

Response: The construction of the line itself will not remove any vegetation other than a landscaped strip on Hughes EDSG facility. The light rail line is compatible with land uses in the area. LACTC will consider limited landscaping as needed in final design.

Comment 3: On page 49, the Draft EIR contains employment projections for the years 1984 and 2010. The Planning Department believes these are inaccurate for the following reasons:

- A: Year 1984 figures are an allocation of the 1980 Census with no growth added between 1980-1984.
- B: Year 1984 and 2010 figures do not reflect the actual distribution of floor area between subtracts. For example, subtract C presently contains approximately four million square feet of office development. The Draft EIR estimates 1984 employment at only 600!
- C: The Draft EIR shows an employment increase of 17,870 from 1984 to 2010. The Draft SCAG Phase II LAX/TSM

Study projects an increase of 58,990 for the same period. The City of El Segundo projects an increase of 30,000 from 1986 to 2010 using even conservative assumptions.

The use of accurate employment data is extremely important with regard to the decision on initial route length. The City of El Segundo has prepared the following employment estimates. The LACTC consultant should contact all cities in the study area and correct Section 3.1 and any related ridership projections on pages 43-45.

City of El Segundo Employment Projections

	<u>Existing 1986</u>	<u>Added</u>	<u>Future (2010)* Total</u>
Tract 6200			
A	700	-0-	700
B	23,000	11,600	34,600
C	11,500	6,900	18,400
D	12,000	7,100	19,100
E	<u>10,800</u>	<u>4,500</u>	<u>15,300</u>
TOTAL	58,000	30,100	88,100

* Future based on approved projects, applications on file and development of vacant sites. (City of El Segundo)

Response: Differences between employment projections developed by the City of El Segundo Planning Department and the Southern California Association of Governments are to be expected due to the different methodologies by which the projections are developed. The City estimates an increase of 30,000 jobs in the study area between 1984 and 2010. SCAG estimates an increase of approximately 24,000 for the same period. Differences are due to the fact that the city generates their estimates based on site specific data whereas SCAG's data is generated from regional growth projections that are disaggregated to the census tract and sub-tract level.

SCAG developed patronage and demographic projections specifically for LACTC on this project and numbers cited in the report were the most recent numbers available from SCAG in May 1986. Numbers developed by the City of El Segundo show the differences in the estimates between these two sources.

The point as to whether higher employment estimates developed by the City of El Segundo should be used for ridership projections for the Century-El Segundo Rail Transit line is a moot one as LACTC has agreed to the

Hawthorne Route Length Alternative which would provide the maximum level of rail transit service to the area.

Comment 4: Are there any cultural or historic sites being impacted by the Light Rail system? (Office of Historic Preservation)

Response: As stated on page 134 of the EIR, no historical, cultural or archaeological sites have been identified along the project route. There are no listings on the National Register of Historic Places within the project area.

LACTC is conducting an archaeological site records and literature search through the Institute of Archaeology at the University of California, Los Angeles in order to verify that no sites exist in the project vicinity. In the event that any areas of potential environmental impact do exist, appropriate measures as recommended by the State Office of Historic Preservation will be followed during the construction phase of the project.

Comment 5: "Since this project, or most of it, will become part of the future Coast Line, some explanation of how the northern and southern part of that future line will junction with the Century-El Segundo extension could be given." (T.A. Nelson, L.A. County Department of Regional Planning, City of Los Angeles).

Response: The Coast Line is being planned in three segments; (1) the El Segundo Extension, (2) the Marina Extension, and (3) the Torrance Extension. Conceptual planning for the Marina Extension is ongoing. The Marina Extension will begin (as does the El Segundo Extension) at the Aviation Station and travel north to LAX/LOT C, Northside, Westchester, Playa Vista, terminating at Marina Del Rey. The El Segundo Extension begins at Aviation Station and travels south to Compton Blvd. near the San Diego Freeway. The Torrance Extension has not yet been studied but will continue south from Compton Boulevard, enter the median of Hawthorne Boulevard, and continue south to Pacific Coast Highway. Once the Coast Line is completed alternate trains will run north-south on the Coast Line and east-west on the Century Line.

Comment 6: The DEIR discussion on conformity with adopted plans on pages 77 & 78 does not include a discussion of conformity with the County of Los Angeles General Plan. The Transportation Policy Map shows a transitway along Century Boulevard, but does not provide for its southerly extension as proposed by this project. (Los Angeles County Department of Regional Planning).

Response: The Los Angeles County Transportation Commission has been mandated by county voters to plan, design and construct a regional rail network. In 1980 the county voters approved the Prop A map that generally defined 13 rail corridors. The LACTC then approved 6 of these as high priority corridors which are now in various stages of construction or design. The County of Los Angeles should update their Transportation Policy Map to include the six high priority corridors so that regional planning efforts will be synthesized with the rail transit network. The County Planning Department has been kept apprised of all previous light rail planning work.

Comment 7: With transients being forced out of the downtown area how will the design and operation of the light-rail line prevent the end-of-the-line station from becoming a "Hobo Junction".
(Christensen, Wong)

Response: Surveillance and security equipment have been designed into the project. Law enforcement will be provided by the transit security forces assisted by local jurisdictional law enforcement agencies.

**3.0 LIST OF AGENCIES, ORGANIZATIONS, AND PERSONS
COMMENTING ON DRAFT EIR**

PUBLIC AGENCIES

City of El Segundo
City of Hawthorne
City of Lawndale
City of Los Angeles
City of Manhattan Beach
City of Redondo Beach
City of Torrance
County of Los Angeles-Department of Public Works
County of Los Angeles-Department of Regional Planning
County of Los Angeles-Fire Department
Southern California Rapid Transit District
State of California-Office of Historic Preservation
State of California-Office of Planning and Research

BUSINESS GROUPS

El Segundo Employers Association (ESEA)
Hawthorne Chamber of Commerce
Manhattan Beach Chamber of Commerce
Redondo Beach Chamber of Commerce

PROPERTY OWNERS

Allied Chemical
Atchison, Topeka and Santa Fe Railway Company
Chevron Land and Development Company
Continental Development Corporation
Damon Lawrence
D'Amato & Lynch
The Goodglick Company
Hughes Aircraft Company
Ken Ruby Company
Kilroy Industries
Rockwell International
Southern California Edison

OTHERS

B. Alessi
T. Christensen
JZK Associates
T.A. Nelson, P.E.
F. Wong



4.0 REVISED PLANS AND PROFILES

The following drawings include all revisions to the plans and profiles contained in the DEIR.

<u>Drawing Number</u>	<u>Contents</u>
K-1	Index of Drawings
BL-1	Baseline Alignment-Sta. 0+00, to Sta. 25+00; From Aviation Blvd. to just east of Nash St.
BL-2	Baseline Alignment-Sta. 25+00 to Sta. 55+00; From just east of Nash St. to just north of Grand Ave.
BL-3	Baseline Alignment-Sta. 55+00 to Sta. 86+00; El Segundo Blvd. Station.
BL-4	Baseline Alignment-Sta. 86+00 to Sta. 116+50; Aerial Section; North end of Douglas St. Station.
BL-5	Baseline Alignment-Sta. 116+50 to Sta. 140+00; Douglas St. Station.
BL-6	Baseline Alignment-Sta. 140+00 to Sta. 150+00; Compton Blvd. Station.
BL-7	Hawthorne Yard Site.
AO-1	Aerial Option-Sta. 0+00 to Sta. 25+00; From Aviation Blvd. to west of Douglas St.
AO-2	Aerial Option-Sta. 25+00 to Sta. 55+00; Mariposa Ave. Station.
AO-3	Aerial Option-Sta. 55+00 to Sta. 86+00; El Segundo Blvd. Station.
CS-1	Station Cross-Sections.
CS-2	Station Cross-Sections.
CS-3	Station Cross-Sections.
U-1	Utility Cross-Sections.
U-2	Utility Cross-Sections.
U-3	Utility Cross-Sections.
U-4	Utility Cross-Sections.
U-5	Utility Cross-Sections.
U-6	Utility Cross-Sections.

LOS ANGELES COUNTY
TRANSPORTATION COMMISSION

**CENTURY-EL SEGUNDO
EXTENSION
CONCEPTUAL DESIGN**



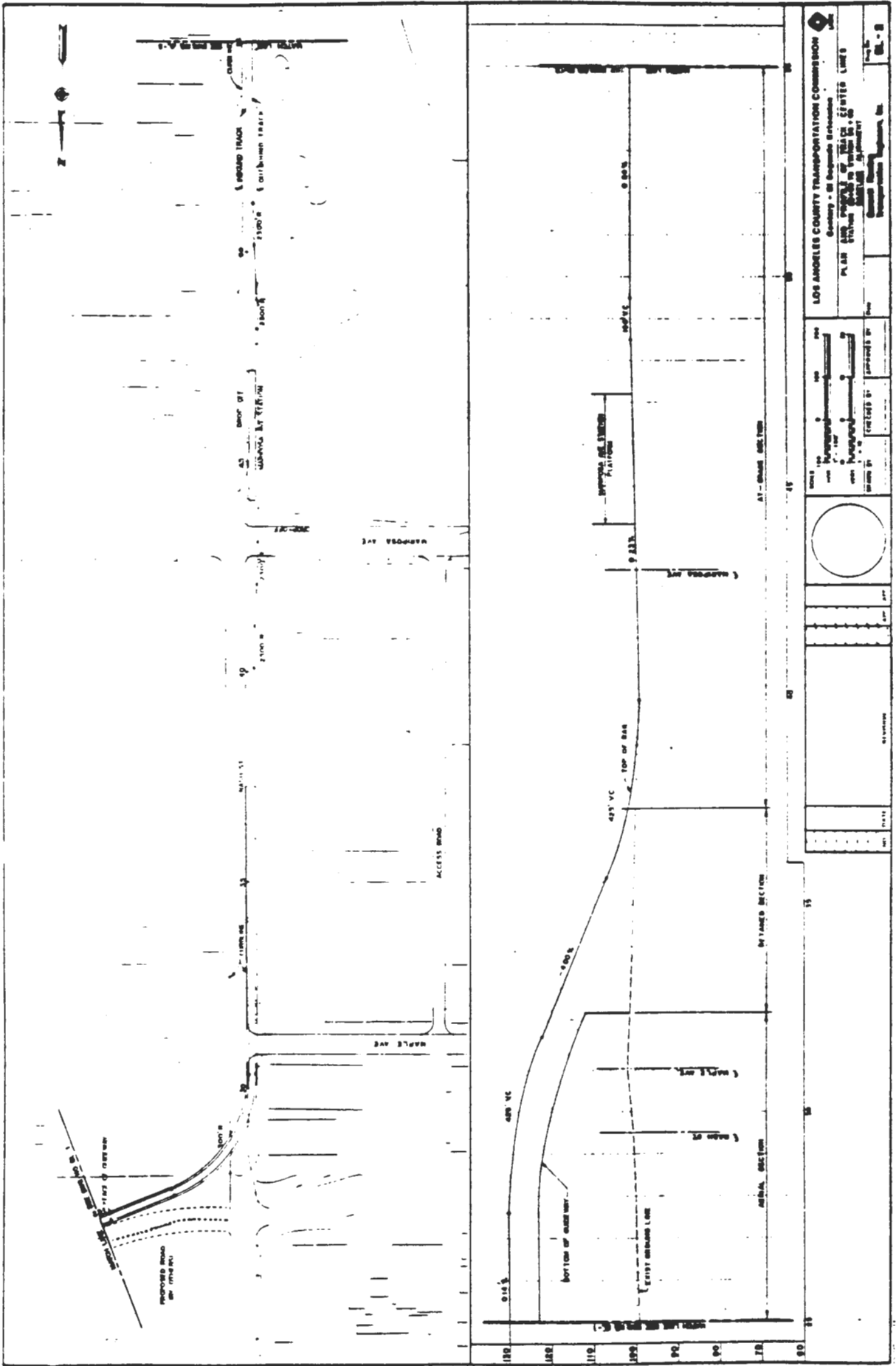
prepared by



**GANNETT FLEMING
TRANSPORTATION ENGINEERS, INC.**

in association with

**Gruen Associates
Benito A. Sinclair & Associates, Inc.
Margot Siegel, AIA, Architect, Inc.
Don Read Corporation**

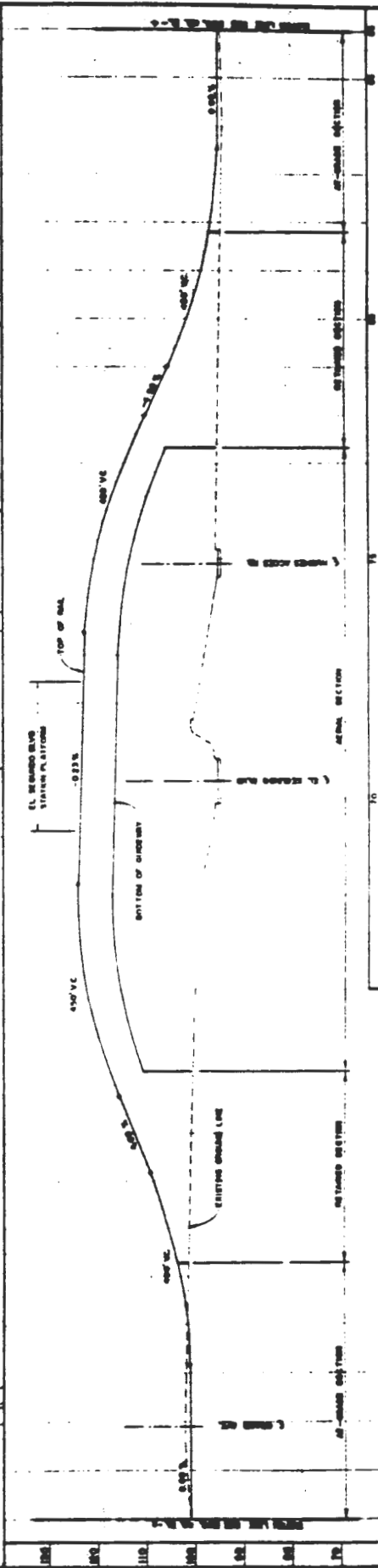
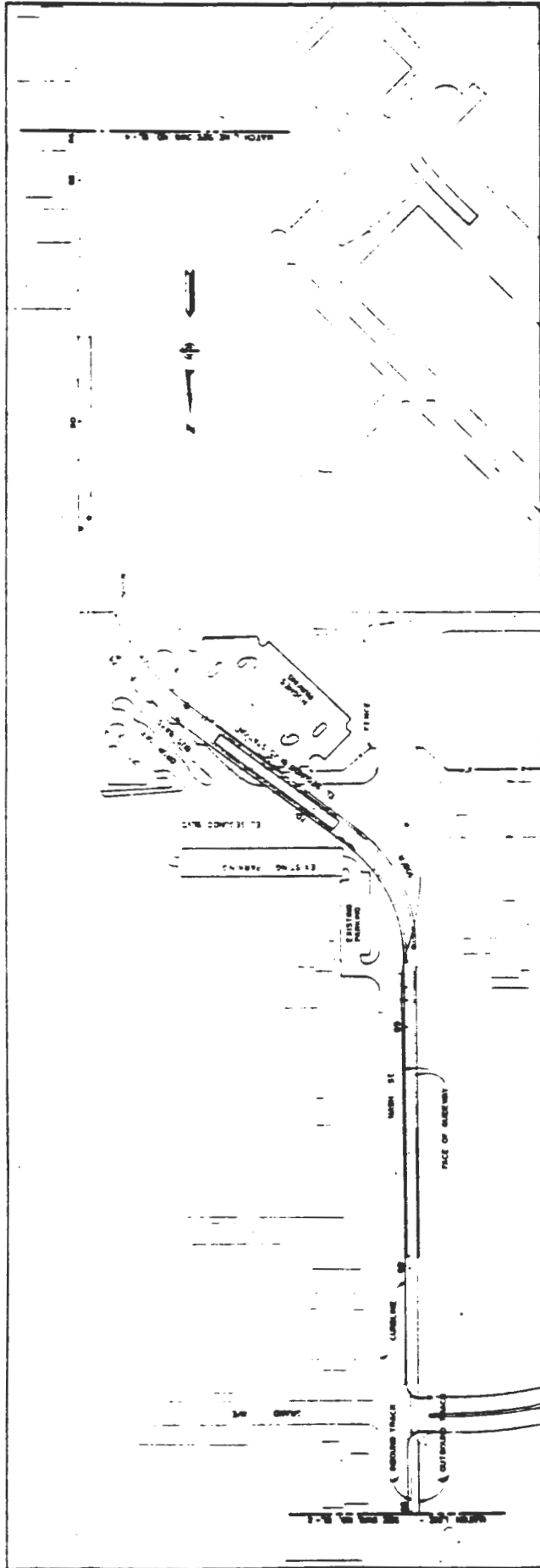


LOS ANGELES COUNTY TRANSPORTATION COMMISSION
 COUNTY OF LOS ANGELES
 PLANS FOR THE IMPROVEMENT OF STATE ROUTE 100
 SECTION 100-100

DATE: 10/15/68
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 APPROVED BY: [Name]

Scale: 1" = 40'

Sheet: 100-100



LOS ANGELES COUNTY TRANSPORTATION COMMISSION
 COUNTY OF LOS ANGELES
PLAN AND PROFILE OF TRACK CENTER LINES
 STATION 10+00 TO STATION 100+00
 METRO RAIL

DATE: 10/1/80

SCALE: 1" = 100'

BY: [Signature]

CHECKED BY: [Signature]

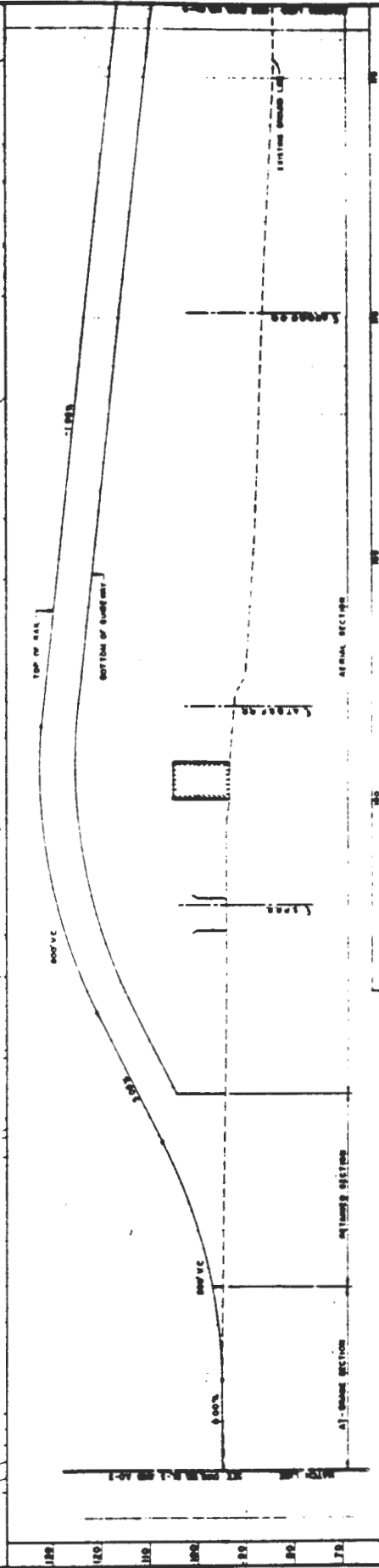
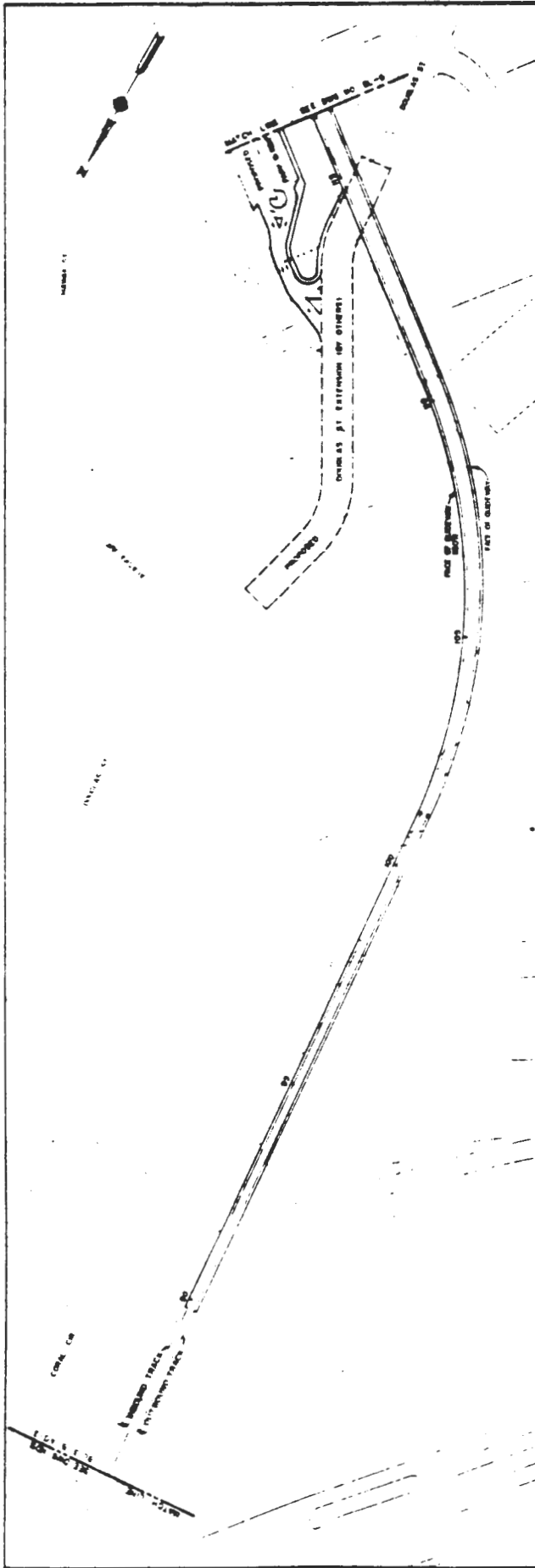
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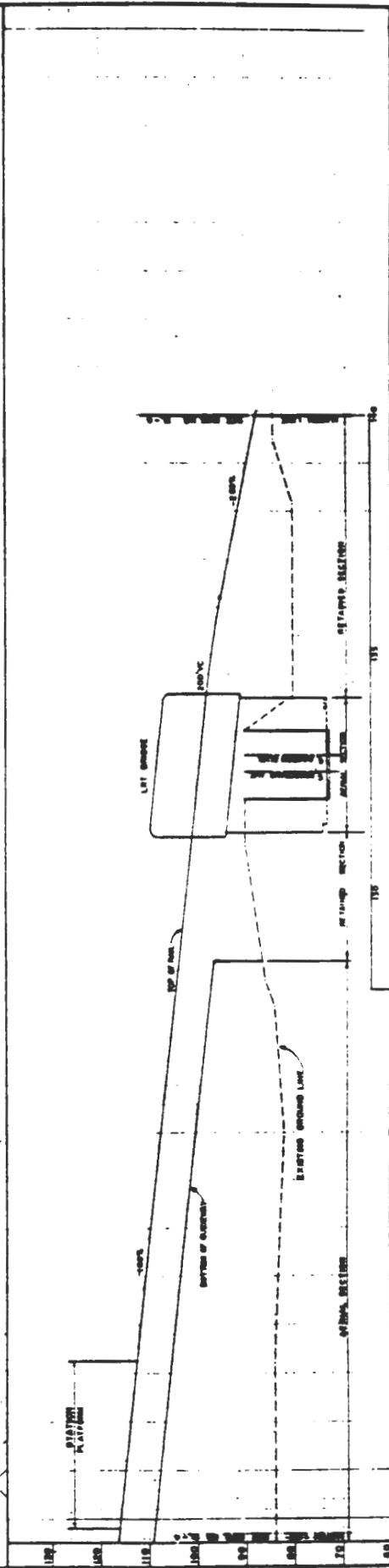
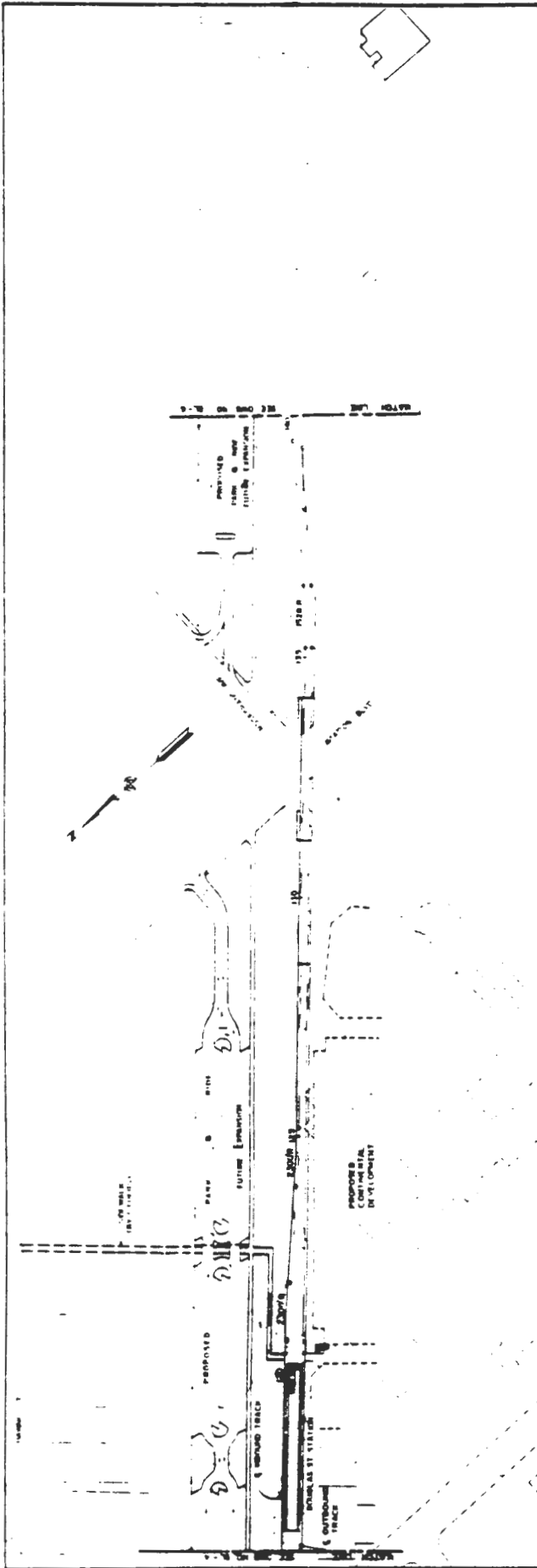
BY: [Signature]

CHECKED BY: [Signature]

SHEET NO. 100-1000-100



LOS ANGELES COUNTY TRANSPORTATION COMMISSION
 COUNTY OF LOS ANGELES
 PUBLIC WORKS DEPARTMENT
 PLANS FOR THE CONSTRUCTION OF THE
 METRO RAIL SYSTEM
 TRACK CENTER LINE
 DRAWN BY: [Name] DATE: [Date]
 CHECKED BY: [Name] DATE: [Date]
 SCALE: 1" = 40' (PLAN) 1" = 10' (PROFILE)
 SHEET NO. 11 OF 12
 PROJECT NO. 1111111111
 TITLE: [Title]



LOG ANGELES COUNTY TRANSPORTATION COMMISSION

Station - on Riverside Boulevard

PLAN AND ELEVATION OF TRACK CENTER LINE

STATION NO. 10 2111/100

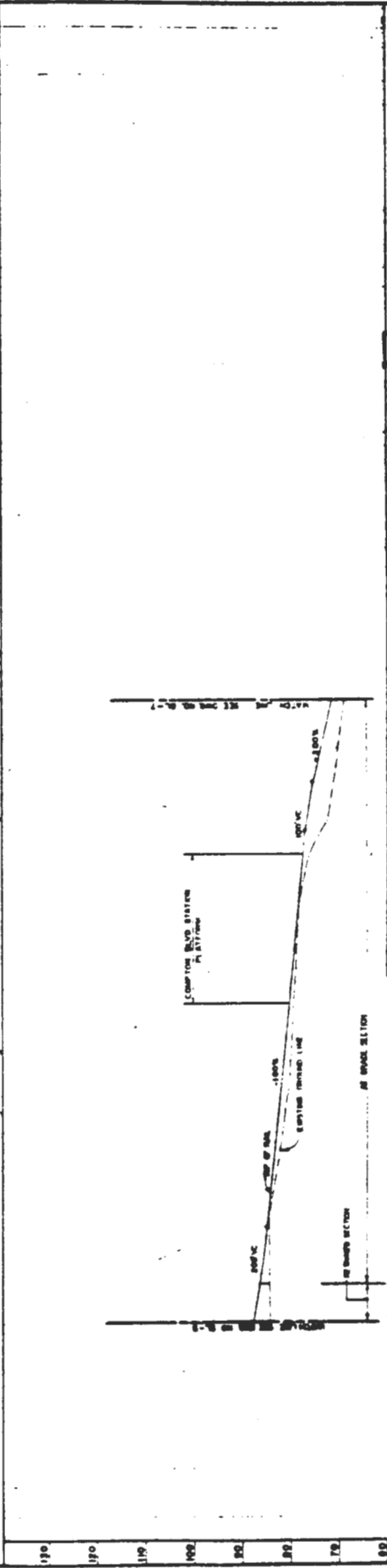
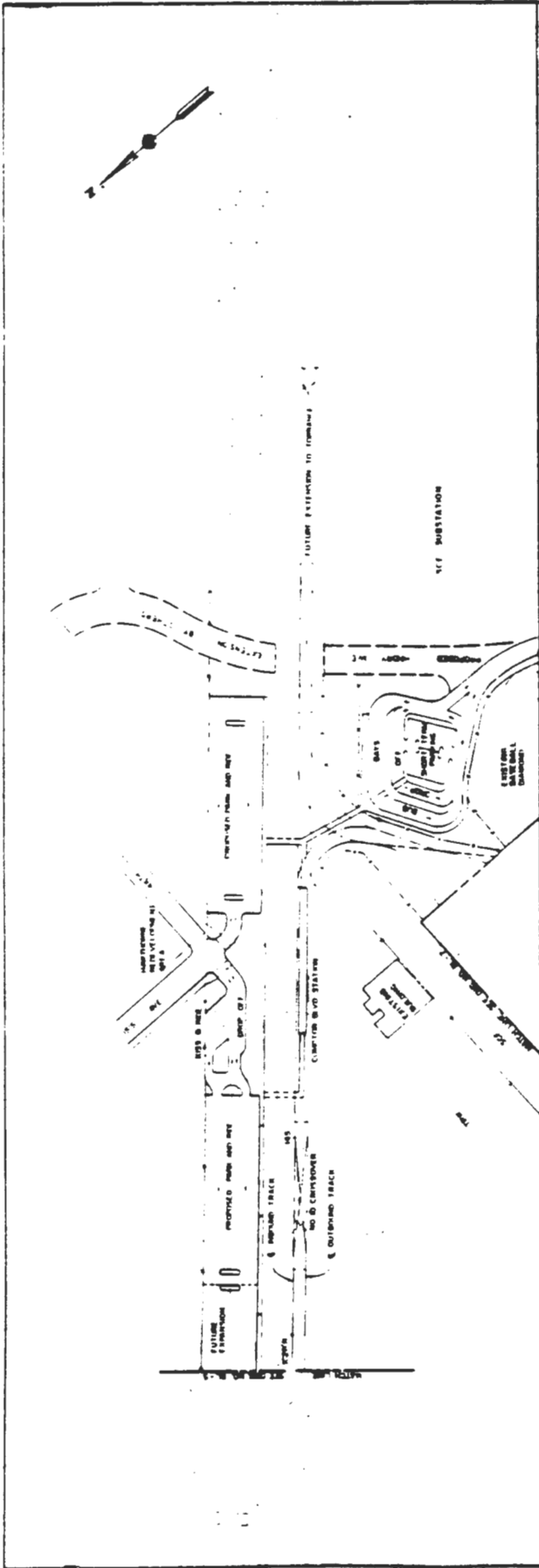
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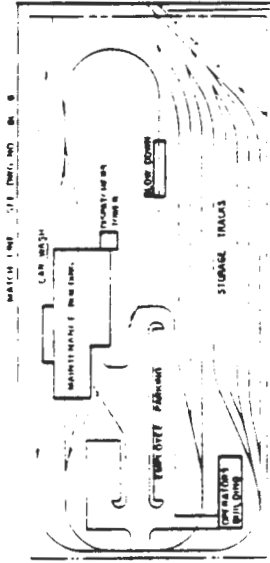
SHEET NO. 10-1



LOS ANGELES COUNTY TRANSPORTATION COMMISSION
 Secretary - Ed Rogerson
 Planning - J. J. ...
 Engineering - ...
 Administration - ...
 Finance - ...
 Legal - ...
 Public Information - ...
 Traffic - ...
 Utility - ...
 Construction - ...
 Maintenance - ...
 Safety - ...
 Security - ...
 Training - ...
 Research - ...
 Development - ...
 Planning - ...
 Engineering - ...
 Administration - ...
 Finance - ...
 Legal - ...
 Public Information - ...
 Traffic - ...
 Utility - ...
 Construction - ...
 Maintenance - ...
 Safety - ...
 Security - ...
 Training - ...
 Research - ...
 Development - ...



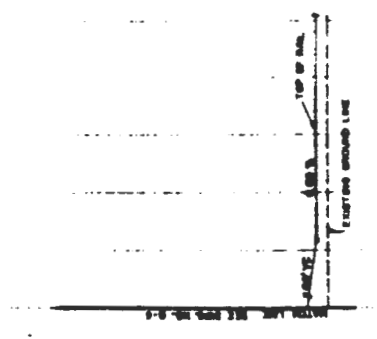
SEE SUBSTATION



1100 AT

M-9 BS

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1100



LOS ANGELES COUNTY TRANSPORTATION COMMISSION
 County - In Dependence
PLAN AND PROFILE OF TRUCK CENTER LINES

DATE: 10/1/54
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 CHECKED BY: [Name]
 APPROVED BY: [Name]

PROJECT NO. [Number]
 SHEET NO. [Number] OF [Total Sheets]

SCALE: 1" = 100'

DATE: [Date]

BY: [Name]

PROJECT: [Project Name]

LOCATION: [Location]

DESIGNED BY: [Name]

APPROVED BY: [Name]

DATE: [Date]

PROJECT: [Project Name]

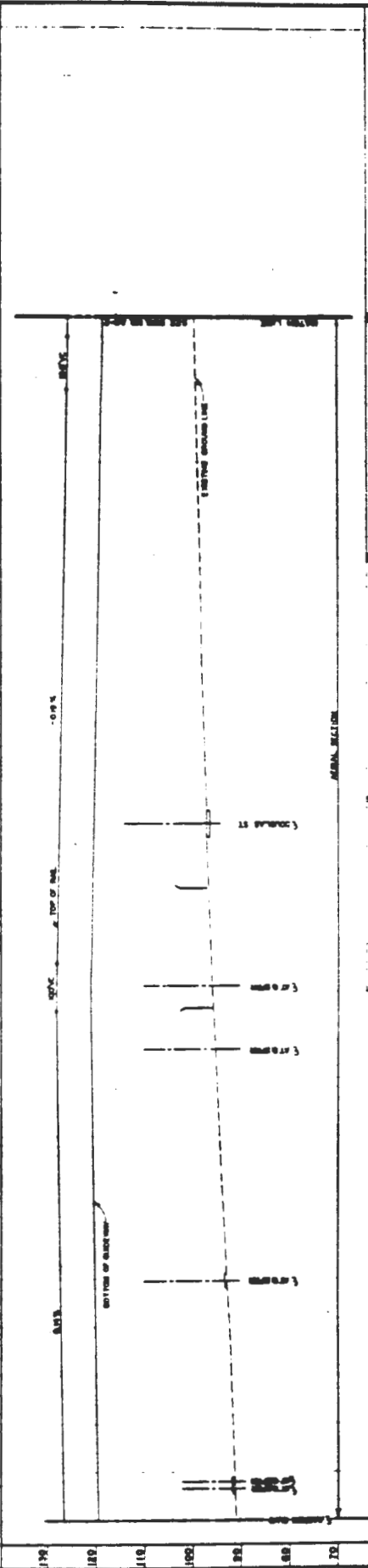
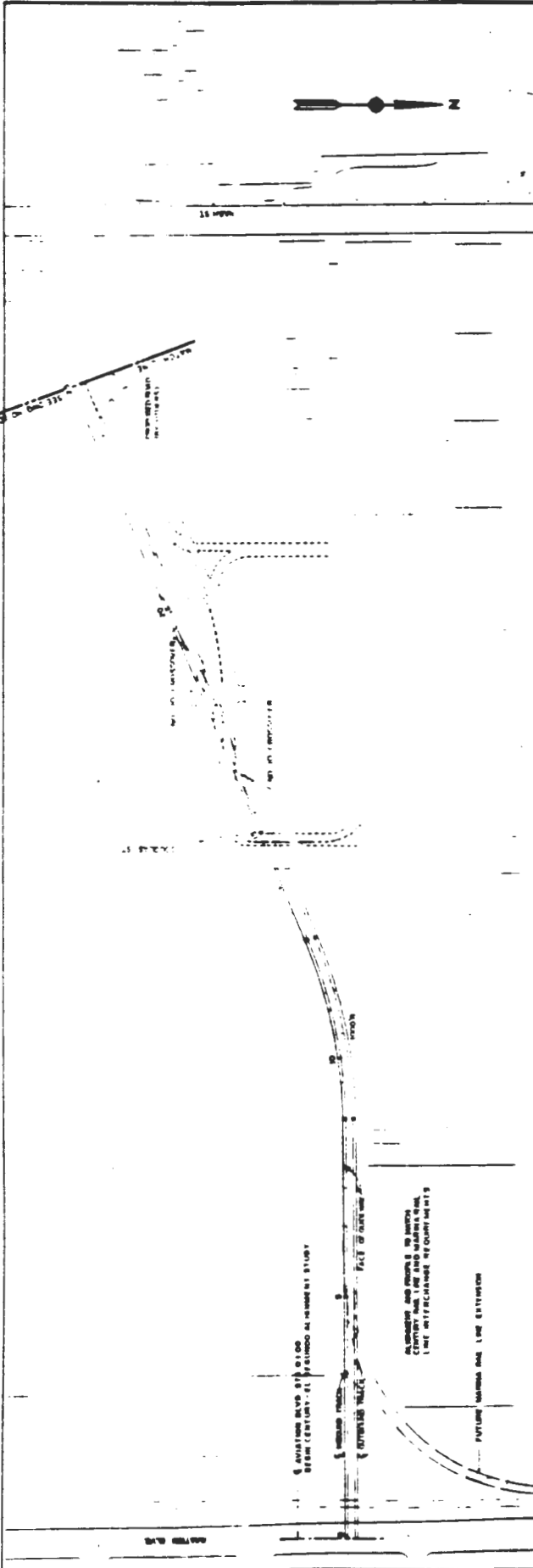
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DESIGNED BY: [Name]

APPROVED BY: [Name]

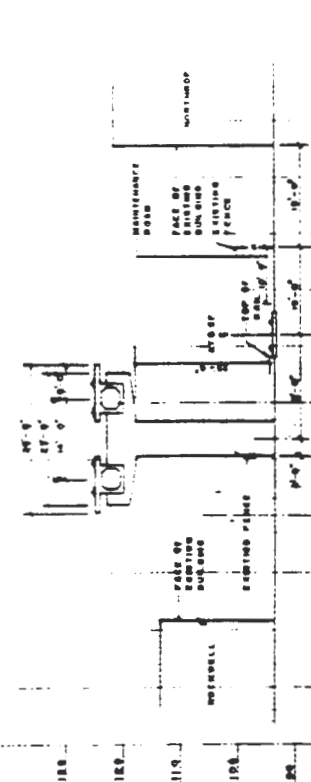
DATE: [Date]

B-7



LOS ANGELES COUNTY TRANSPORTATION COMMISSION
 County of Los Angeles
PLAN AND PROFILE OF TRACK CENTER LINE
 STATION AREA FROM 10+00 TO 15+00

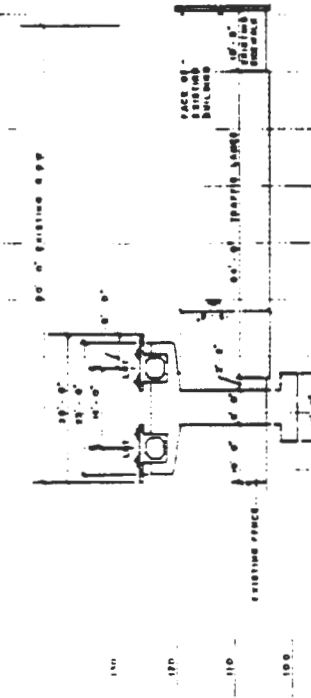
Scale 1" = 100'		SHEET NO. AD-1 OF 1 SHEETS	
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STATION 1+00 (LOOKING EAST)



STATION 1+00 (LOOKING NORTH)

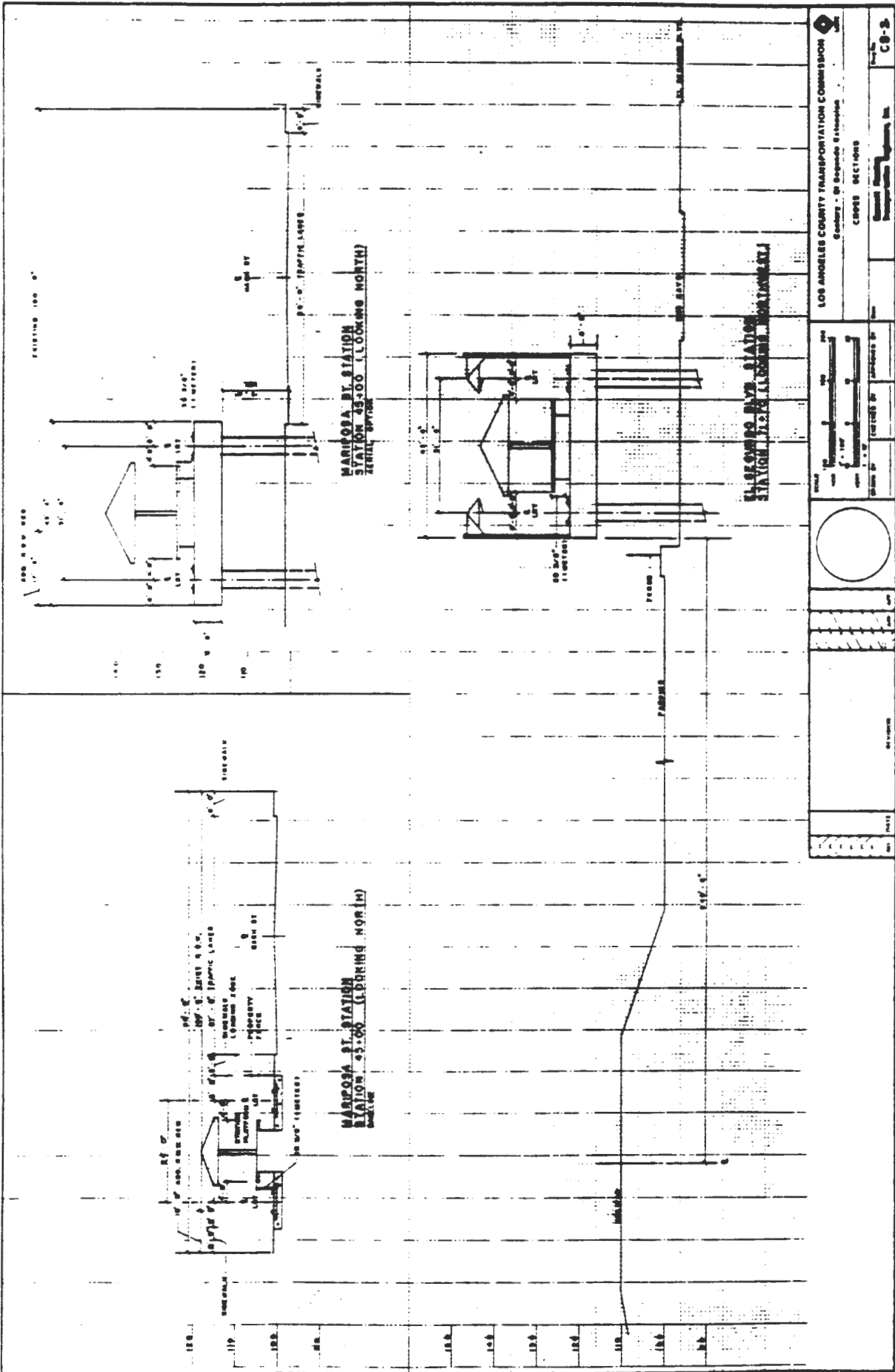


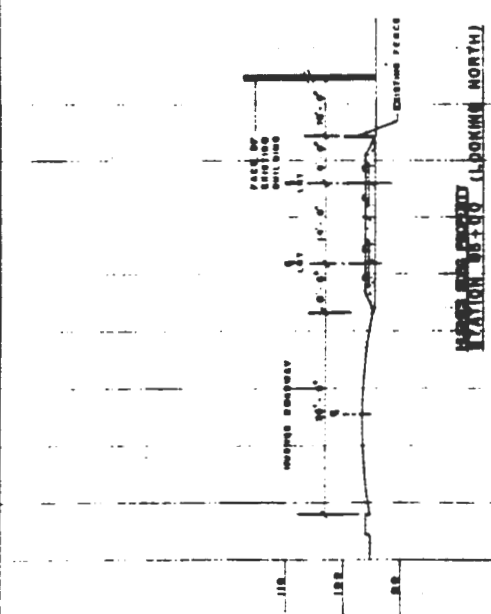
STATION 1+00 (LOOKING SOUTH)

LOS ANGELES COUNTY TRANSPORTATION COMMISSION
 County of Los Angeles
 CROSS SECTION

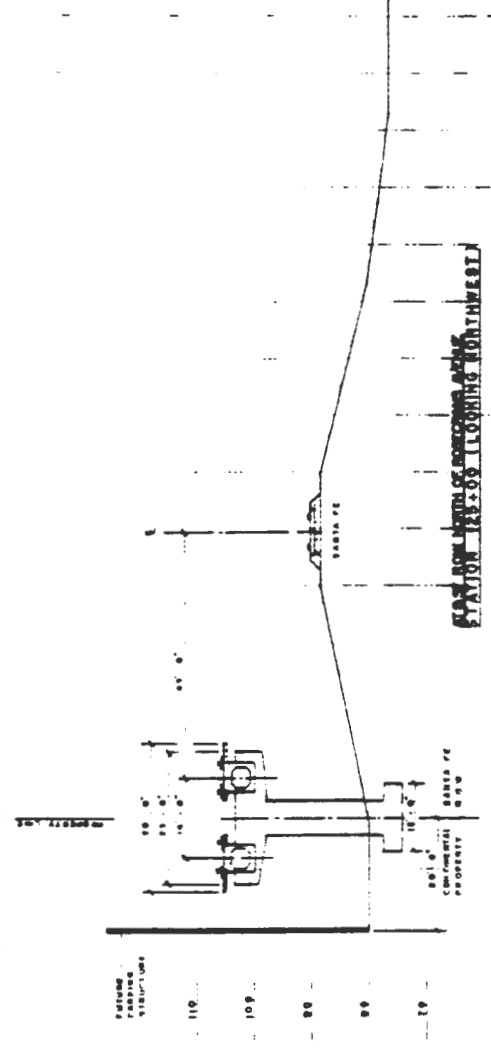


CS-1

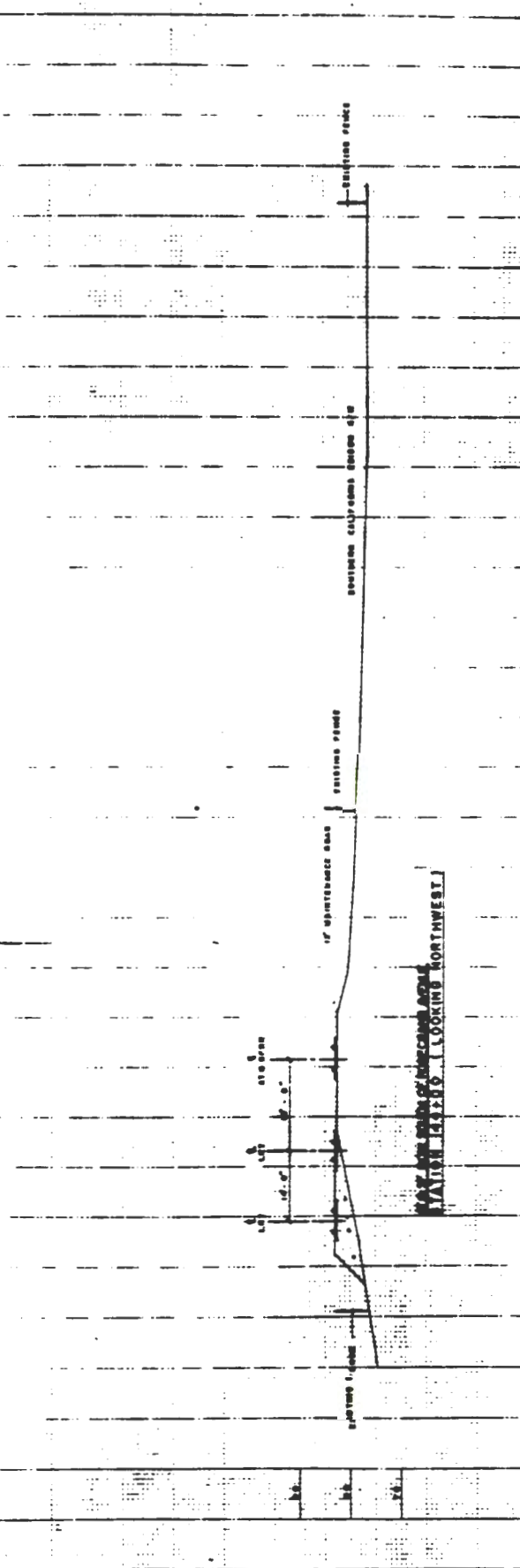




STATION 13+00 (LOOKING NORTH)



STATION 13+00 (LOOKING NORTHWEST)



STATION 13+00 (LOOKING NORTHWEST)

LOS ANGELES COUNTY TRANSPORTATION COMMISSION
 Geodetic - 20 Station Station
 CROSS SECTION

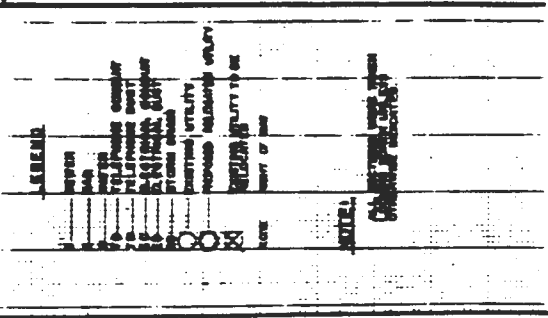
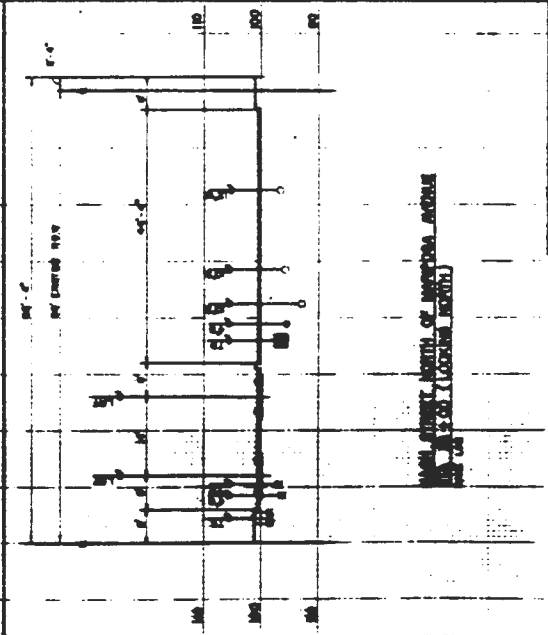
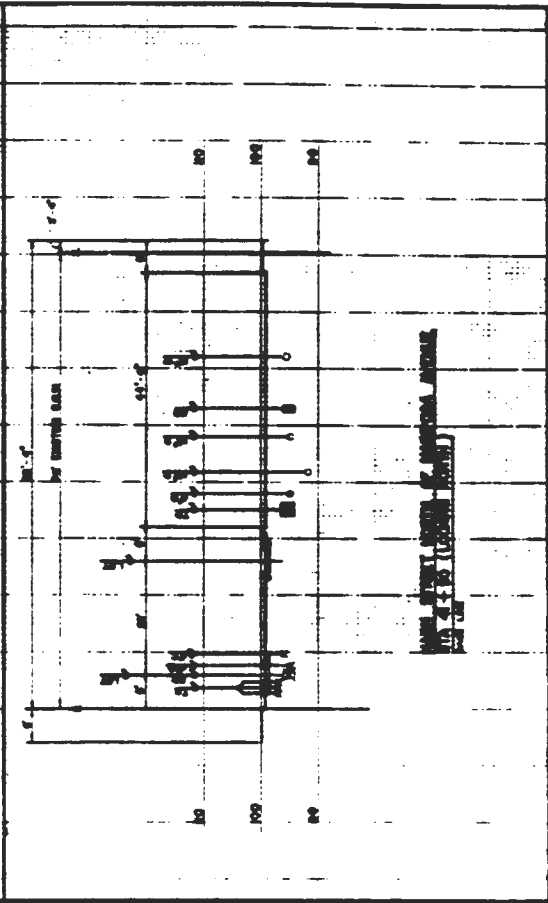
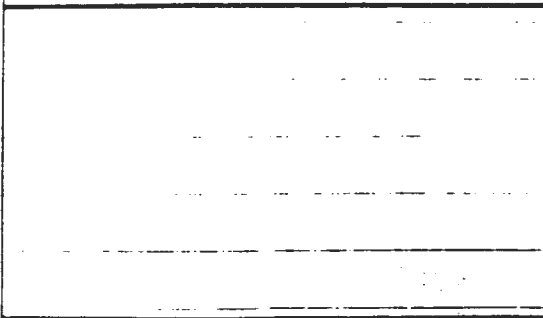
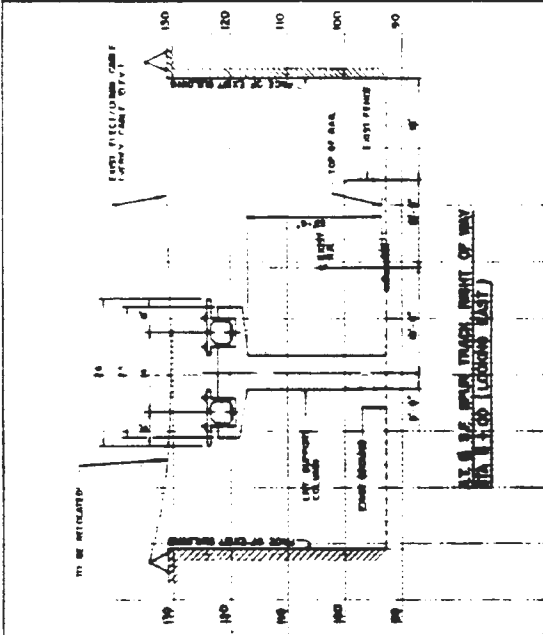
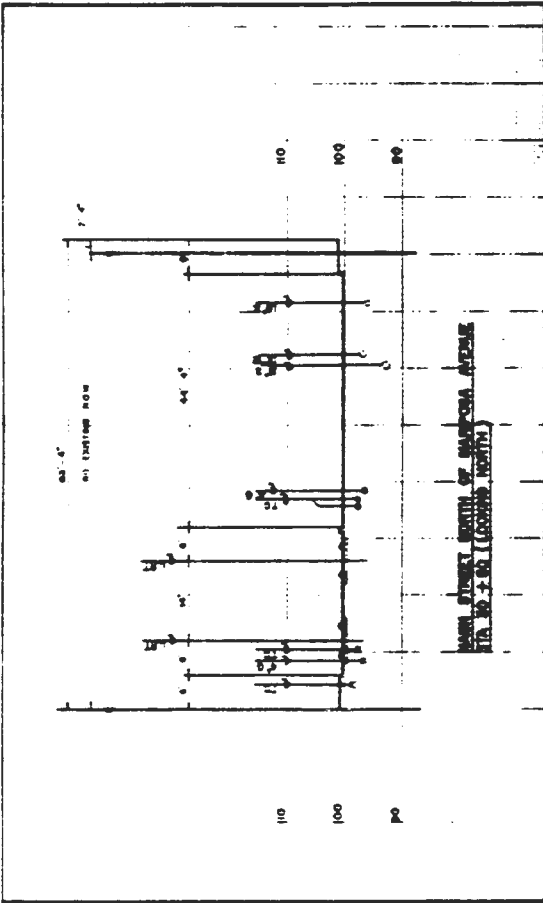
DATE: _____ SCALE: _____

DESIGNED BY: _____ CHECKED BY: _____

PROJECT NO. _____

DATE: _____

FIGURE NO. **CS-3**



LEGEND

- SEWER
- WATER
- 12" WATER MAIN
- 12" GAS MAIN
- 12" ELECTRIC MAIN
- 12" TELEPHONE MAIN
- 12" CABLE MAIN
- 12" FIBER OPTIC MAIN
- 12" RAINWATER MAIN
- 12" STORM SEWER MAIN
- 12" SANITARY SEWER MAIN
- 12" CULVERT MAIN
- 12" DRAINAGE MAIN
- 12" IRRIGATION MAIN
- 12" FLOOD CONTROL MAIN
- 12" OTHER MAIN
- 12" OTHER UTILITY
- 12" OTHER STRUCTURE
- 12" OTHER EQUIPMENT
- 12" OTHER

NOTES

1. ALL UTILITIES TO BE INSTALLED IN ACCORDANCE WITH THE CITY OF LOS ANGELES SPECIFICATIONS FOR UTILITIES.

2. ALL UTILITIES TO BE INSTALLED IN ACCORDANCE WITH THE CITY OF LOS ANGELES SPECIFICATIONS FOR UTILITIES.

3. ALL UTILITIES TO BE INSTALLED IN ACCORDANCE WITH THE CITY OF LOS ANGELES SPECIFICATIONS FOR UTILITIES.

LOS ANGELES COUNTY TRANSPORTATION COMMISSION
 COUNTY - 00 Regional Streets

UTILITY CROSS SECTION

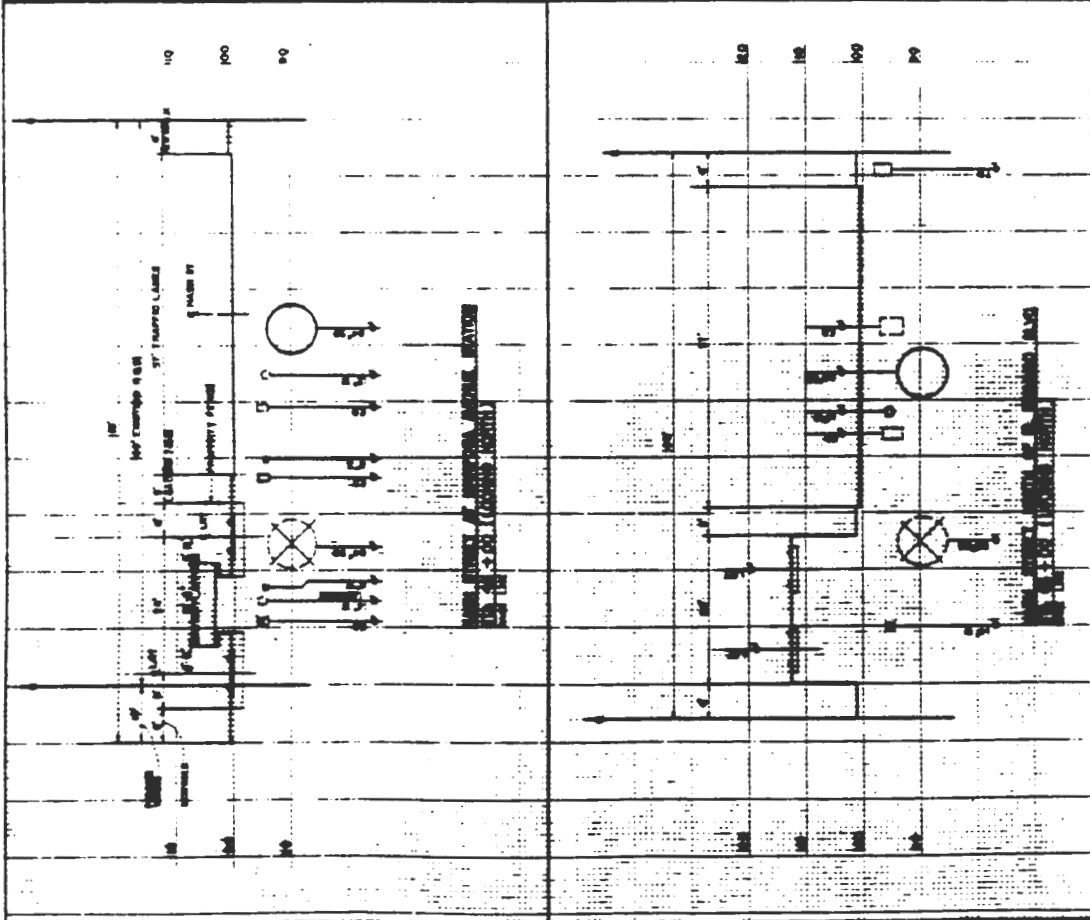
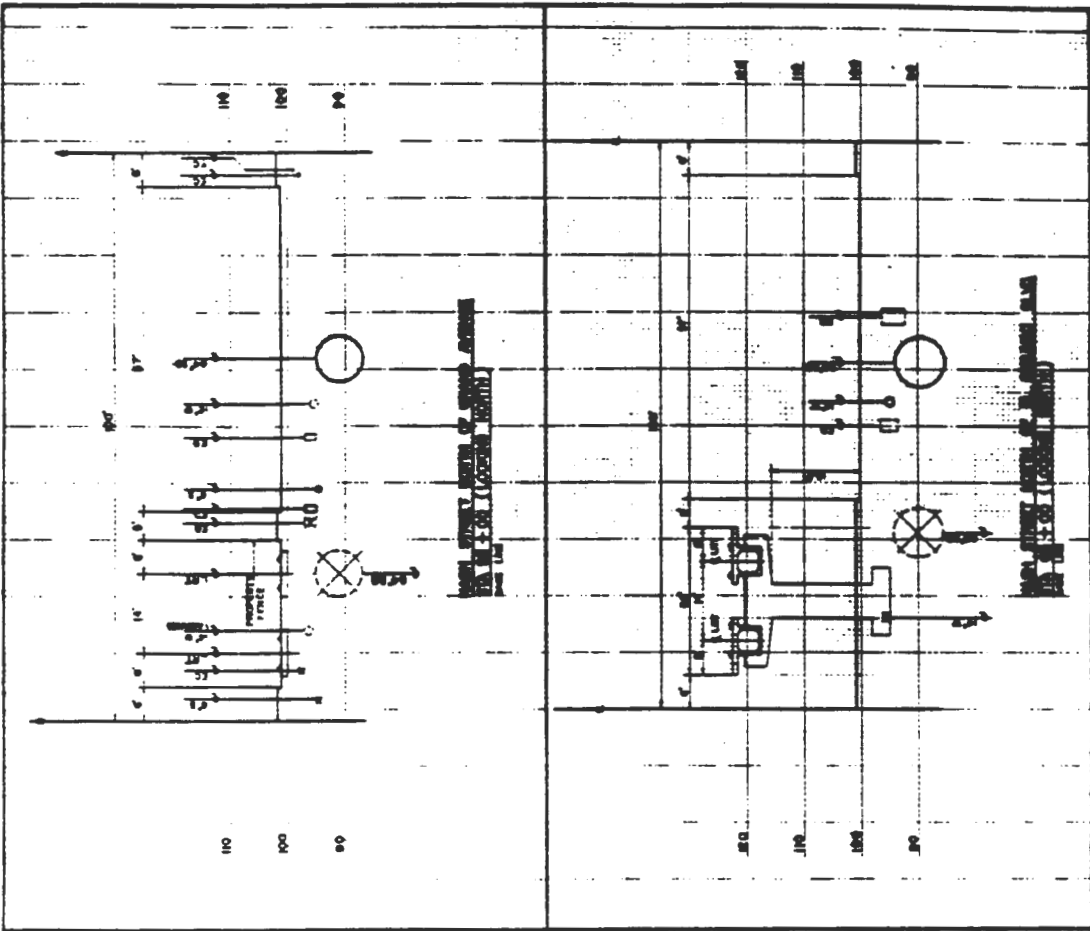
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 CHECKED BY: [Name]

SCALE: 1" = 10'-0"

PROJECT: [Name]

DATE: 10/1/11

U-1



LOS ANGELES COUNTY TRANSPORTATION COMMISSION
 Station - 31 (Orange Station)

UTILITY GRID SECTION

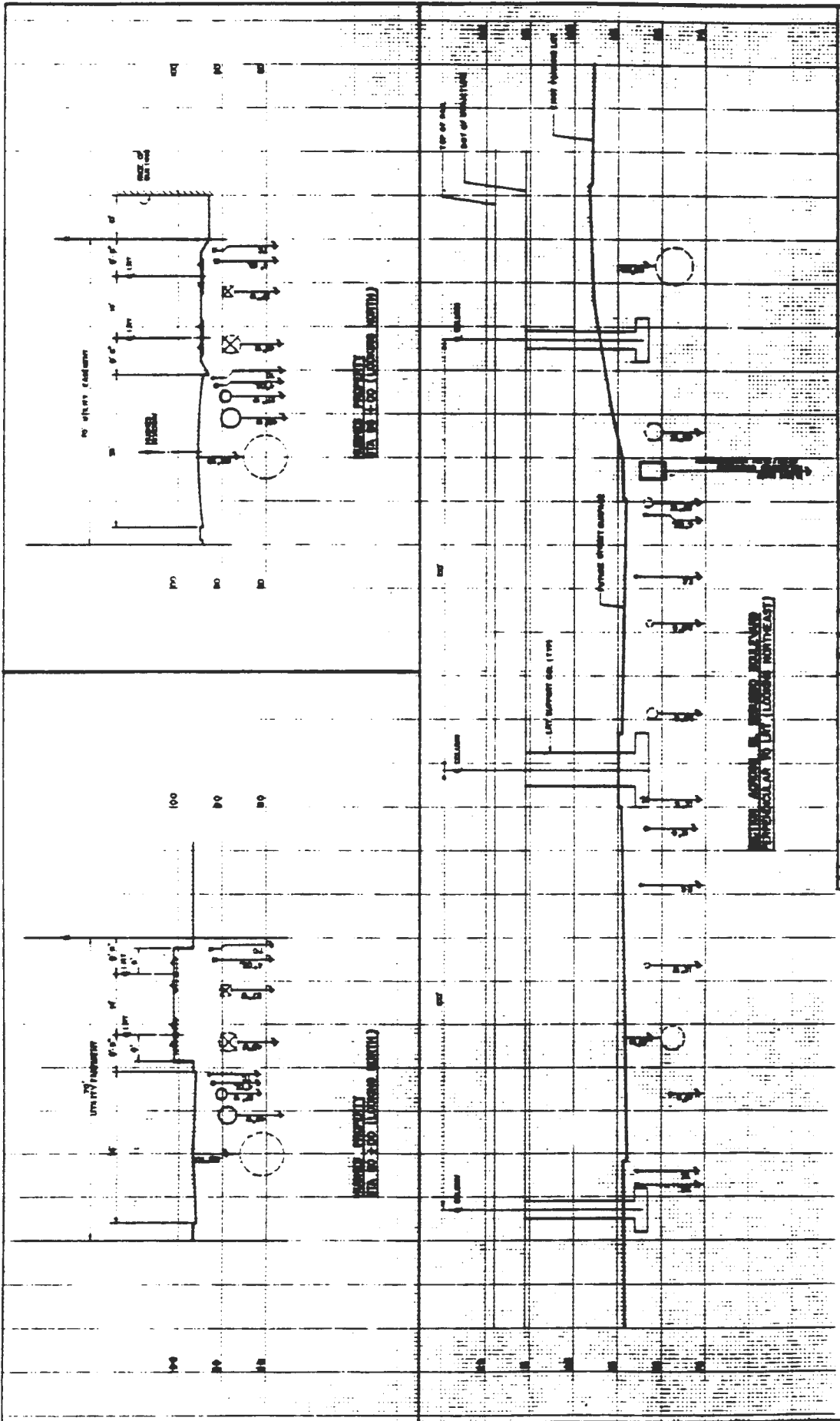
DATE: _____ DRAWN BY: _____ CHECKED BY: _____

SCALE: _____

SHEET NO. _____ OF _____

PROJECT NO. _____

U-2



LOS ANGELES COUNTY TRANSPORTATION COMMISSION
 County of Los Angeles

DATE: _____

DRAWN BY: _____

CHECKED BY: _____

APPROVED BY: _____

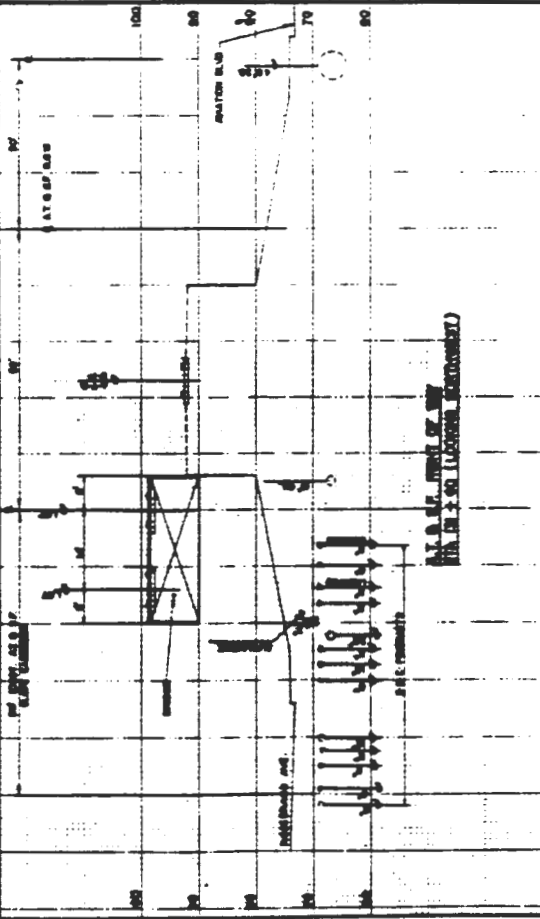
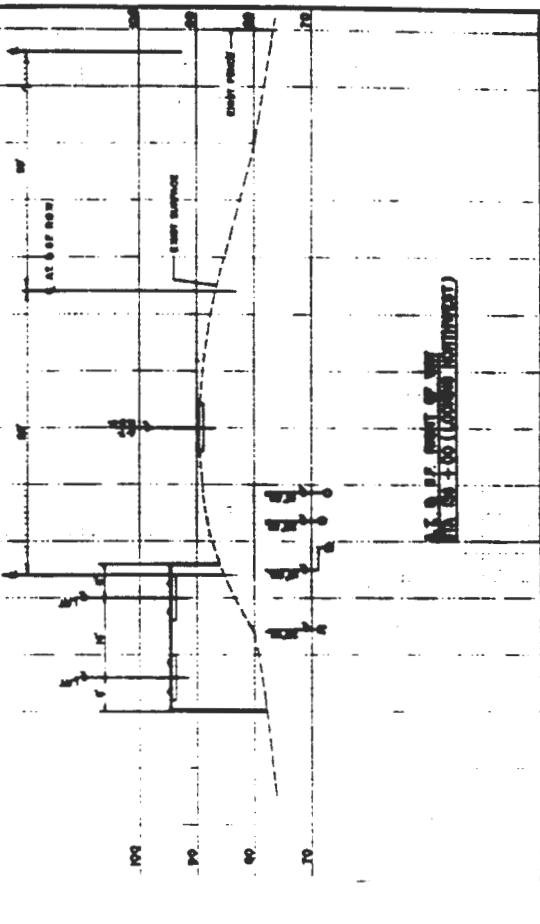
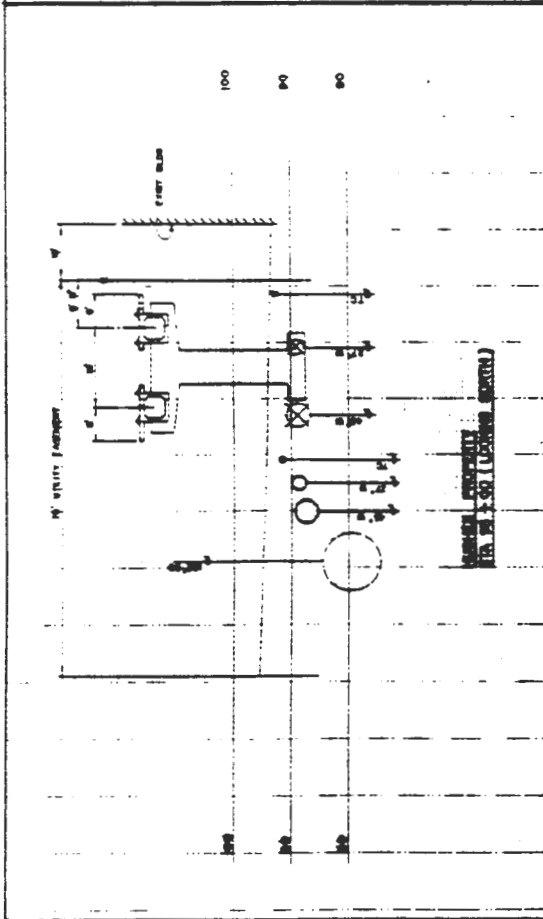
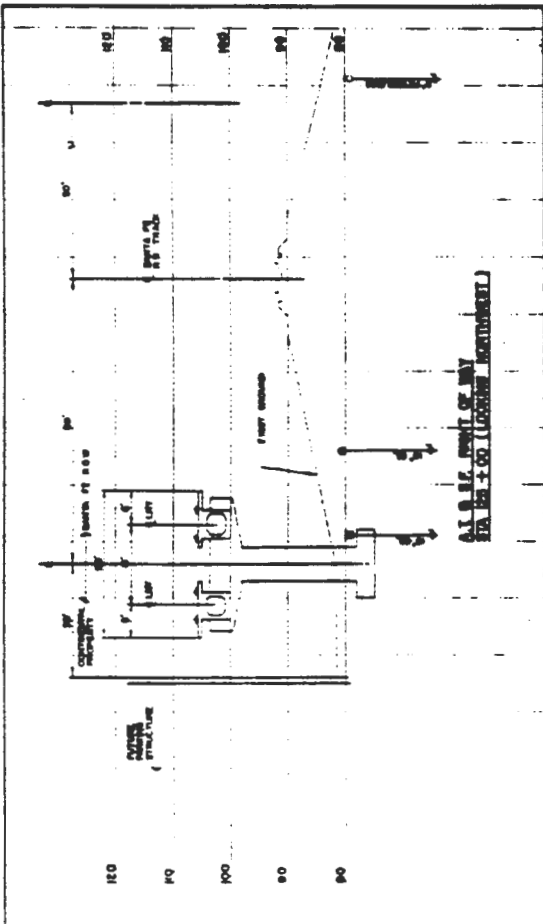
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PROJECT NO.: _____

SHEET NO.: _____

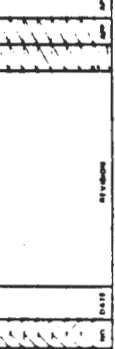
TOTAL SHEETS: _____

U-3

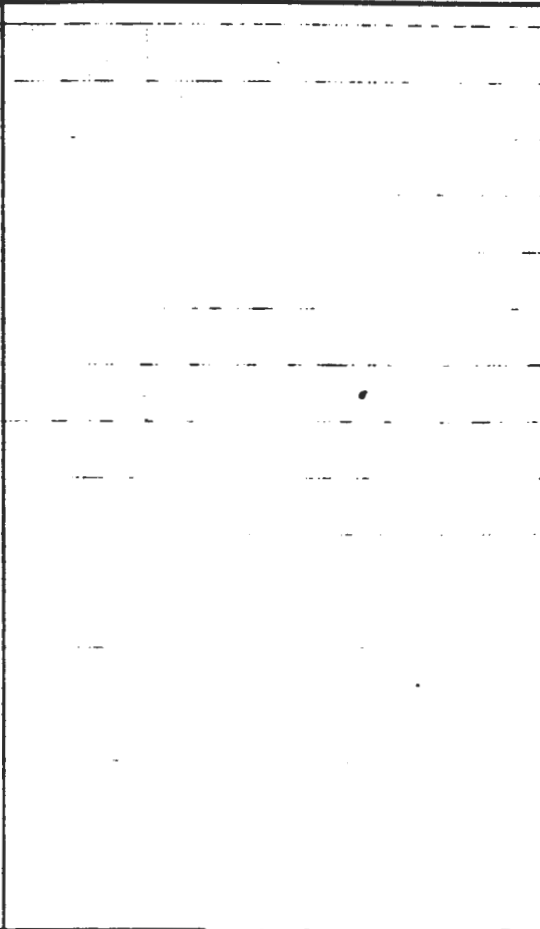
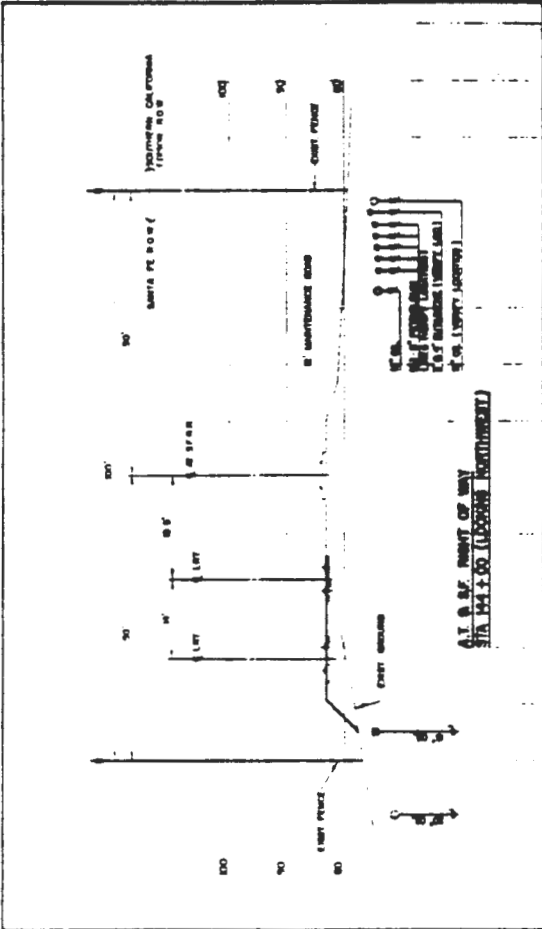
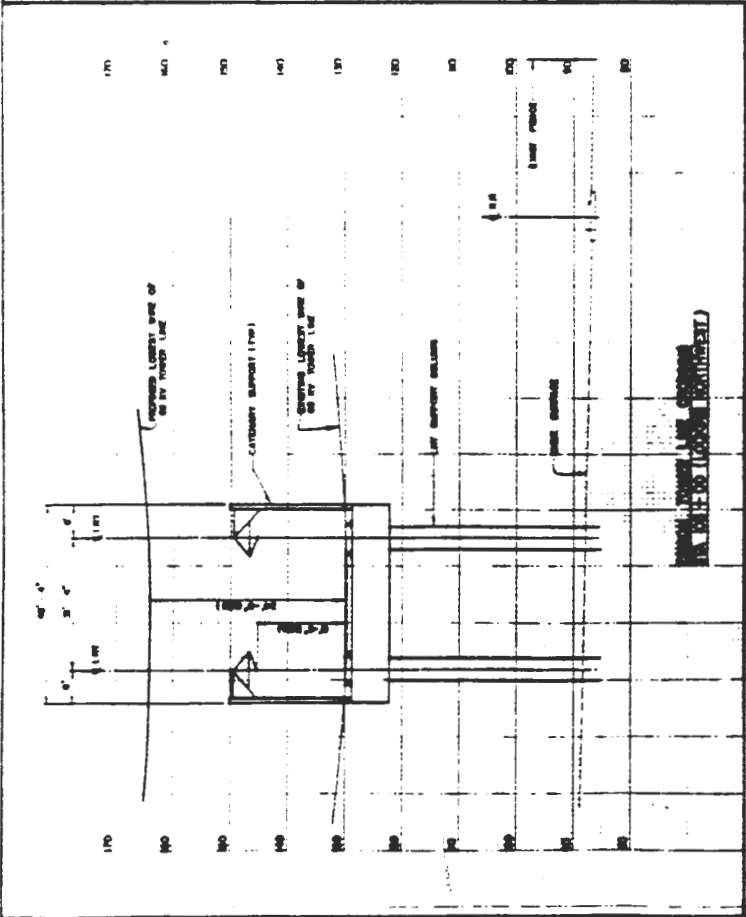


LOS ANGELES COUNTY TRANSPORTATION COMMISSION
 COUNTY OF BERKELEY DISTRICT

DATE: 10/1/11
 DRAWN BY: [Name]
 CHECKED BY: [Name]



U-4



LOS ANGELES COUNTY TRANSPORTATION COMMISSION
 Bureau - El Segundo Station
 U-9

Scale: 1" = 100'

DATE: 1/15/50

BY: [Signature]

APPROVED BY: [Signature]

PROJECT: [Text]

NO. 1011

NO. 1012

NO. 1013

NO. 1014

NO. 1015

NO. 1016

NO. 1017

NO. 1018

NO. 1019

NO. 1020

NO. 1021

NO. 1022

NO. 1023

NO. 1024

NO. 1025

NO. 1026

NO. 1027

NO. 1028

NO. 1029

NO. 1030

NO. 1031

NO. 1032

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NO. 1034

NO. 1035

NO. 1036

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NO. 1094

NO. 1095

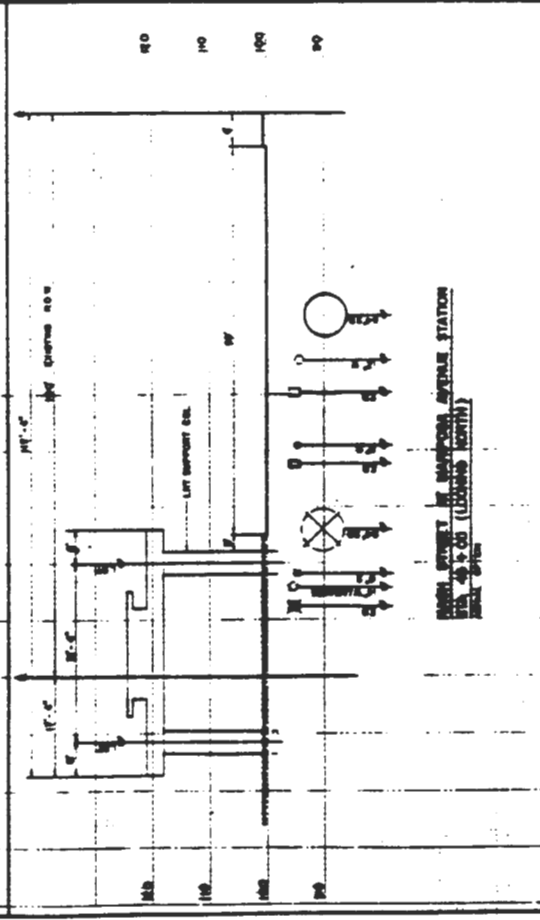
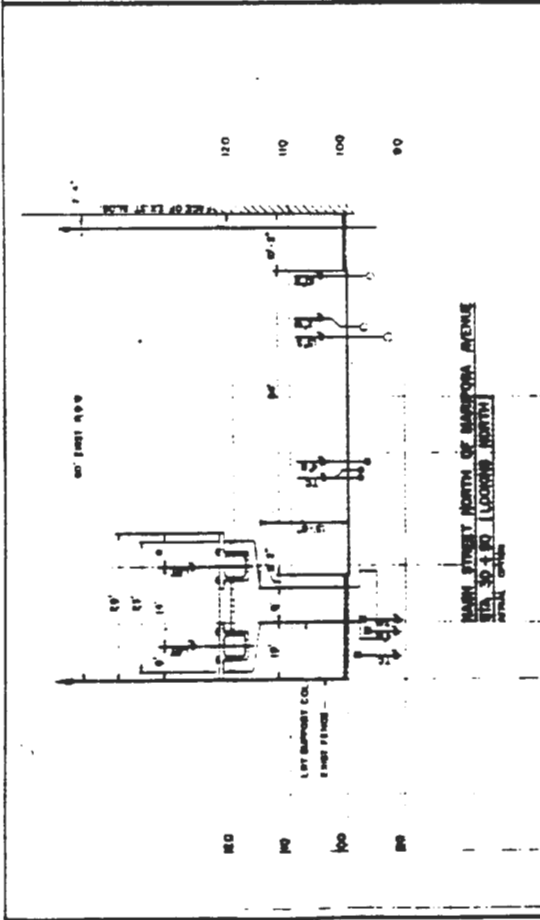
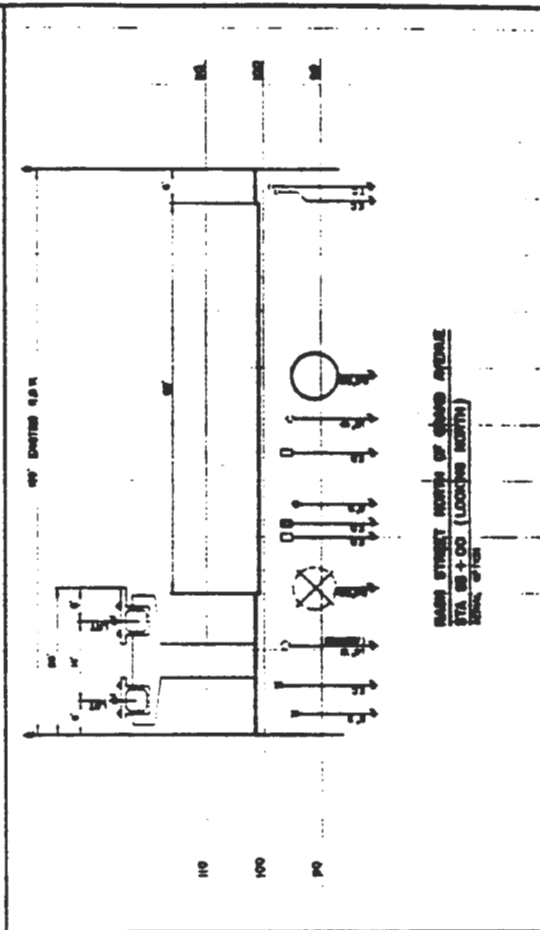
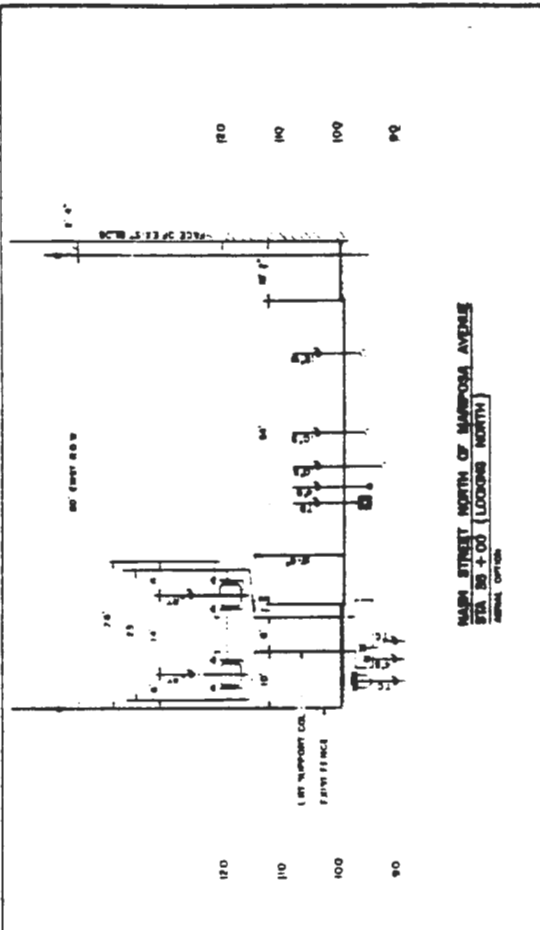
NO. 1096

NO. 1097

NO. 1098

NO. 1099

NO. 1100



LOS ANGELES COUNTY TRANSPORTATION COMMISSION
 Station - at Sta. 28+00

DATE: _____ TIME: _____

BY: _____

SCALE: _____

PROJECT: _____

U-6