



*MAKING THE CONNECTION*



**San Francisco Bay Area Rapid Transit District**

Draft

BART-Oakland International Airport Connector

Final Environmental Impact Report /  
Final Environmental Impact Statement

Addendum

Prepared by the San Francisco Bay Area Rapid Transit District

November 2006



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## **Appendix A Revised Project Alignment Maps**

## **Appendix B Supplemental Technical Report-Noise and Vibration Report**

## EXECUTIVE SUMMARY

### Overview

The San Francisco Bay Area Rapid Transit District (BART) has adopted a BART-Oakland International Airport Connector (Connector) project to improve access to the airport using direct connections to the existing regional BART rail transit system by linking the Oakland International Airport (OIA) and the Coliseum BART Station. The Connector project is designed to improve service by providing an exclusive aerial guideway for transit vehicles.

On August 3, 2001, BART and the Federal Transit Administration (FTA) distributed the Draft Environmental Impact Report/Draft Environmental Impact Statement (DEIR/DEIS) for the Connector project. The DEIR/DEIS evaluated several transit alternatives, including a No Action Alternative (continuing the existing AirBART bus service), a Quality Bus Alternative (Bus Rapid Transit scenario), and an Automated Guideway Transit (AGT), which provided an exclusive aerial guideway for transit vehicles. The Final EIR/Final EIS (FEIR/FEIS), which was published in March 2002, identified a version of the AGT as the Preferred Alternative. The BART Board of Directors certified the FEIR and adopted the AGT Connector project on March 28, 2002. The FTA issued the Record of Decision on July 16, 2002.

The AGT selected as the Preferred Alternative is not one transit technology, but represents an array of transit technologies. The common elements of AGT systems are that they are generally of proprietary design, operate within their own guideway, would have stations physically integrated with the Coliseum BART Station and the airport terminal, and do not require a vehicle operator.

The FEIR/FEIS identified a Preferred Alternative alignment for the AGT, which is largely in the Hegenberger Road corridor and would run on an aerial guideway between the Coliseum BART Station and Doolittle Drive, then at-grade adjacent to Airport Drive. Between the Coliseum BART Station and Interstate 880 (I-880), the AGT alignment would be located over the west-side curb lane of Hegenberger Road. Between I-880 and Doolittle Drive, the alignment would be located largely in the median of Hegenberger Road. Between Doolittle Drive and Oakland International Airport, the alignment would pass under Doolittle Drive and run at-grade adjacent to Airport Drive. South of Air Cargo Road, in the airport terminal area, the alignment would be an aerial guideway over the airport parking area. The AGT would include two terminal stations: one at the Coliseum BART Station and one at the airport terminal. The Preferred Alternative also included two intermediate stops: one near the intersection of Hegenberger Road/Edgewater Road, and the second near the intersection of Doolittle Drive/Hegenberger Road.

### Purpose of Addendum

The Connector project is a “design-build” project, which means that a conceptual OAC project was developed for evaluation in the EIR/EIS. In order to respond to changes in the airport’s development plan, as well as to additional engineering and other changed circumstances, the OAC design has evolved since the project was approved in 2002.

Section 15164 of the CEQA Guidelines allows a Lead Agency to prepare an addendum to a previously certified EIR if some changes or additions are necessary, as long as none of the conditions described in Section 15162 requiring the preparation of a subsequent EIR have occurred. In brief, Section 15162 states that, when an EIR has been certified, no subsequent EIR needs to be prepared for the project unless the Lead Agency determines, on the basis of substantial evidence in the light of the whole record, that there are substantial changes proposed in the project which require major revisions of the previous EIR, substantial changes occur with respect to the circumstances under which the project is undertaken, or there is new information of substantial importance regarding new significant effects, more severe effects, or the feasibility or effectiveness of mitigation measures.<sup>1</sup>

## Modifications to the Preferred Alternative

There are five areas of the AGT alignment where there have been substantial changes compared to the Preferred Alternative. These five areas, which are described in greater detail in Section 2 of this Addendum, include the following locations:

1. Revised location for the Airport AGT Station within the airport terminal area.
2. Maintenance and storage facility (MSF) relocated to Doolittle Drive site. (The MSF was originally located at the Coliseum BART Station.)
3. Elimination of the Edgewater intermediate stop and revised alignment on Hegenberger Road at Edgewater Drive.
4. Revised median alignment between Coliseum Way and Elmhurst Channel.
5. Changes at Coliseum Station.

All these changes take place within the Hegenberger Road-Airport Drive project corridor, which was analyzed in the OAC EIR/EIS.

## Conclusion

This Addendum to the *Bart-Oakland Airport International Airport Connector FEIR/FEIS* revisited the analysis conducted in the FEIR/FEIS and evaluates the potential effects of the proposed project revisions compared to the 2002 Preferred Alternative. Project changes were evaluated for all the disciplines analyzed in the original document (transportation, land use, socioeconomics, visual quality, etc.). The analysis did not identify any substantial changes in the existing environment and did not identify any new or more severe impacts not identified in the FEIR/FEIS.

Based on the evaluation presented in this Addendum, there is no substantial evidence in the light of the whole record that there are any substantial changes proposed in the project or substantial changes with respect to the circumstances under which the project is undertaken, which will require major revisions of the previous EIR due to new or substantially more severe significant environmental impacts; or new information of substantial importance, which was not known at the time of the previous EIR, indicating new or substantially more severe significant impacts or new mitigation measures or alternatives that would substantially reduce

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<sup>1</sup> The text of CEQA Guideline Sections 15162 and 15164 is provided in Section 1.4 of this Addendum.

significant impacts. Therefore, the revised OAC project does not meet any of the conditions of CEQA Section 15162, and an EIR addendum is appropriate.



## 1.0 Introduction

The San Francisco Bay Area Rapid Transit District (BART) has adopted a BART-Oakland International Airport Connector (Connector) project to improve access to the airport using direct connections to the existing regional BART rail transit system. The Connector would link the Oakland International Airport (OIA) and the Coliseum BART Station. The Connector project is designed to improve service by providing an exclusive aerial guideway for transit vehicles. The Connector study area lies entirely within the City of Oakland, California.

### 1.1 Background

On August 3, 2001, BART and the Federal Transit Administration (FTA) distributed to public agencies and the general public the Draft Environmental Impact Report/Draft Environmental Impact Statement (DEIR/DEIS) for the Connector project. The DEIR/DEIS evaluated several transit alternatives: a No Action Alternative (continuing the existing AirBART bus service); a Quality Bus Alternative (Bus Rapid Transit scenario); and Automated Guideway Transit (AGT). The AGT Alternative provided an exclusive aerial guideway for transit vehicles, and the environmental evaluation of the AGT in the DEIR/DEIS included five separate design options for the AGT. The Final EIR/Final EIS (FEIR/FEIS) identified a version of the AGT as the Preferred Alternative. The FEIR/FEIS was published in March 2002. The BART Board of Directors certified the EIR and adopted the OAC project on March 28, 2002. The FTA issued the Record of Decision on July 16, 2002.

### 1.2 2002 FEIR/FEIS Preferred Alternative

The FEIR/FEIS selected the Automated Guideway Transit (AGT) Alternative as the Preferred Alternative. The AGT is not one transit technology, but represents an array of transit technologies, the common elements being that they are generally of proprietary design, operate within their own guideway, would have stations physically integrated with the Coliseum BART Station and the airport terminal, and do not require a vehicle operator. A specific technology has not been selected, because BART wants to encourage competition among various vendors. BART does have minimum performance specifications that will have to be satisfied by prospective suppliers. Such specifications include minimum operating speeds and carrying capacities necessary to serve the ridership forecasts. Figure 1-1 illustrates a variety of AGT technologies.

The alignment for the Preferred Alternative is largely in the Hegenberger Road corridor. Starting at the AGT terminal station at the Coliseum BART Station, the AGT alignment would proceed over the Union Pacific Railroad tracks west of San Leandro Street and over the adjoining on-ramp to Hegenberger Road (Figure 1-2). In the AGT segment north of Interstate 880 (I-880), the AGT alignment would follow the west side of Hegenberger Road on an aerial alignment over the curb lane. South of I-880, the Preferred Alternative would parallel Hegenberger Road on the west side of the roadway between I-880 and Edgewater Drive. South of Edgewater Drive, the aerial alignment would transition to the Hegenberger Road median and continue in the median until Airport Drive, where it would cross over 98<sup>th</sup> Avenue before

passing under Doolittle Drive. South of Doolittle Drive on OIA property, the alignment would run at grade adjacent to the east side of Airport Drive, between Airport Drive and Lew F. Galbraith Municipal Golf Course. South of the golf course, the AGT alignment would parallel Airport Drive on an aerial alignment into the airport terminal area to an AGT station adjacent to OIA Terminal 1.

The AGT vehicles would operate primarily on an elevated guideway, thus providing the AGT with its own exclusive right-of-way separate from other vehicular traffic along its route. For a short stretch, generally in the vicinity of the Lew F. Galbraith Municipal Golf Course, the alignment would run either below or at grade. The AGT would include two terminal stations: one at the Coliseum BART Station and one at the proposed enlarged and consolidated airport terminal. The airport terminal station is similar to a BART station with its own fare collection, station agent, and amenities. The Preferred Alternative also included two intermediate stops: one near the intersection of Hegenberger Road/Edgewater Road, and the second near the intersection of Doolittle Drive/Hegenberger Road. The City of Oakland suggested these locations as sites that would support the city's efforts to revitalize the Hegenberger Road Corridor.

Figure 1-1  
Typical AGT Technologies



Rubber Tire



Rubber Tire



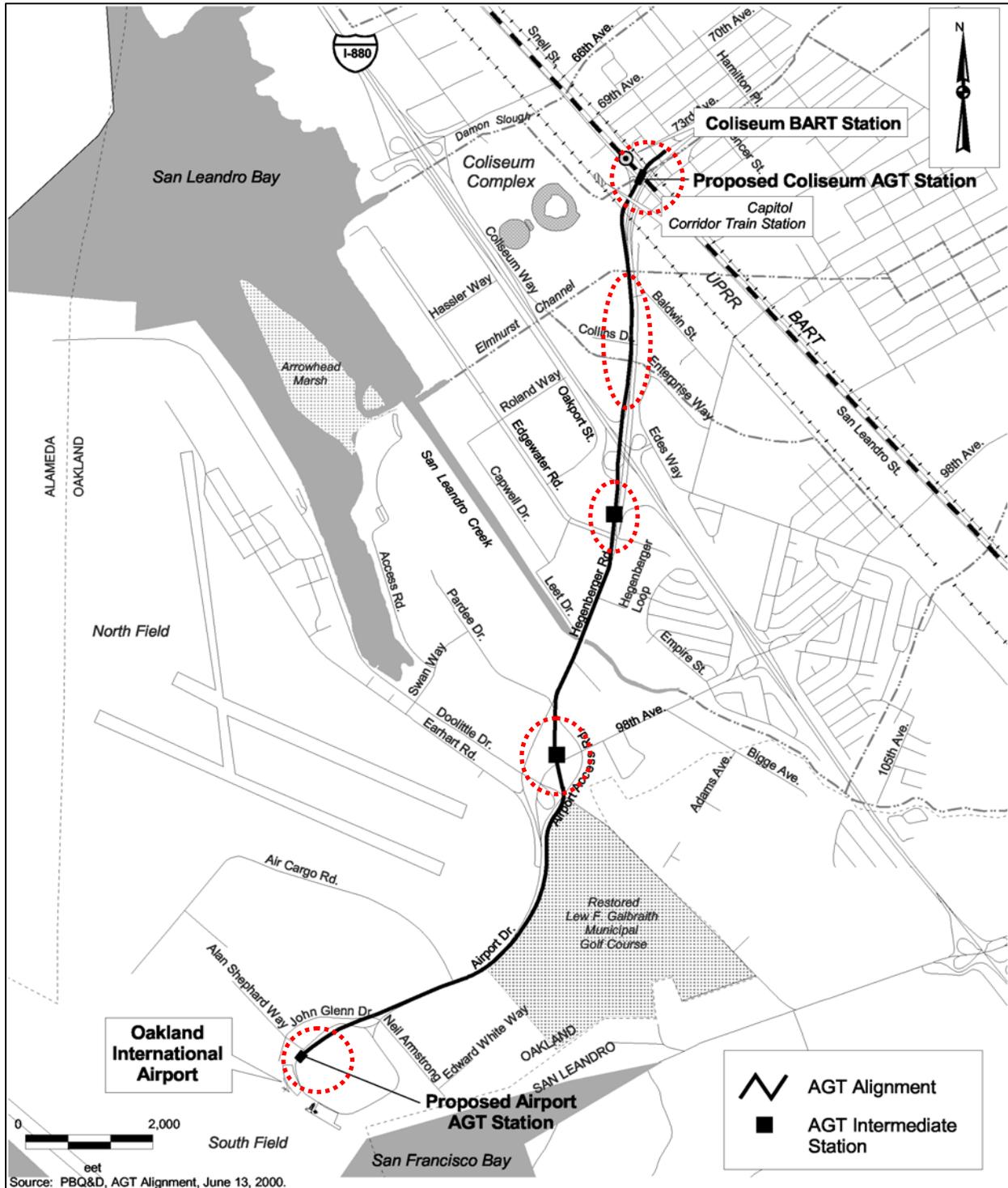
Rubber Tire



Steel Wheel

Sources: Lea+Elliott, Inc.  
[www.caf.net](http://www.caf.net)  
[www.cksairport.gov.tw/CKSeng/](http://www.cksairport.gov.tw/CKSeng/)

Figure 1-2  
Alignment of Preferred Alternative



 Areas of Project modifications

## 1.3 Modifications to the Preferred Alternative

The Connector project is a “design-build” project, which means that a conceptual project was developed for evaluation in the EIR/EIS. It was acknowledged throughout the process that final design of the project would result in modifications to some conceptual elements of the project. Following certification of the project by BART and the issuance of the Record of Decision (ROD) by the Federal Transit Administration, more precise engineering and design were undertaken. In addition, the Port of Oakland (Port), which owns and operates Oakland International Airport, produced a series of designs for the airport terminal area encompassing the airport terminals, access roads, and parking facilities. In order to respond to these airport plan changes, as well as additional engineering and other changed circumstances, the OAC design has evolved.

There are five areas of the AGT alignment where there have been substantial changes to the Preferred Alternative. These five areas, which are described in greater detail in Section 2, include the following areas:

1. Revised location for the Airport AGT Station
2. Maintenance and storage facility (MSF) relocated to Doolittle Drive site. (The MSF was originally located at the Coliseum BART Station).
3. Elimination of the Edgewater Drive intermediate stop and revised alignment on Hegenberger Road at Edgewater Drive
4. Revised median alignment between Coliseum Way and Elmhurst Channel
5. Changes at Coliseum Station

All these changes take place within the Hegenberger Road-Airport Drive project corridor analyzed in the EIR/EIS. Figure 1-2 illustrates the five locations where modifications to the Preferred Alternative are proposed.

## 1.4 Purpose of Addendum

Section 15164 of the CEQA Guidelines allows a Lead Agency to prepare an addendum to a previously certified EIR if some changes or additions are necessary, as long as none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR have occurred. Section 15162 states that, “When an EIR has been certified, no subsequent EIR shall be prepared for that project unless the Lead Agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:”

1. Substantial changes are proposed in the project which require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable due diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
  - a) The project will have one or more significant effects not discussed in the previous EIR;
  - b) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
  - c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
  - d) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

An agency must prepare an addendum to the previously certified EIR if the Lead Agency's role in the project is not complete and some changes or additions are necessary to the project but none of the conditions triggering a Subsequent EIR, Negative Declaration, or Supplemental EIR have occurred. Based on the following environmental evaluation in Section 3, the revised OAC project does not meet any of the conditions of Section 15162, and an Addendum is appropriate.

## 1.5 Format for the Addendum Document

This document contains the following sections:

Section 1. *Introduction.*

Section 2. *Project Description.* This section contains a description of the five areas where BART is proposing substantial changes to the OAC project.

Section 3. *Environmental Evaluation.* This section contains an evaluation of how the proposed project modifications could affect the environment. Section 3 reviews the 17 environmental issues that were evaluated in the EIR/EIS. For convenience, all potential impacts, both permanent operational effects and temporary construction effects, are reviewed under each issue.

Section 4. *References*. This section provides references used in the preparation of this Addendum.

Section 5. *List of Preparers*. This section provides the list of preparers of this Addendum document.



## 2.0 Project Description

There are five locations where there are substantial design revisions to the Connector project. These locations are described below.

### 2.1 Revised Airport AGT Station Location

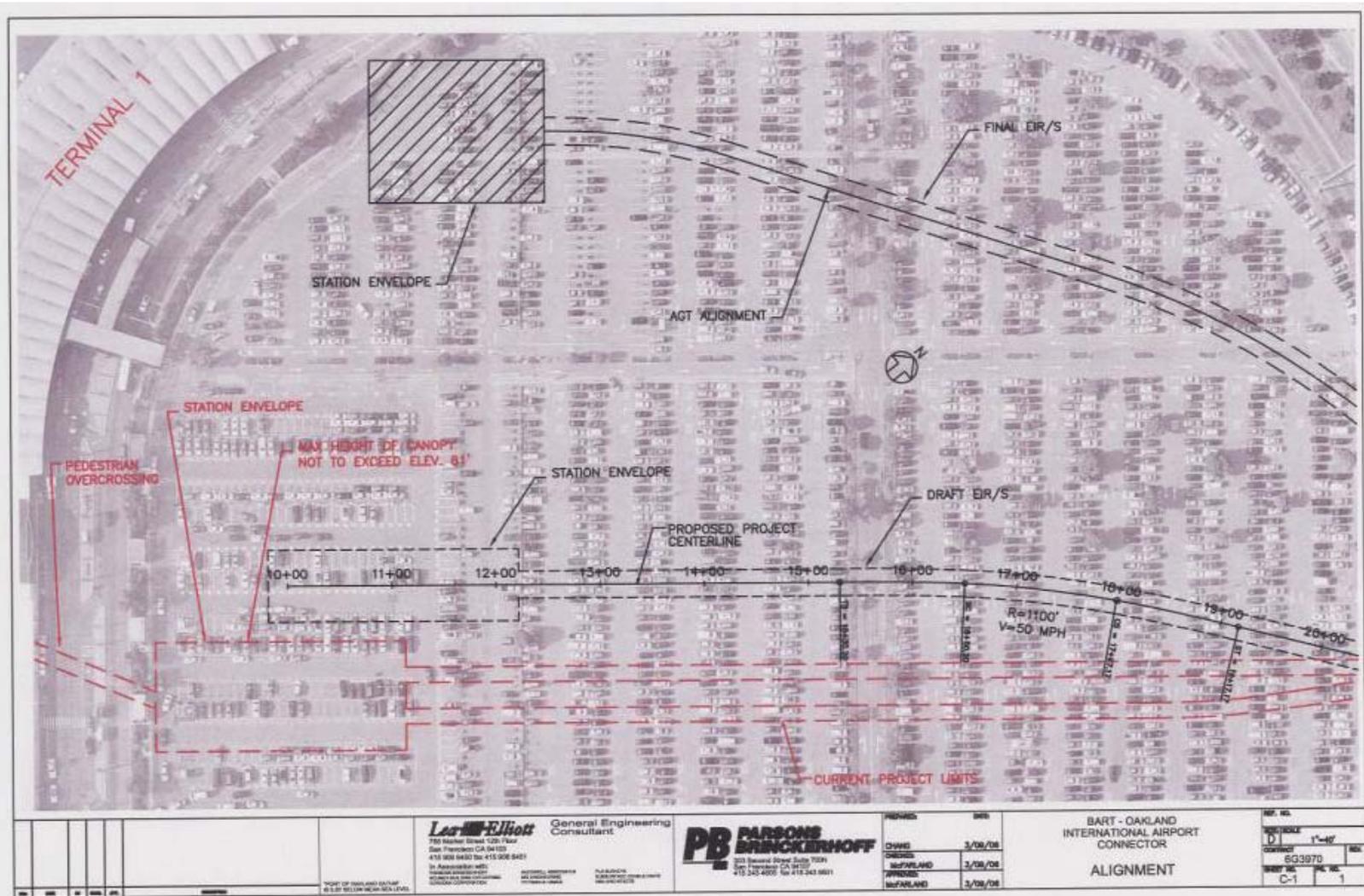
In the 2002 Preferred Alternative for the Oakland Airport Connector, the airport AGT station was located adjacent to the western portion of the Airport Drive loop road as it circles the existing Oakland Airport terminal parking lot (Figure 2-1a). The Port of Oakland initially planned a double-deck loop roadway providing access to an enlarged and consolidated airport passenger terminal. Inside the loop road, the Port planned a five-level parking structure. The original airport AGT station was to be integrated into the west side of the parking structure.

Subsequently, the Port has redesigned its airport terminal and roadway plans. The parking structure has not been built, and the plan for a double-decked loop road has been replaced by a plan for a series of widened roadways at surface level. In response to the Port's revised plans, the proposed AGT station location is now in a more centralized location in the parking lot, between Terminal 1 and Terminal 2. The AGT guideway's revised alignment as it approaches the AGT station location would be very similar to the original "straight-in" approach outlined in the OAC Draft EIR/EIS (DEIR/DEIS) (San Francisco Bay Area Rapid Transit District, July 2001). Figures 2-1a and 2-1b illustrate the revised path of the AGT guideway over the airport's parking and terminal area compared to previous alignments described in the DEIR/DEIS and the Final EIR/EIS (FEIR/FEIS) (San Francisco Bay Area Rapid Transit District, March 2002).

The revised plan for the OAC terminal station would be an 81-foot high (maximum), freestanding, aerial structure over the at-grade loop road. The AGT station platform would be approximately 145 feet long and 30 feet wide. Roadway clearance would be 17 feet. Similar to the 2002 Preferred Alternative, the station would be connected to the airport terminal by a 64-foot long covered walkway over the airport loop road. Figures 2-2, 2-3, and 2-4 illustrate the plan, elevation, and section for the revised OAC Airport AGT Station. BART has worked with the Port and the U.S. Department of Homeland Security to ensure that the airport AGT station meets all FAA security requirements (Dunscombe, April 2004; San Francisco Bay Area Rapid Transit District, May 2004).

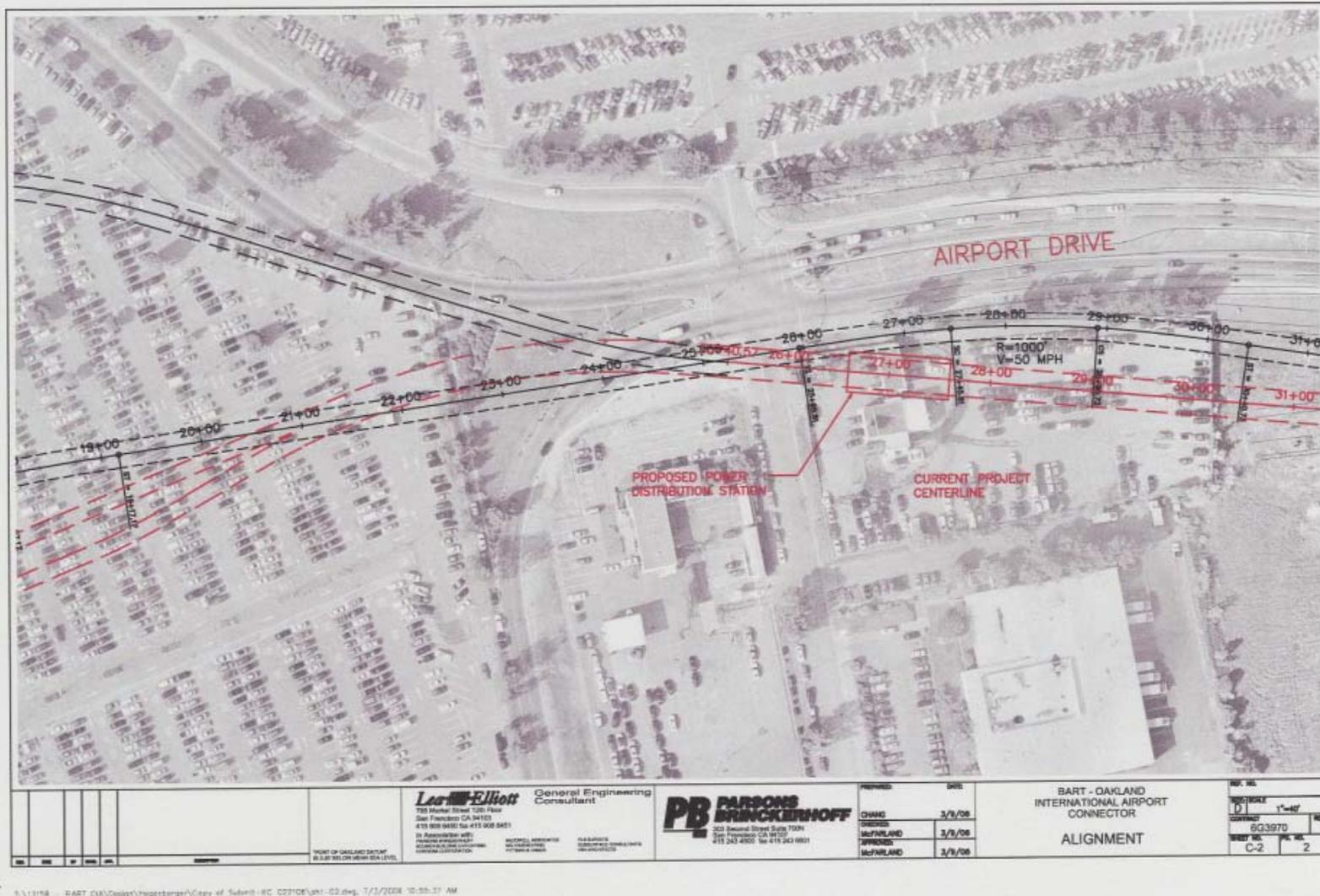
The power distribution system substation at the airport end of the Connector would be located under the AGT guideway approximately 60 feet north of Neil Armstrong Way (Figure 2-1b). The location of the power distribution system substation was developed in coordination with the Port. The power distribution system substation would be a concrete building approximately 1,000 square feet in size, with a maximum width of 26 feet (to correspond to the width of the guideway) and height of approximately 14 feet. Primary commercial power lines would enter the substation through underground duct banks, and secondary power feeders would exit the substation to the guideway in steel conduits through the substation side or roof.

Figure 2-1a  
Revised Airport Station



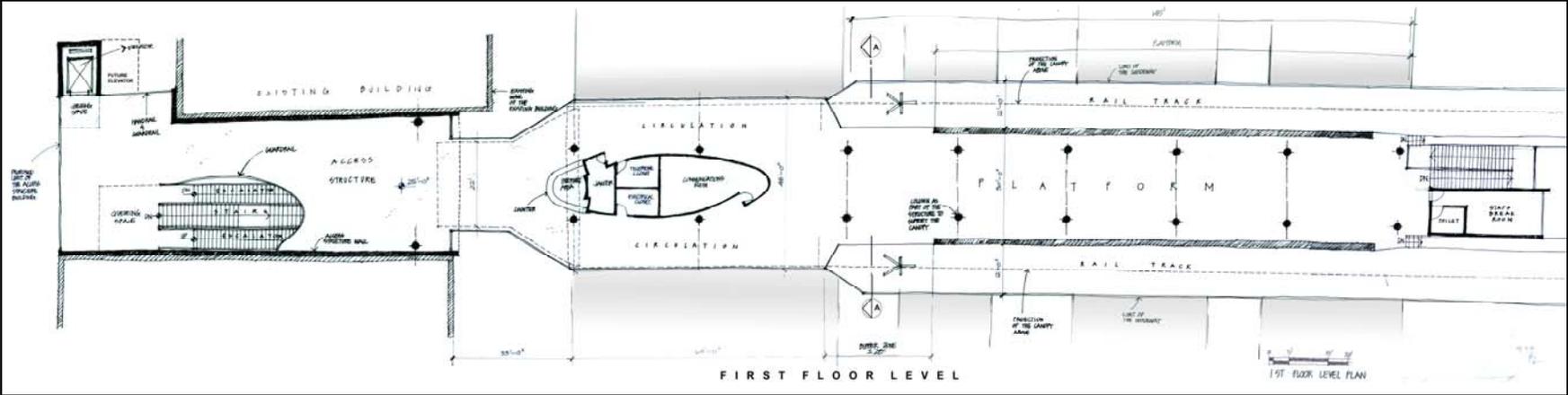
Source: Parsons Brinckerhoff

Figure 2-1b  
Revised Airport Alignment



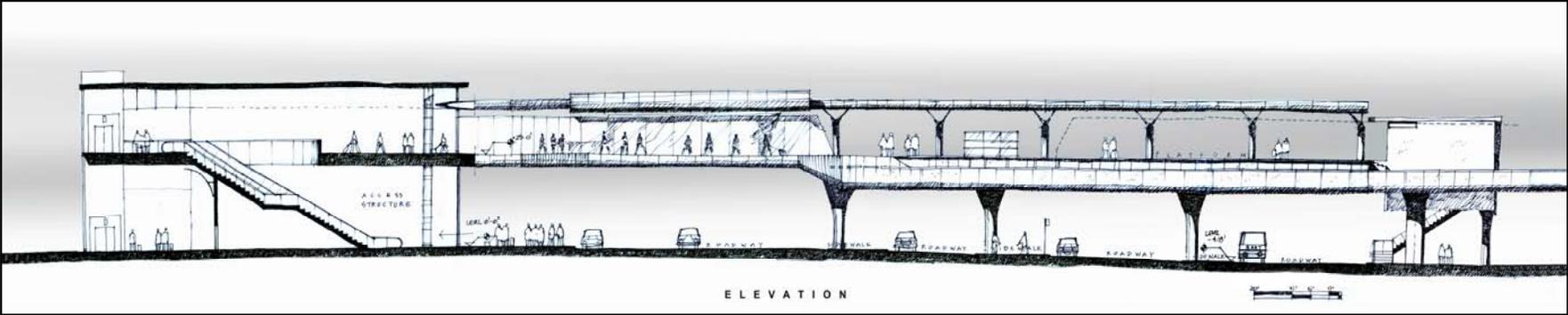
Source: Parsons Brinckerhoff

Figure 2-2  
Airport AGT Station Plan View



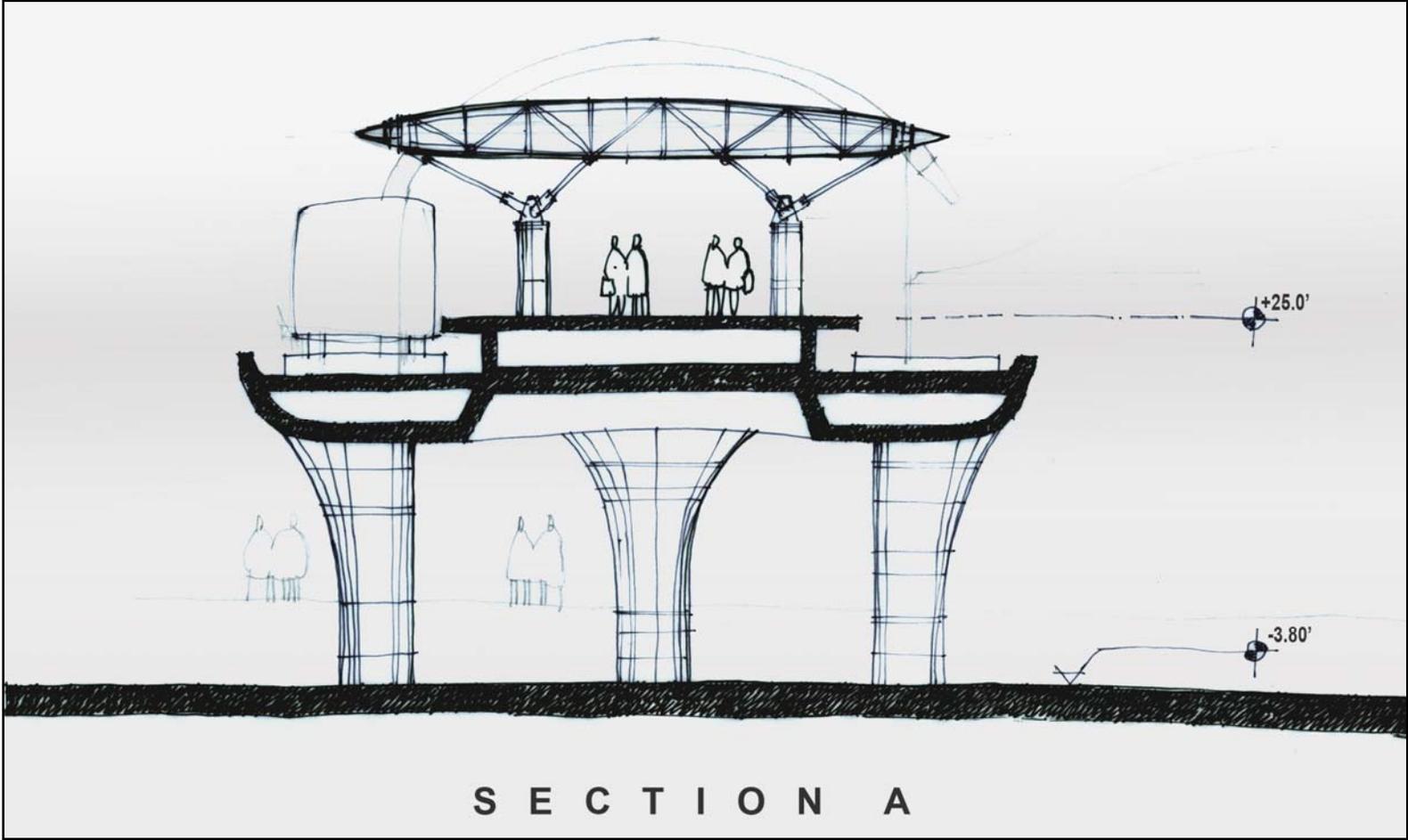
Source: VBN Architects

Figure 2-3  
Airport AGT Station Elevation



Source: VBN Architects

Figure 2-4  
Airport AGT Station Section



Source: VBN Architects

## 2.2 Doolittle Drive Maintenance and Storage Facility (MSF)

Typically, maintenance facilities are located beyond the operational end of an AGT system, where storage areas can be external to the maintenance facility or within the building enclosure. The 2002 Preferred Alternative included a 3-story maintenance facility located over the BART Coliseum Station parking lot. BART is now proposing to relocate the maintenance and storage facility (MSF) to a 3.61-acre parcel at the intersection of Hegenberger Road and Airport Drive (Doolittle site). The Doolittle site is bound by Hegenberger Road on the north, 98<sup>th</sup> Avenue on the south, Airport Drive on the east, and commercial motel property on the west (Figure 2-5). The site, currently owned by the Teamsters Union, is in the process of being acquired by BART. (This is not a new acquisition.) The property was needed under the Preferred Alternative for the AGT guideway alignment, intermediate station, and power distribution system substation as addressed in the EIR/EIS, although it would not have been used for the MSF.

Relocating the AGT maintenance and storage facility to the Doolittle site offers a number of advantages. The Doolittle site offers a more centralized location between the two AGT terminal station sites. The guideway elevation at the Coliseum Station needed to be three stories high in order to cross the BART tracks and Union Pacific Railroad tracks adjacent to the Coliseum Station. To maintain the same elevation, the maintenance facility over the Coliseum Station parking lot also was required to be three stories. At the Doolittle site, the guideway only requires 15.5 feet vertical clearance from grade. Therefore, the height of the maintenance track and maintenance facility can be reduced to two stories. This change results in significant cost savings.

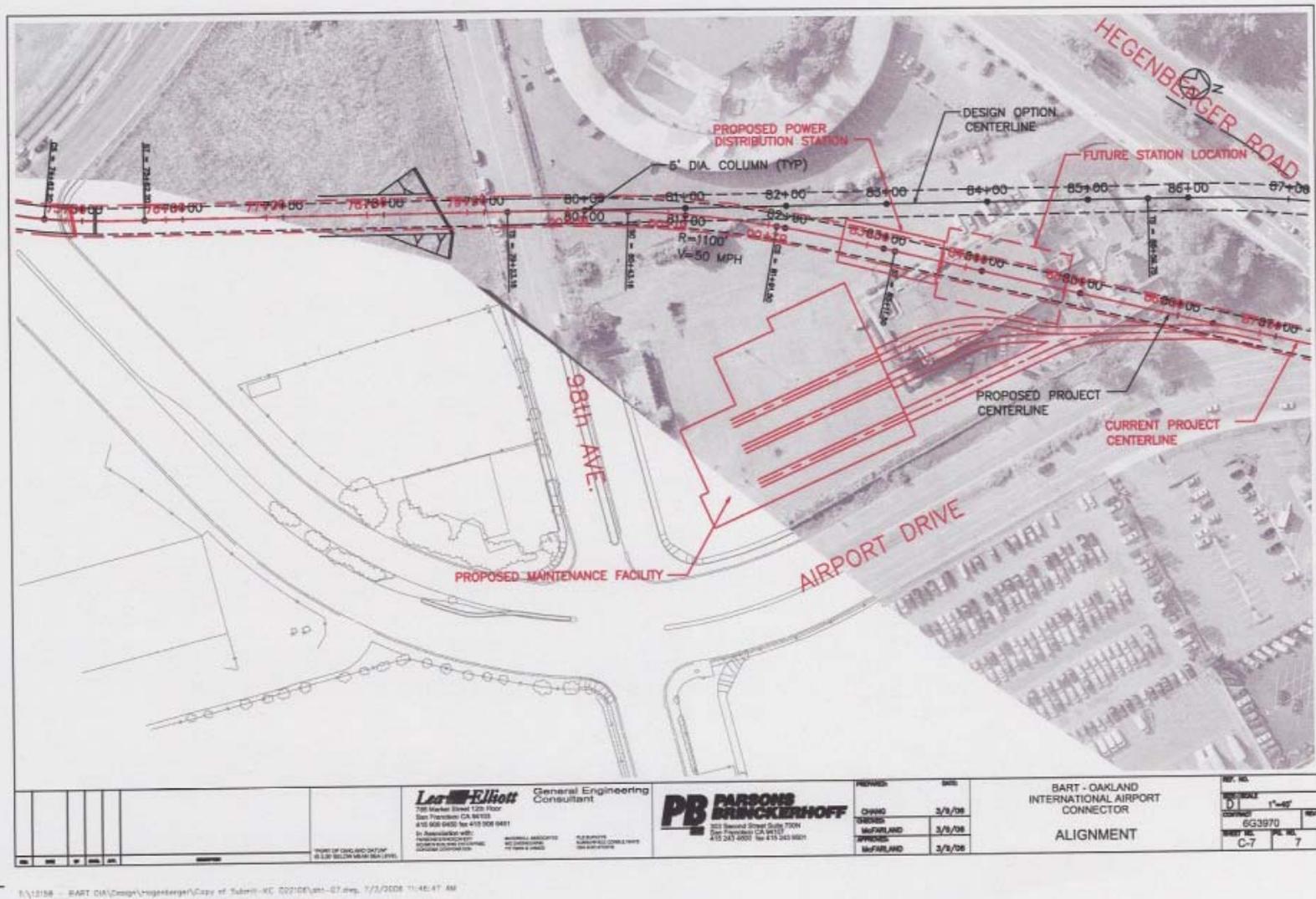
In addition, the Doolittle site is bordered by arterial roadways and commercial land uses, which are less effected by the maintenance activities than the residential land uses along the northern and eastern borders of the Coliseum BART Station parking lot, the previously proposed MSF location.

As in the 2002 Preferred Alternative, the AGT guideway would bisect the Doolittle site. Space for a potential, future intermediate stop is reserved in the central portion of the site. A power distribution system substation would be located underneath the AGT guideway adjacent to the future intermediate station (Figures 2-5 and 2-6). The maintenance and storage facility would be located in the southeast corner of the property, bordered by Airport Drive and 98<sup>th</sup> Avenue.

The maintenance and storage facility would include vehicle maintenance, vehicle washing and cleaning, and repair shops. Spare equipment would also be stored at the maintenance facility. In addition, the AGT system central control, supervisory offices, BART Police facilities, restrooms, lockers, and a break room would be located at the maintenance facility. Central control facilities would allow staff to monitor activities in the system with automated train control consoles and closed circuit television cameras. A typical two-story, 50-foot-high facility would be fully enclosed for operational, security, and noise reasons. The footprint of the structure would be approximately 210 feet long by 170 feet wide or approximately 30,450 square feet. The structure's second level would have the same elevation as the AGT guideway and contain three storage tracks: two for light maintenance and one for heavy maintenance. The second level would be narrower than the first level: 210 feet long by 103 feet wide (21,630

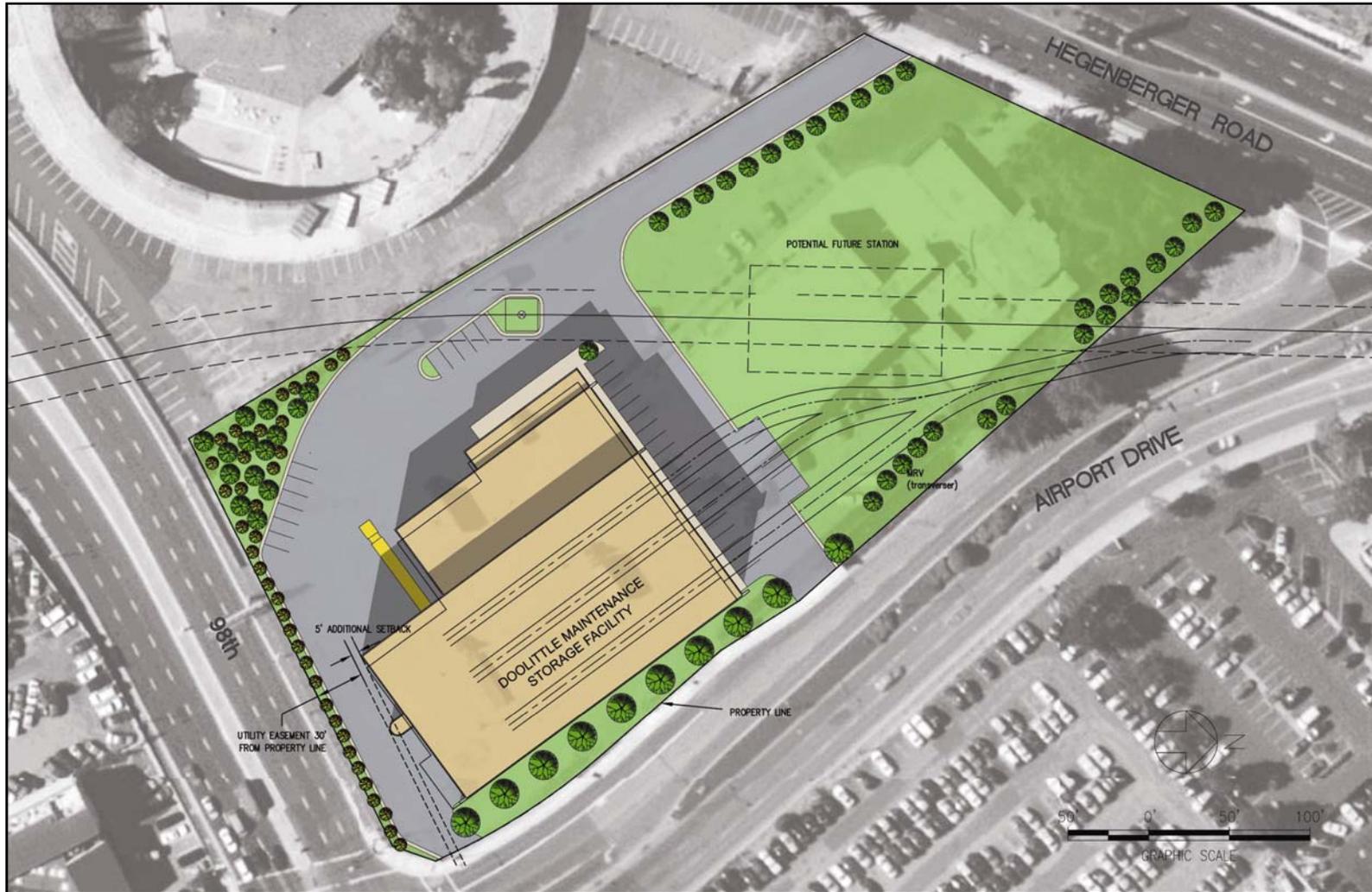
square feet). Thirty-five parking spaces, including two secured spaces for BART Police use, would be provided on-site. Landscaping would be provided along the Airport Drive and 98<sup>th</sup> Avenue street frontages. The facility would have an estimated staff of 41 employees, working three shifts. The maximum number of employees per shift would be approximately 18.

Figure 2-5  
Doolittle Maintenance Facility and Alignment



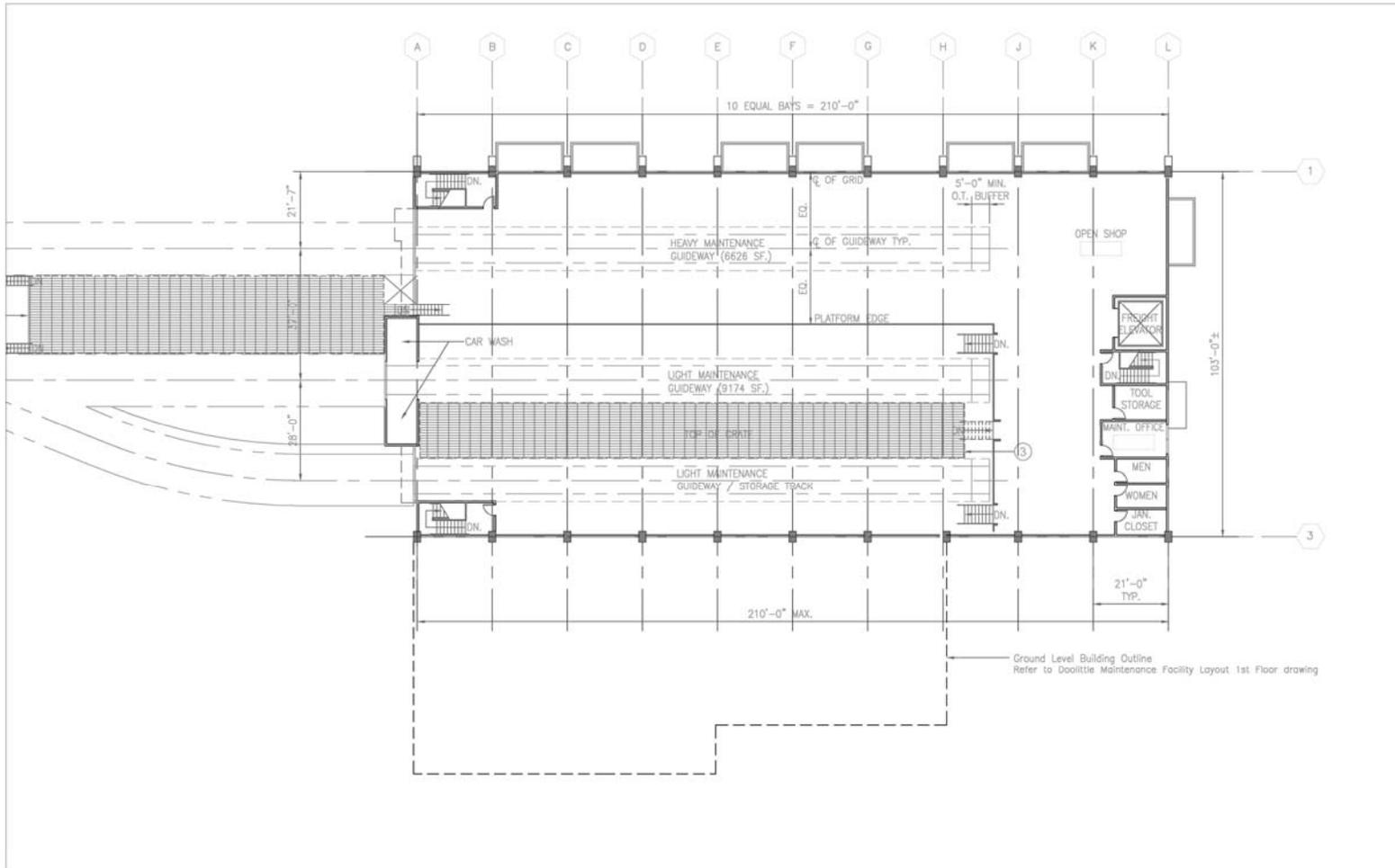
Source: Parsons Brinckerhoff

Figure 2-6  
Doolittle Maintenance Facility Plan View



Source: VBN Architects

Figure 2-7  
Doolittle Maintenance Facility 2<sup>nd</sup> Floor Layout



Lea+**Elliott** DOOLITTLE MAINTENANCE FACILITY LAYOUT 2ND FLOOR

2/7/2006

Source: Lea+Elliott, Inc.

Figure 2-8  
Doolittle Maintenance Facility 1<sup>st</sup> Floor Layout

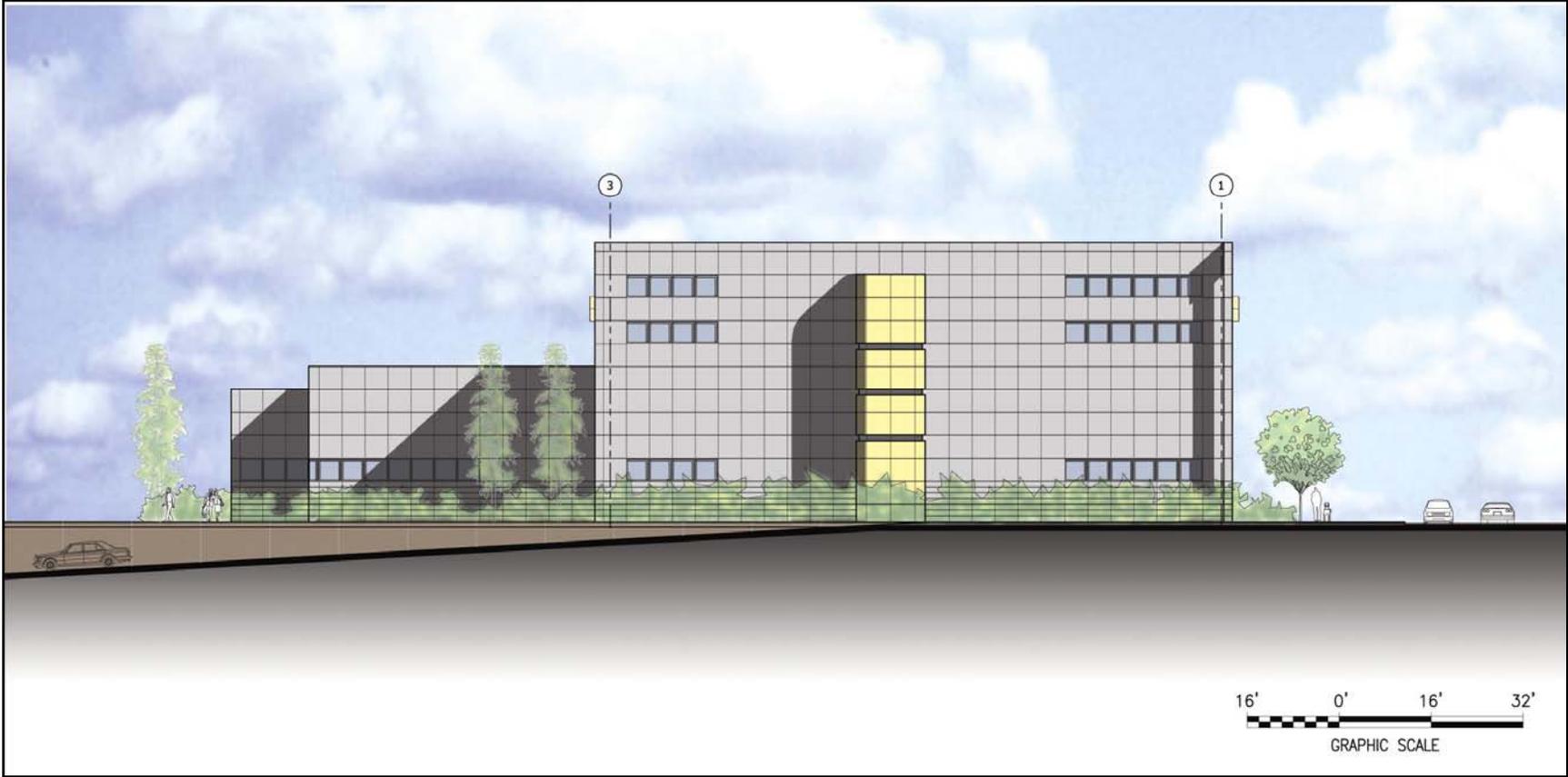


**Lea+Elliott** DOOLITTLE MAINTENANCE FACILITY LAYOUT 1ST FLOOR

7/26/2006

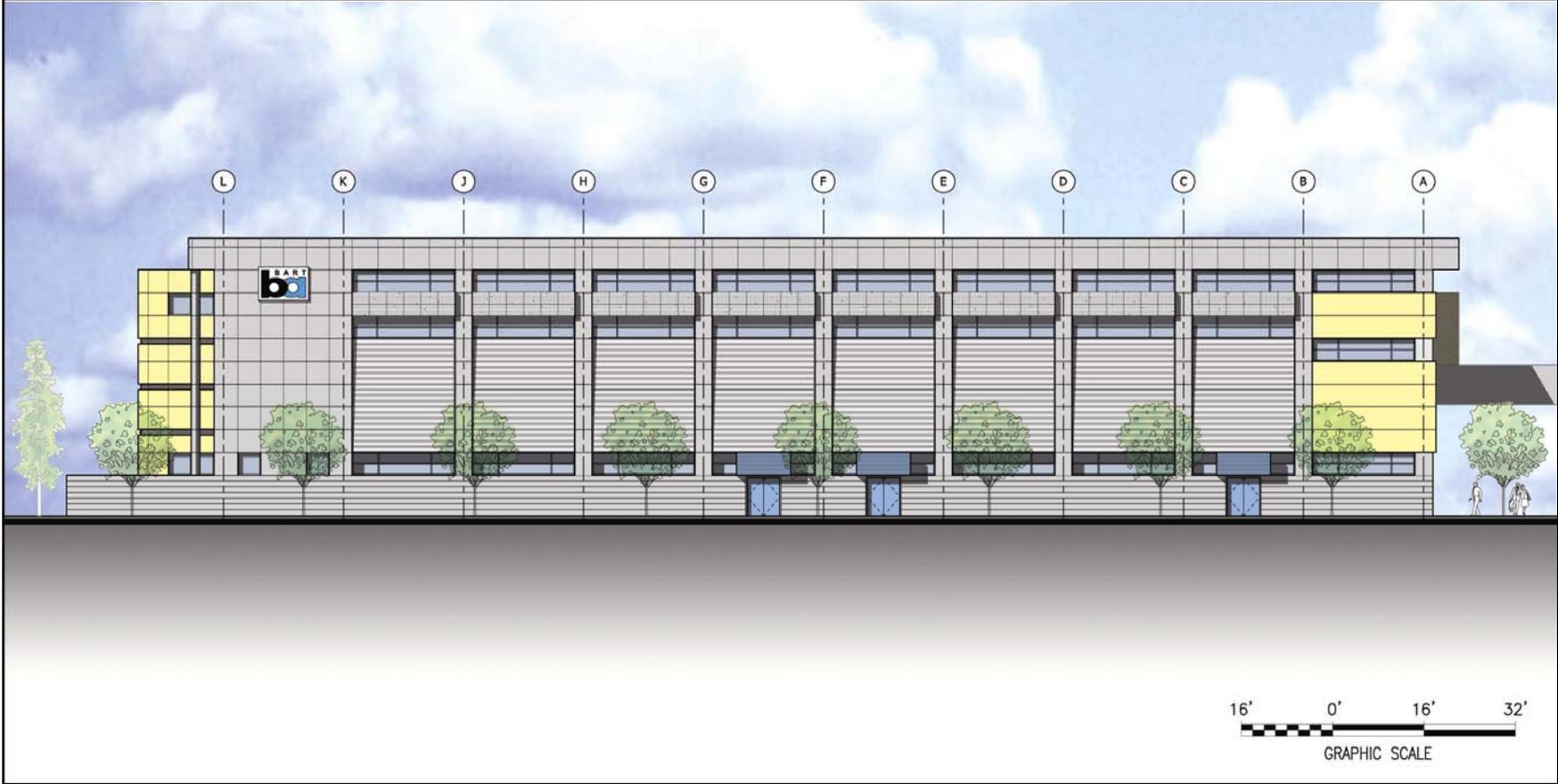
Source: Lea+Elliot, Inc.

Figure 2-9  
Doolittle Maintenance Facility South Elevation



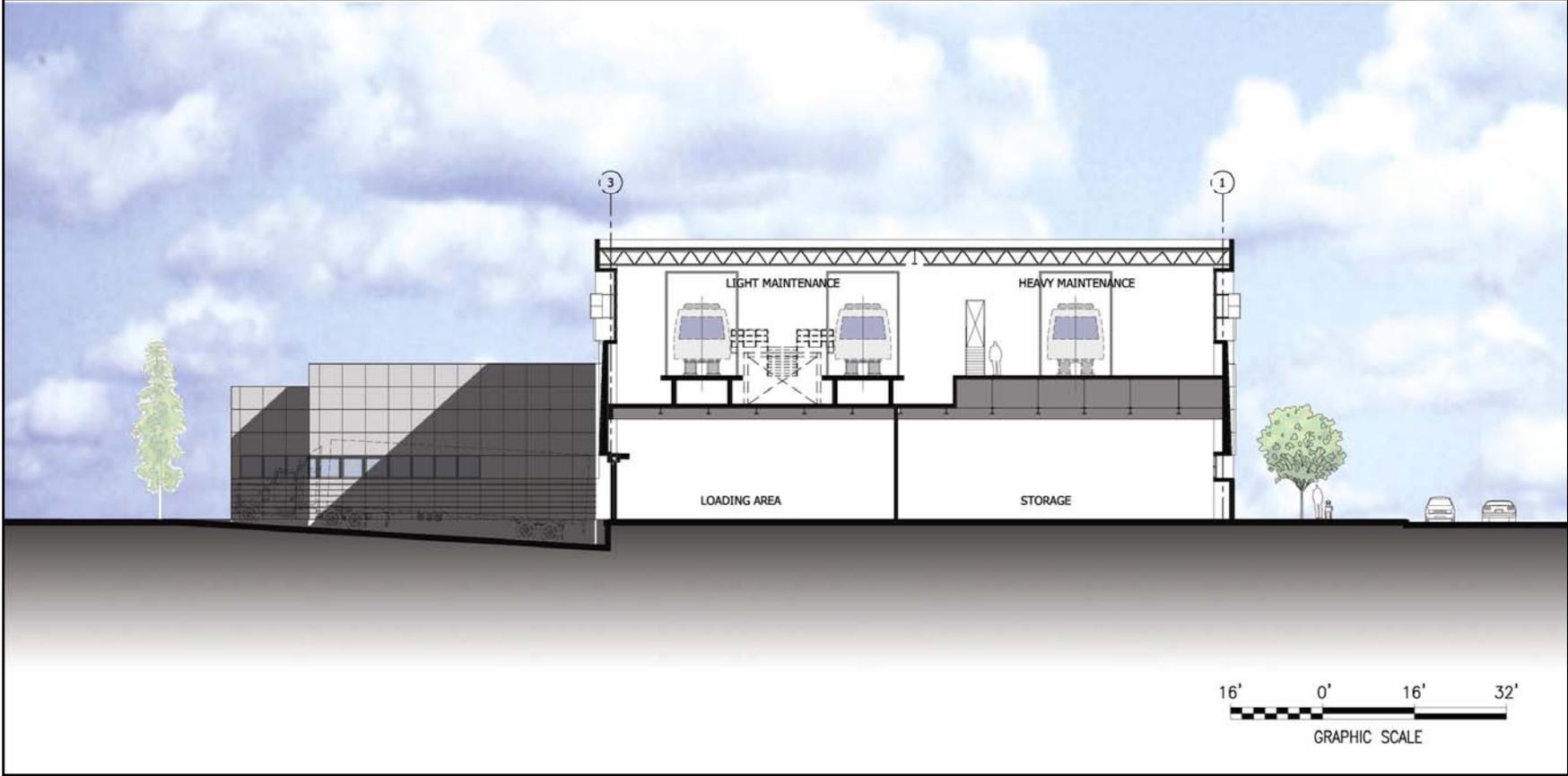
Source: VBN Architects

Figure 2-10  
Doolittle Maintenance Facility East Elevation



Source: VBN Architects

Figure 2-11  
Doolittle Maintenance Facility Section



Source: VBN Architects

## 2.3 Elimination of the Edgewater Drive Intermediate Stop and Revised AGT Alignment on Hegenberger Drive at Edgewater Drive

For the AGT segment between Edgewater Drive and Interstate 880, the 2002 Preferred Alternative identified an alignment along the west side of Hegenberger Road. At the south end of this segment, the alignment transitioned between the west curb and the median of Hegenberger Road. At the north end of this segment, the alignment crosses Interstate 880 on the west side of Hegenberger Road.

The curbside alignment along the west side of Hegenberger Road was chosen as the Preferred Alternative in order to provide an intermediate station stop near the northwest corner of the Hegenberger Road/Edgewater Drive intersection. The intermediate station was part of a larger, transit-oriented development proposed in the northwest quadrant of the intersection (Figure 2-12a). Without the attraction of an intermediate stop at Edgewater Drive, the AGT alignment would have been located in the median of Hegenberger Road in order to avoid crossing two gas stations located on the corner of Edgewater Drive and Hegenberger Road. Both service stations have hazardous materials issues related to leaking underground storage tanks.

For reasons independent of BART and the Connector project, the transit-oriented development never came to fruition, and the site was purchased by Wal-Mart. Following consultation between BART and the City of Oakland, both parties agreed that without a high-intensity transit-oriented style development, an intermediate stop at Edgewater was not justified. Subsequently, the site has been developed as a Wal-Mart with associated auto-oriented retail development.

Elimination of the intermediate station site at Edgewater Drive allowed the guideway to be realigned to the Hegenberger Road median to avoid the two service stations at Edgewater Drive. The FEIR/FEIS identified the partial acquisition of these properties, as well as other acquisitions, as a significant socio-economic impact. Relocating the AGT alignment to the median of Hegenberger Road would eliminate the need to acquire these properties and would reduce the level of this socioeconomic impact, as well as potential hazardous materials impacts related to the underground storage tanks at the two service stations.

The revised alignment is located in the median of Hegenberger Road between Edgewater Drive and I-880 before transitioning to the west side of Hegenberger Road approximately 300 feet south of the I-880 freeway southbound on ramp (Figure 2-12b). The additional distance that the AGT would travel in the Hegenberger Road median compared to the Preferred Alternative is approximately 1,000 feet.

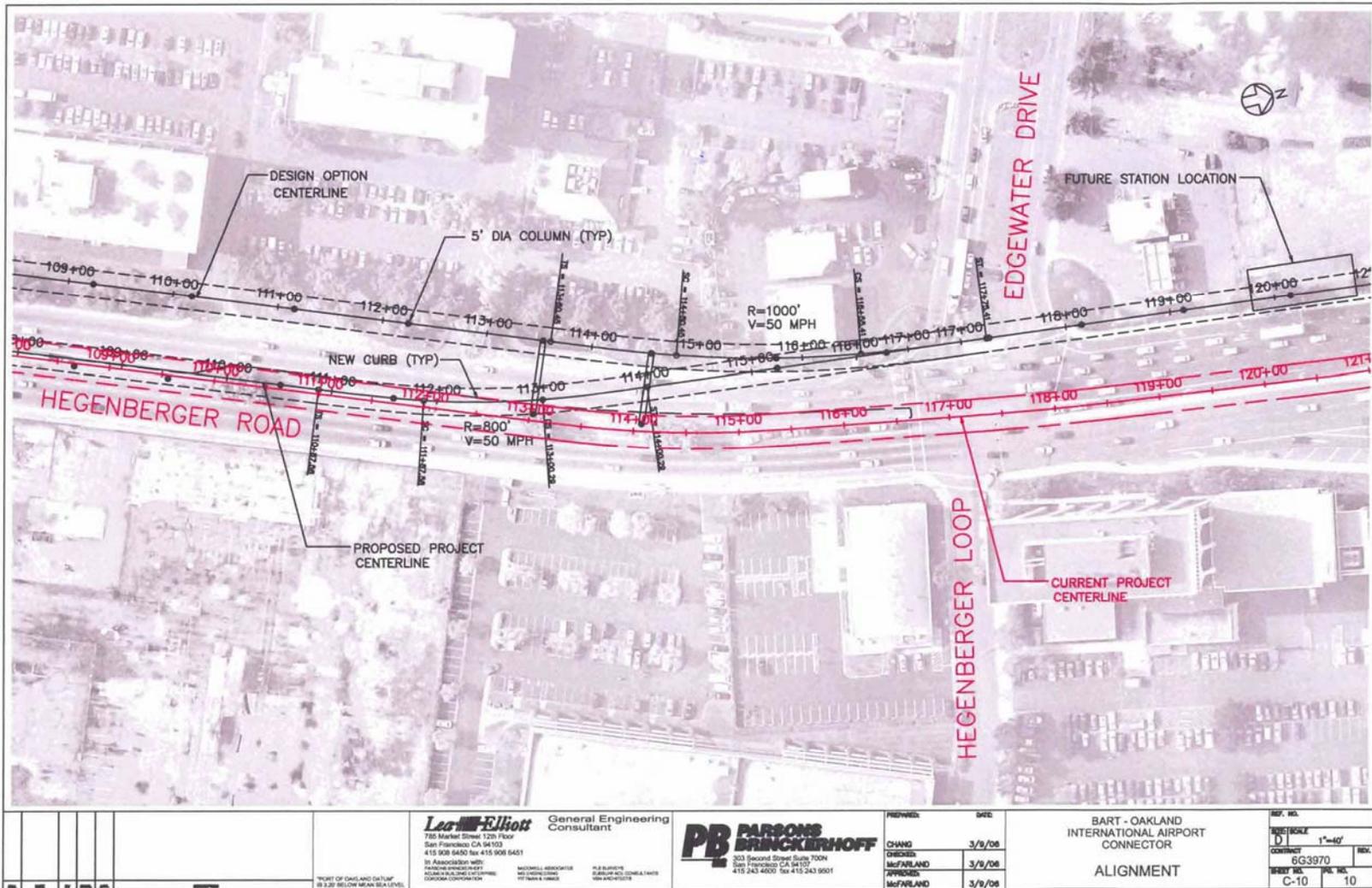
Relocation of the AGT alignment from the west side of Hegenberger Road to the median would largely preclude the possibility of an intermediate stop at Edgewater Drive. The FEIR/FEIS estimated that approximately 4,520 of the 13,540 AGT patrons in 2020 would be generated from the two intermediate stops (Edgewater and Doolittle). Updated projections by Wilbur Smith Associates, based on historic growth of the shuttle bus service, estimate approximately 14,700

patrons using the AGT to OIA in 2020 (WSA, September 2005). This indicates that even without patronage from the intermediate AGT stops, future ridership could exceed the original ridership estimates for the Connector project. (For more on ridership, see Section 3.1 Transportation.)

The Edgewater intermediate stop was also the alternate location for a power distribution system substation. Elimination of the Edgewater intermediate stop required the relocation of the power substation. The revised alignment for the AGT guideway between Edgewater Drive and I-880 is in the Hegenberger Road median. The roadway median does not provide enough width for the power substation. The primary location proposed for the substation is now the Caltrans-owned, GMC-occupied parcel north of I-880. (See discussion of the Revised Median Alignment-Coliseum Way to Elmhurst Channel in Section 2.4 below.) An alternate location for the power substation now is proposed on the east side of Hegenberger Road, in the bend of the southbound I-880 on-ramp just south of I-880 (Figure 2-12b). The power substation would be constructed adjacent to the south boundary of the irregularly-shaped parcel. The parcel is owned by Caltrans. This alternate site would be used for the substation if the proposed substation site on the Caltrans (GMC) property north of I-880 is not feasible.

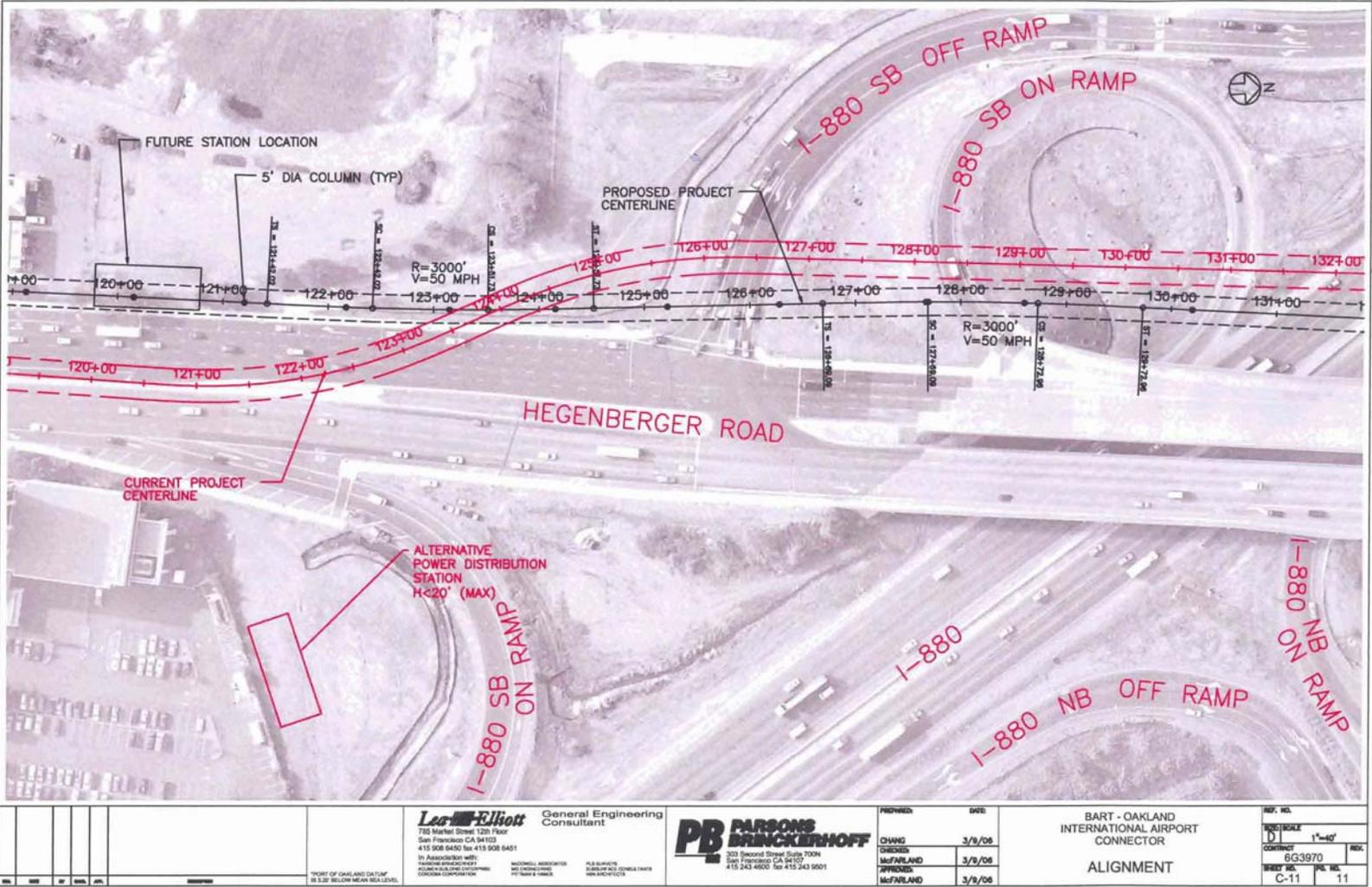
As with the other power distribution system substations, the structure would be a concrete building approximately 1,000 square feet in size, with a maximum width of 26 feet and height of approximately 14 feet. Primary commercial power lines would enter the substation through underground duct banks, and secondary power feeders to the AGT guideway would exit the substation through a second set of underground ducts and pass under Hegenberger Road to connect with the AGT guideway in the median. This is a departure from the description of the power distribution system substations presented in the FEIR/FEIS.

Figure 2-12a  
Revised Edgewater Drive Alignment



Source: Parsons Brinckerhoff

Figure 2-12b  
Revised Edgewater Drive Alignment



Source: Parsons Brinckerhoff

## 2.4 Revised Median Alignment-Coliseum Way to Elmhurst Channel

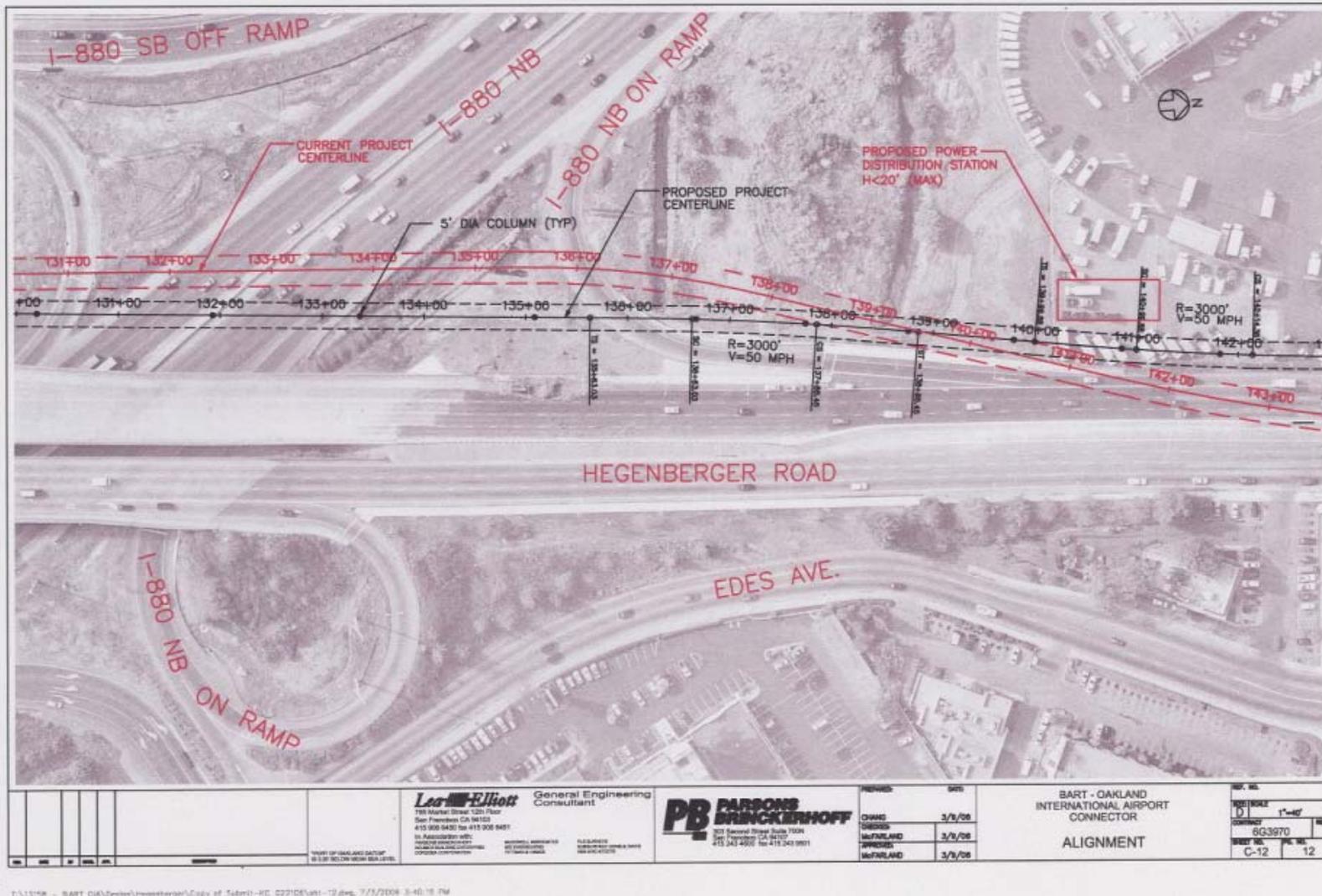
For the AGT segment north of I-880, the 2002 Final EIR/Final EIS identified two design options for the alignment between Coliseum Way and Elmhurst Channel. The first option, the Preferred Alignment, was located along the west side of Hegenberger Road over the existing curb lane. In the second design option, the AGT alignment was located in the median of Hegenberger Road. For the median option, the alignment transitioned back to the west side of Hegenberger Road at each end of the Coliseum Way to Elmhurst Channel median segment, where it joined the Preferred Alignment (Figures 2-13a through 2-13c).

The Revised Median Alignment for the Coliseum to Elmhurst Channel segment is very similar to the median option analyzed in the FEIR/FEIS; the primary difference is that the proposed Revised Median Alignment extends a greater distance in the Hegenberger Road median than the 2002 Preferred Alternative. For the 2002 median option, the transition between curb and median occurred just north of Coliseum Way at the south end and near the office building at 675 Hegenberger Road at the north end. The proposed Revised Median Alignment extends the distance of the alignment in the median at both the north and south end of the 2002 median segment; approximately 1,550 feet in the median compared to 850 feet for the original 2002 median option.

As outlined in the 2002 FEIR/FEIS, the Preferred Alternative created socioeconomic (property acquisition), visual quality, and vibration impacts along the north side of Hegenberger Road. Due to refinements in the median alignment, BART now considers the Revised Median Alignment for the Coliseum Way to Elmhurst Channel segment of the AGT alignment to be preferable; it reduces property acquisition and environmental impacts to the west side of Hegenberger Road without adding new impacts to properties along the east side of Hegenberger Road.

In addition to the revised alignment in the Coliseum Way to Elmhurst Channel segment of the AGT, BART is proposing a power distribution system substation on the west side of Hegenberger Road south of Coliseum Way (Figure 2-13a). The proposed location is adjacent to the guideway as it transitions between the west side of Hegenberger Road and the Hegenberger Road median. The location is on a portion of a parcel owned by Caltrans and leased by GMC Trucks. This parcel was previously identified a partial acquisition in the FEIR/FEIS. As with the other power substations, the structure would be a concrete building approximately 1,000 square feet in size. The maximum height would be less than 20 feet. Primary commercial power lines would enter the substation through underground duct banks, and secondary power feeders to the AGT guideway would exit the substation through a second set of underground ducts to connect with the AGT guideway. This is a minor departure from the description of the power distribution system substations presented in the FEIR/FEIS, which described the power distribution system substations as under the guideway and at either the terminal stations or intermediate stops. If for any reason, this site is not feasible for the power distribution system substation, the alternate substation location is south of I-880, adjacent to the I-880 southbound on-ramp. (See the description of the alternate substation site in Section 2.3 above.)

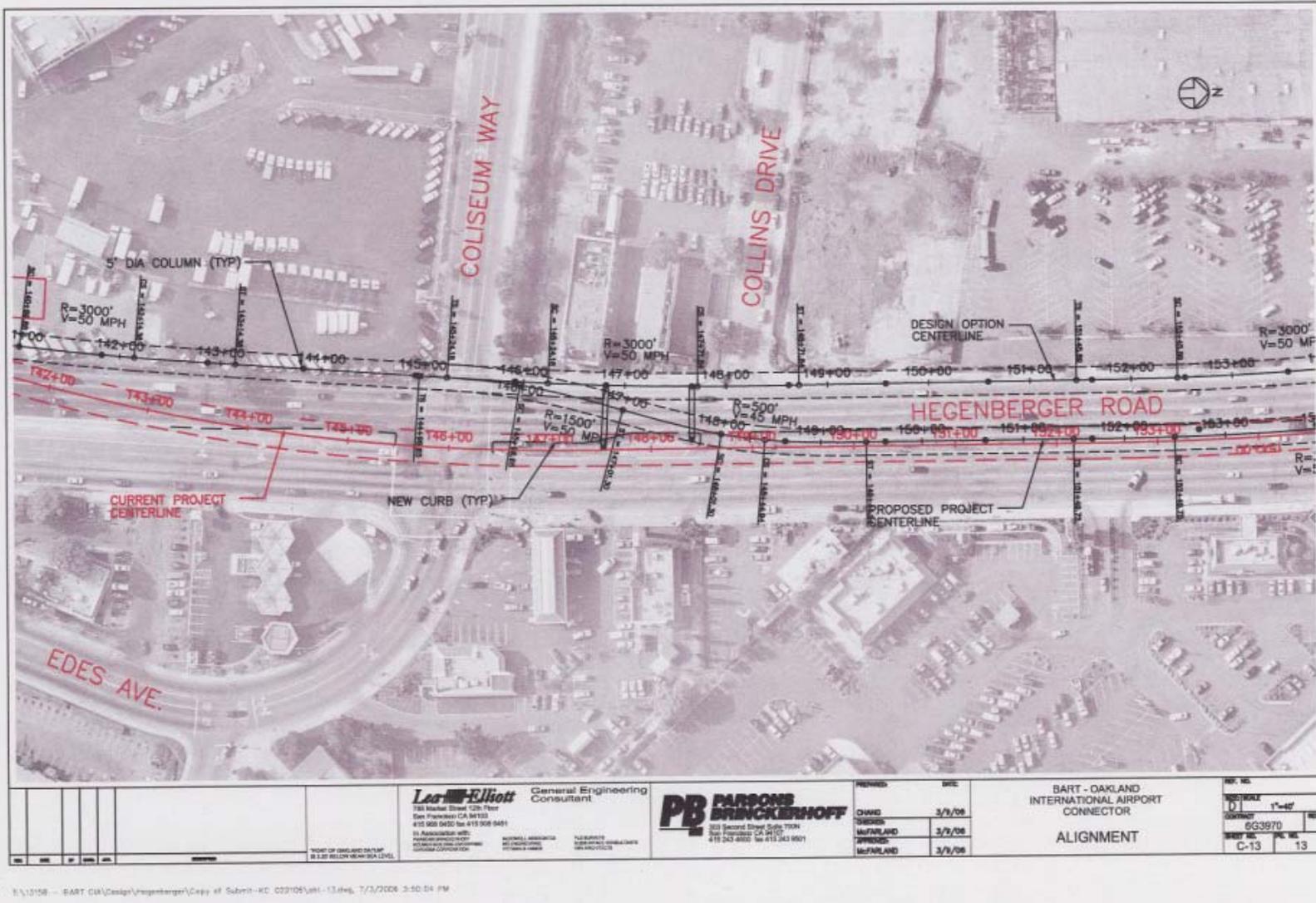
Figure 2-13a  
Revised Median Alignment



Source: Parsons Brinckerhoff

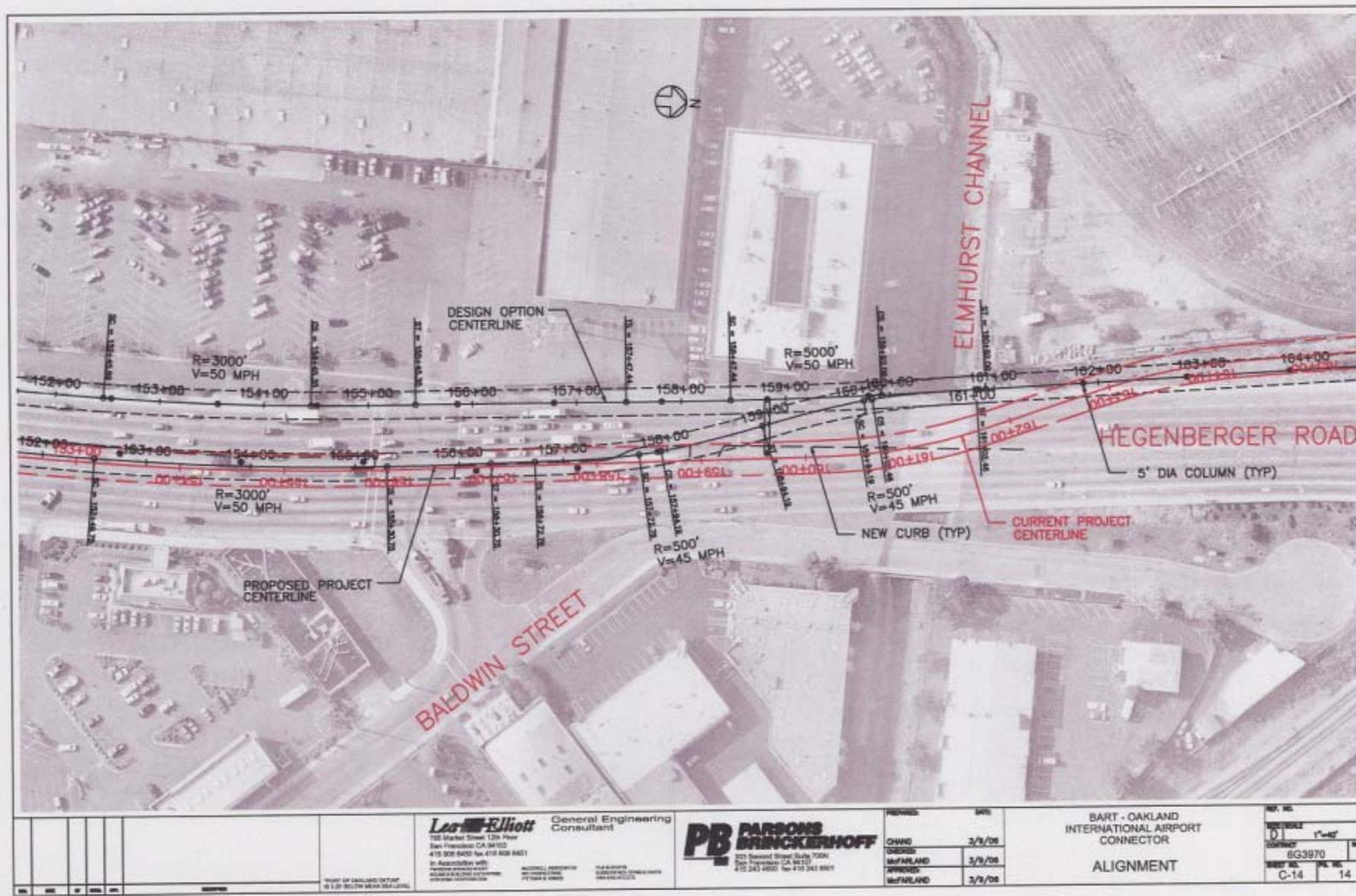
OAC Addendum Draft November 2006

Figure 2-13b  
Revised Median Alignment



Source: Parsons Brinckerhoff

Figure 2-13c  
Revised Median Alignment



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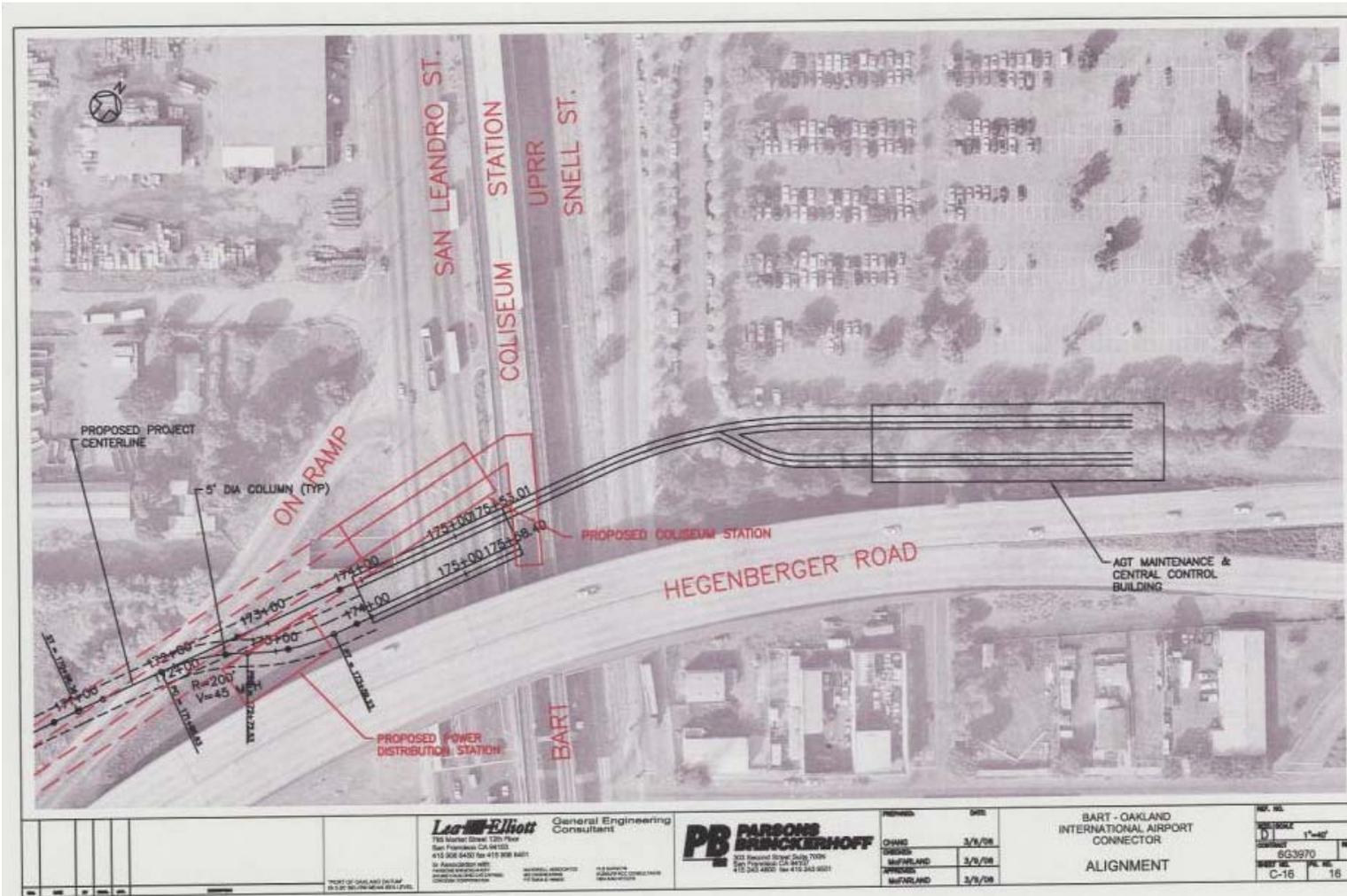
Source: Parsons Brinckerhoff

## 2.5 Changes at Coliseum Station

Typically, maintenance facilities are located beyond the operational end of an AGT system, where storage areas can be external to the maintenance facility or within the building enclosure. The 2002 Preferred Alternative included a 3-story maintenance facility located over the BART Coliseum Station parking lot. BART is now proposing to relocate the maintenance and storage facility (MSF) to the Doolittle site at the intersection of Hegenberger Road and Airport Drive. (See Section 2.2 above.) Figure 2-14 illustrates the previous location of the MSF over the Coliseum BART Station parking lot. Figure 2-15 illustrates the current plan view of the Coliseum AGT Station. In addition to offering a number of advantages for the AGT system, such as a more centralized location and lower costs, the relocation of the MSF to the Doolittle site will eliminate MSF-related impacts to the Coliseum BART Station area. These benefits are discussed in the environmental evaluation in Section 3 below.

Relocation of the MSF from the Coliseum BART Station to the Doolittle site would also affect the location of the power distribution system substation at the Coliseum BART Station end of the AGT alignment. Originally, the power substation was to be located within the footprint of the MSF. Relocation of the MSF to the Doolittle site required that a new location be found for the power substation for the Coliseum end of the AGT system. The revised location for the power distribution system substation is on San Leandro Street across from the Coliseum BART Station, on a triangular parcel formed by San Leandro Street, Hegenberger Road, and the on-ramp from San Leandro Street to Hegenberger Road (Figure 2-14). The only development on the parcel is the Arroyo Viejo Creek box culvert that is located under the northwestern corner of the triangular-shaped site. The site is used for construction parking or storage. As with the other power distribution system substations, the substation would be a concrete building approximately 1,000 square feet in size, with a maximum width of 26 feet and height of approximately 14 feet. Although not directly under the guideway, the substation would be immediately adjacent to it.

Figure 2-14  
Changes at Coliseum Station



Source: Parsons Brinckerhoff





## 3.0 Environmental Evaluation

The purpose of this section is to evaluate the revisions to the 2002 Preferred Alternative and identify any additional effects that might result from those revisions or from changes in the surrounding environment since the FEIR/FEIS was published in March 2002. All the areas of the original 2002 analysis are revisited in this Addendum. The areas of evaluation include transportation, land use, socioeconomics, visual quality, cultural resources, community services, utilities, geology, hydrology and water quality, biological resources, noise and vibration, air quality, energy, hazardous materials, environmental justice, other CEQA/NEPA considerations, and Section 4(f) evaluation. Potential operational and construction affects are discussed under each subject heading. The five locations with project modifications are discussed separately under each subject topic.

### 3.1 Transportation

The transportation analysis in the FEIR/FEIS evaluated the operational and construction effects on freeways, intersections, access to businesses, parking, transit, and pedestrian and bicycle circulation.

In the years between publication of the FEIR/FEIS and this Addendum, elements of the Airport Development Plan have been completed, including a grade separation at the intersection of 98<sup>th</sup> Avenue and Doolittle Drive, a grade separation at the intersection of Air Cargo Road (Airport Road) and Airport Drive, and the extension of 98<sup>th</sup> Avenue through the airport to Bay Farm Island in the City of Alameda. These planned improvements were largely on airport property. Hegenberger Road and other streets in the project vicinity, both north and south of I-880, are largely unchanged from the description provided in the 2002 FEIR/FEIS. Street widths, lane configurations, and street access are generally the same as in 2002.

While most U.S. airports experienced decreased passenger activity for a period of time following September 11, 2001, Oakland International Airport's passenger activity did not appear to suffer. The total number of air passengers using OIA in 2000 was approximately 10.6 million, in 2002--12.7 million, and in 2004—14.1 million. The existing AirBART shuttle bus patronage has grown apace. The actual average daily AirBART patronage, without any change in technology or amenities, was approximately 64 percent higher in 2004 than the AirBART patronage forecast in the FEIR/FEIS for 2005.<sup>2</sup>

Traffic volumes also have increased in the vicinity of the OAC project corridor. Based on annual average daily traffic reported by the California Department of Transportation,<sup>3</sup> the existing traffic volumes along I-880 north of Hegenberger Road are approximately 237,000 daily vehicles. This is an increase of approximately 11 percent compared with traffic volumes presented in the FEIR/FEIS document. Along Hegenberger Road, peak hour traffic south of Edgewater Drive has increased from 2,790 vehicles during the am peak hour and 3,020 vehicles

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<sup>2</sup> Wilbur Smith Associates, BART to Oakland Connector Ridership Update-Final Report, September 19, 2005, pages 1-1, 3-3, and 4-1.

<sup>3</sup> California Department of Transportation, Average Annual Daily Traffic, 2004.

during the pm peak hour cited in the FEIR/FEIS to 3,350 vehicles in the am peak hour and 3,935 vehicles in the pm peak hour.<sup>4</sup> This is a 20 percent increase in the am peak hour and a 30 percent increase in pm peak hour traffic.

### **3.1.1 Airport AGT Station Relocation**

The location of the Airport AGT Station was originally planned on the west side of a proposed airport parking structure, which was to be constructed over the existing parking area. The AGT station would have been adjacent to the airport loop road and a new, enlarged airport terminal. The airport plan changed, and the parking structure was never constructed and the plan for a double-decked loop road has been replaced by a plan for a series of widened roadways at surface level.

The relocated AGT terminal station is now proposed between existing Terminal 1 and Terminal 2, a more central location. The AGT trains would enter and exit the terminal area on an elevated guideway. The AGT station itself would be an aerial structure placed over the Port's at-grade roadway system.

The revised AGT station is very similar to the Airport AGT Station described in the DEIR/DEIS and FEIR/FEIS. The AGT station would be supported by columns placed on the three pedestrian islands that serve public and private transit operators. A minimum roadway clearance of 17 feet would be provided for travel lanes. The aerial AGT station would retain existing airport parking and not interfere with the airport's at-grade roadways. The relocated airport AGT station would not affect any off-airport transportation conditions.

As noted in the FEIR/FEIS, construction of the AGT station and the guideway at OIA would most likely require temporary traffic lane closures. Depending on the duration and extent of the lane closures, and whether airport development plan (ADP) construction occurs simultaneously with the AGT station construction, the disruption to local traffic circulation could be potentially significant. In addition, construction of the AGT station at OIA would temporarily reduce the available parking supply. The FEIR/FEIS included mitigation measures intended to reduce these construction impacts. Implementation of Mitigation Measure C-TR-1(iii) (Coordinate with ADP Construction Management Plans for Vehicular Circulation), C-TR-2(ii) (Coordinate with ADP Construction Plans for Pedestrian Circulation), and C-TR-3(ii) (Coordinate with ADP Construction Management Plans for Parking Conditions) would reduce these impacts to a less-than-significant level.

### **3.1.2 Doolittle Drive Maintenance and Storage Facility (MSF)**

Access to the maintenance and storage facility would be provided from Hegenberger Road, similar to existing site access. The project's street frontage would be similar to current conditions; no sidewalks, bicycle lanes, or transit stops would be affected. There would be no change to pedestrian, bicycle, or transit conditions.

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<sup>4</sup> Alameda County Congestion Management Agency, Projected AM and PM Peak Hour Volumes for 2005.

An estimated 41 employees would work at the maintenance and storage facility, divided into three shifts. The maximum number of employees during one shift is estimated to be 18. Assuming a worst-case scenario in which every employee traveled individually to the facility by auto, the maintenance facility would generate approximately 82 daily vehicle trips, and approximately 36 vehicle trips (18 x 2) during a shift change. Roadways surrounding the site (Hegenberger Road, Airport Drive, 98<sup>th</sup> Avenue) are all high-volume, arterial roadways. Hegenberger Road, which provides site access, is a 6-lane, major arterial street adjacent to the Doolittle site. The two-way volume on Hegenberger Road just south of Edgewater Drive is approximately 3,350 vehicles during the morning peak hour and 3,935 vehicles during the evening peak hour.<sup>5</sup> The addition of 36 MSF-related vehicle trips to Hegenberger Road during the morning peak hour would be approximately 1 percent of the peak hour traffic, and would not measurably affect local traffic conditions. The revised project also would not measurably affect freeway volumes on Interstate 880, which currently carries approximately 237,000 average daily trips.<sup>6</sup> Relocation of the maintenance facility would not affect the guideway alignment along the Hegenberger Road median, including placement of supporting columns. Therefore, there would be no additional affects on left-turn movements or access to businesses in the project corridor.

Approximately 35 parking spaces would be provided on-site, providing enough space for all employees to be accommodated on-site. There would be no affect on off-site parking conditions.

Construction impacts for the maintenance facility would generally be confined to the Doolittle site itself and would not require construction in the roadway. Access to other businesses would not be affected.

### **3.1.3 Revised Alignment at Edgewater Drive**

The revised alignment for the AGT segment between Edgewater Drive and I-880 would be located in the median of Hegenberger Road, compared to the Preferred Alternative, in which the guideway was located just west of Hegenberger Road. The additional distance proposed for the alignment in the median compared to the Preferred Alternative is approximately 1,000 feet.

In this vicinity, Hegenberger Road is an eight-lane arterial roadway providing access to I-880. There is no parking along this segment of Hegenberger Road. Although there is business frontage in this segment of Hegenberger Road, there is no direct access from the street. The revised alignment also would not affect traffic volumes, circulation, left-turn movements, or access to businesses in the project corridor. No parking would be affected. No pedestrian, bicycle, or transit operations would be affected.

Relocation of the AGT alignment from the west side of Hegenberger Road to the median would largely preclude the possibility of an intermediate stop at Edgewater Drive, with the resulting loss of patronage from the Edgewater intermediate stop. However, it should be noted that the

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<sup>5</sup> Alameda County Congestion Management Agency, *Traffic Volumes for Arterial Roadways*, 2005.

<sup>6</sup> California Department of Transportation, *annual average daily traffic counts*, 2004.

2002 EIR/EIS forecasts were conservative, largely because they started with 1999 base year data, the latest available at the time the OAC ridership model was built. Since then, existing bus shuttle patronage, even with no change in technology or amenities, has grown faster than could be anticipated.

In September 2005, Wilbur Smith Associates updated passenger projections for the Oakland Airport Connector (WSA, September, 2005). Actual 2004 average daily AirBART shuttle bus patronage was about 64 percent higher than the EIR/EIS model forecasted for the 2005 No-Action alternative (continued AirBART service). While most U.S. airports experienced decreased passenger activity for a period of time after September 11, 2001, Oakland International Airport's passenger activity did not appear to suffer. Oakland was one of the few U.S. airports to have an increase in passengers between 2000 and 2001 (a 7 percent increase). This trend continued in 2002; for example, while SFO enplanements were down 10 percent, Oakland enplanements increased 10 percent over 2001, and this trend continued through 2003 (WSA, 2005).

The WSA analysis assumed a transit connection between Coliseum BART and OIA, without any intermediate stations. WSA undertook three separate analyses to compare the original EIR/EIS forecasts and updated passenger forecasts for OAC Ridership. The first approach involved the development of a "simplified mode choice curve" using empirical travel data (travel data from the latest available MTC Air Passenger Surveys). The mode choice model used equations based on some form of (real or perceived) cost differentials between competing travel modes to predict the decisions of travelers in their choice of travel modes. The second approach, the "historic growth model," used the strong correlation between overall air passenger activity at OIA and AirBART patronage to develop a future AGT passenger growth curve. The historic growth model had two scenarios: a "high-growth scenario" and a "low-growth scenario." A third approach compared forecasted daily ridership with data from 10 similar transit systems in the United States already operating rail connections to international airports.

The initial forecasts presented in the WSA report represented a range of possible patronage from a future AGT BART to airport connector, including a possible low end, a possible high end, and a middle range of results. For example, daily ridership projected for the year 2021 ranged from a low of 9,700 riders for the EIR/EIS model, through 15,000 (simplified mode choice), 15,300 (historical growth model-low scenario), to 32,800 (historical growth model-high scenario). The two middle range scenarios (Simplified Mode Choice Curve and Historic Growth Model-Low Scenario) both predicted project ridership of the same order of magnitude. The use of the Historic Growth Model-low scenario was the consensus choice for the most suitable ridership forecast. In addition, it seems likely that the results forecasted by the Historic Growth Model-Low Scenario were achievable due to a number of factors. For example, the existing bus shuttle already demonstrates a high performance level, matching or exceeding the achievement of half the 10 existing in-place rail systems reviewed.

The 2002 EIR/EIS estimated approximately 13,540 daily AGT riders in 2020 for the Preferred Alternative, which included two terminal stations and two intermediate stations. Of the 13,540

daily patrons, approximately 4,520 were expected to be generated by the two intermediate stations.<sup>7</sup> Loss of the Edgewater Intermediate Station would result in about 2,260 fewer daily patrons (4,520/2) than projected in the EIR/EIS. However, based on historic ridership trends, the updated WSA report forecasts 14,700 daily riders in 2020 for an AGT connector project without any intermediate stations. This indicates that even without patronage from the intermediate stations, future Connector ridership is expected to exceed original estimates.

As noted in the FEIR/FEIS, in order to construct the guideway in the median, two lanes of traffic would be closed compared to one lane of traffic when construction is on the west side of Hegenberger Road. Thus, lengthening the distance that the AGT alignment travels in the median proportionally increases the potential effect on traffic conditions during construction. Depending on the duration of the additional traffic lane closures and the extent of the closure, the disruption to local traffic circulation could be significant. Mitigation measures C-TR-1(i) (Restripe Hegenberger Road) and C-TR-1(ii) (Develop and Implement a Construction Traffic Management Plan) would reduce these potential impacts to a less-than-significant level.

Construction of the electric power distribution substation east of Hegenberger Road would not have an operational impact on transportation in the project area. Placing the substation off the immediate Hegenberger Road frontage would also remove some of the AGT construction activity from Hegenberger Road, reducing the immediate impact to Hegenberger Road. This would be a benefit of the revised substation location.

### **3.1.4 Revised Median Alignment-Coliseum Way to Elmhurst Channel**

The revised median alignment for the Coliseum Way-Elmhurst Channel segment of the AGT alignment would relocate the guideway from over the curb lane along the west side of Hegenberger Road to the Hegenberger Road median. The Revised Median Alignment extends further in the median than the design option for a median alignment that was evaluated in the FEIR/FEIS. The 2002 design option occupied approximately 1,000 feet of the Hegenberger Road median; the Revised Median Alignment occupies approximately 1,700 feet of the median.

Intersection operations in the project corridor depend on traffic volumes and lane configurations at intersections. The Revised Median Alignment would not affect either of these factors. Traffic impacts would be the same as the Preferred Alternative. As noted in the FEIR/FEIS, preliminary engineering for the median option determined that the columns for the AGT guideway could be constructed in the median of Hegenberger Road without requiring the removal of any left-turn lanes. However, as with the Preferred Alternative, unforeseen circumstances may require the permanent removal or shortening of left-turn lanes or the redesign or relocation of driveways at certain locations. Depending on the location and duration of traffic lane changes, disruption could be significant. Mitigation Measure TR-2(i) (Accommodate any displaced left-turn movements at alternate locations) would apply to the Revised Median Alignment and would reduce circulation impacts to a less-than-significant level.

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<sup>7</sup> Dowling Associates, Inc., Revisions to Transit Ridership Forecasts, February 12, 2002, Table 2.

The Revised Median Alignment would have a greater potential effect on parking than the Preferred Alternative. Construction of the guideway in the median would require widening the median to accommodate the AGT support columns. In order to maintain the existing lane configuration, approximately 25 curb parking spaces would be removed on the east side of Hegenberger Road. Implementation of Mitigation Measures TR-4(i) (Permanent Replacement of Parking Spaces for Affected Businesses) and TR-4 (ii) (Parking Monitoring: Parking Management Program) would reduce these parking impacts to a less-than-significant level. In addition, the Revised Median Alignment would reduce permanent parking impacts to the General Motors property on Hegenberger Road, as the Preferred Alternative would have removed off-street parking at this location.

In order to construct the Revised Median Alignment, the center two lanes of traffic would be closed compared to closing one lane of traffic on the west side of Hegenberger Road for the Preferred Alternative. Lengthening the distance that the AGT alignment travels in the median proportionally increases the potential traffic effects during construction. As with the Preferred Alternative, depending on the duration of the additional traffic lane closures and the extent of the closures, the disruption to local traffic circulation could be significant. Mitigation measures C-TR-1(i) (Restripe Hegenberger Road) and C-TR-1(ii) (Develop and Implement a Construction Traffic Management Plan) would reduce these potential impacts to a less-than-significant level.

Construction of the Revised Median Option could have fewer effects on pedestrians and bicyclists traveling along Hegenberger Road, because the sidewalk and curb lane along this segment of Hegenberger Road would not be obstructed during construction in the median. However, guideway construction in the median of Hegenberger Road may interfere with pedestrian and bicycle traffic attempting to cross Hegenberger Road through the construction zones. Implementation of Mitigation Measure C-TR-2(i) (Construct Temporary Walkways) would reduce this potential impact to a less-than-significant level.

The construction effect on parking conditions with the Revised Median Alternative would be the same or greater than the Preferred Alternative, since construction in the median would entail enlarging the median and moving the existing lanes outward. This would most likely take the street parking on the east side of Hegenberger Road. Implementation of Mitigation Measures C-TR-3(i) (Provide Temporary Replacement Parking for Affected Businesses) would reduce this impact to a less-than-significant level.

The location of the power distribution system substation on the Caltrans (GMC) site is adjacent to the guideway as it transitions between the west side of Hegenberger Road and the median. The substation would be within the immediate guideway corridor, and for practical purposes, not separated from it. This is largely consistent with the description in the FEIR/FEIS. This location would not affect transportation (roadways, transit, sidewalks, or bicycle routes) in the project area. The location would be consistent with the construction analysis in the FEIR/FEIS.

### **3.1.5 Changes at Coliseum Station**

The FEIR/FEIS identified a number of project-related impacts for the Coliseum Station. If the maintenance facility were constructed at the Coliseum Station, 75 BART parking spaces would be permanently lost. Placing the maintenance facility at the Doolittle site provides a net

increase in system-wide parking compared to the original 2002 scenario. Construction of the maintenance and storage facility at the Doolittle site also would eliminate any construction impacts at the Coliseum BART Station related to the maintenance facility, which included the temporary loss of 90 BART parking spaces.

The revised power distribution plan also would relocate the power distribution system substation from the Coliseum BART Station parking lot to the triangular parcel between San Leandro Street, Hegenberger Road and the Hegenberger on-ramp. This location adjacent to two busy thoroughfares could cause traffic impacts during construction. There is an existing sidewalk along the south side of San Leandro Street and the west side of the Hegenberger on-ramp, but pedestrian activity is minimal. Therefore, impacts to pedestrian activity would be less than significant. Implementation of Mitigation Measure C-TR-1(ii) (Develop and Implement a Construction Traffic Management Plan) would reduce this impact to a less-than-significant level.

### 3.2 Land Use

The FEIR/FEIS evaluated the Connector's consistency with plans, policies, and programs, and the Connector's compatibility with existing uses. According to state law, BART is not required to comply with local plans, policies, and land use ordinances. Therefore, determinations of significant land use impacts in this report are not made in terms of the project's consistency with local plans, policies, and zoning, but are provided for informational purposes only. Mitigation is not suggested if the project revisions are inconsistent with local polices.

Construction-related effects that can result in land use conflicts are mostly associated with traffic, noise, dust and other air pollutants, and a decrease in safety. These effects are discussed in those sections of the Addendum. Plans and policies concerning economic development are also considered in Section 3.3, Socioeconomics.

Existing land uses in the project corridor were resurveyed in March 2006.<sup>8</sup> Land use is consistent with the description in the FEIR/FEIS with the following changes:

- Lion Creek Crossings (formerly Coliseum Gardens). A 462-unit, mixed-income housing development (affordable housing and first-time homebuyers) on approximately 20 acres located on San Leandro Street between 66<sup>th</sup> and 69<sup>th</sup> Streets. Phase I (115 units) will be complete by summer of 2006. Phase II and III (252 units) and Phase IV (95 units) are expected to be complete by December 2008.
- Capitol Corridor/ Amtrak Train Station. The train station on 73<sup>rd</sup> Avenue south of San Leandro Street has been completed and is in service.
- Champions Coliseum Shopping Center. The 12.4-acre parcel on the west side of Hegenberger Road between Coliseum Way and Elmhurst Channel, which was formerly the Home Base site, has been cleared to make the site available for redevelopment. The

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<sup>8</sup> Land use survey conducted March 4 and June 24, 2006 by Donald J. Dean, MCP.

City of Oakland is considering a commercial shopping center on the site.<sup>9</sup> Known as the Champions Coliseum Shopping Center, the project would develop approximately 13,800 square feet for restaurants and auto-oriented retail on three pads adjacent to Hegenberger Road and approximately 141,200 square feet for three major retail tenants along the back portion (west side) of the property. Access to the shopping center would be from Hegenberger Road opposite Baldwin Street and from Collins Drive. The project is scheduled to open in 2008.

- Sam's Hofbrau. Sam's Hofbrau restaurant at the corner of Coliseum Way and Hegenberger Road has been demolished, and the site is vacant.
- Wal-Mart. A vacant site on the west side of Hegenberger Road just north of Edgewater Drive (formerly the Ramada or Metroport site) has been developed with a Wal-Mart store and associated retail development. Known as the Hegenberger Gateway Shopping Center, the Wal-Mart is located on the west side of the property adjacent to Oakport Street with the parking area extending to Hegenberger Road. There is some associated retail development along the Hegenberger Road street frontage north of Edgewater Drive, as well as along Oakport Drive. A portion of the site's Hegenberger Road street frontage was the location of the proposed the Edgewater intermediate AGT stop.
- Carpenters' Union Hall. A ceramics productions facility on the west side of Hegenberger Road adjacent to the south side of San Leandro Creek has been redeveloped as a Carpenters' Union Hall.
- Harley Davidson. Harley Davidson Motorcycles, a retail business previously located on the east side of Hegenberger Road between San Leandro Creek and Airport Road, has moved to a new expanded location on the west side of Hegenberger Road opposite its original location.
- Bay Trail. A portion of the Bay Trail, a regional bicycle and pedestrian trail, has been completed adjacent to Airport Drive. This portion of the Bay Trail is located immediately adjacent to the Lew F. Galbraith Golf Course, between the OAC at-grade alignment and the golf course. This is a 10-foot wide Class I bicycle facility. The OAC alignment along Airport Drive would not impinge on the Bay Trail.

### **3.2.1 Airport AGT Station Relocation**

The Port of Oakland, the operator of OIA, is in the midst of the Airport Development Program (ADP), which involves the major expansion of both the landside facilities and minor additions to the airside facilities to relieve congestion and delay at the OIA's passenger and cargo facilities. The ADP is an umbrella program for a number of on-going improvement projects for both the terminal area and airport access. Several elements of the ADP project have not been carried out, including the consolidation of the two existing terminals into one terminal, a two-level access road in front of the terminal, and the construction of a multi-level parking garage

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<sup>9</sup> Jay Musante, City of Oakland, March 9, 2006.

over the existing surface parking lot. The ADP also includes improvements to the airport's roadways, such as the widening of 98<sup>th</sup> Avenue with a new underpass into the airport and the construction of the Doolittle Drive and Airport Drive interchange, which were completed in 2002. The project to widen Airport Drive, OIA's main roadway, to a six-lane parkway connecting businesses and residents on Bay Farm Island in the City of Alameda to the airport and I-880 was completed in 2004. Other ADP projects are ongoing, including improvements to the terminal and curbside areas.

In spite of substantial improvements in access roadways to the airport, the land uses in the airport terminal area are the same as described in the 2002 FEIR/FEIS. The two terminals and the surface parking area in front of the terminals are largely unchanged since 2002. The Port is reconfiguring, but will retain the existing surface parking area. The Oakland Board of Port Commissioners adopted a master plan for Oakland International Airport on March 7, 2006. The master plan is a concept-level planning and feasibility study that focuses for the near-term (2010-2012) and long-term (2025) airport land use guidance. The OAC Connector project is included as part of the long-term land use master plan (Port of Oakland, 2006).

The Oakland Airport Connector was included in the Port's current Airport Layout Plan (ALP), which was approved by the Federal Aviation Administration (FAA) in December 2000. The OAC alignment shown on the ALP follows the east side of Airport Drive into the airport terminal area, rather than going straight across the parking area, and stops at a terminus station opposite the center of the airport terminal area. This alignment was evaluated as "Design Option D" in the DEIR/DEIS (July, 2001) and was commonly referred to as the "fishhook option." This alignment was designed to curve around the Port's multi-story parking structure, which was included as an element of the Port's ADP.

Plans for airport land use have evolved since 2000, and the Port submitted a revised ALP to the FAA for approval in March 2006. The FAA has not yet responded to the revised ALP.<sup>10</sup> The revised ALP includes an alignment for the Oakland Airport Connector that extends down the east side of Airport Drive and crosses directly over the airport parking area to a terminus station between Terminal 1 and Terminal 2. This alignment is consistent with the Port's recently adopted master plan and the revised AGT alignment presented in this Addendum.

The revised alignment of the guideway and AGT station are designed to be compatible with planned airport improvements and would not alter or impede activities at the airport. Land uses in this area are all airport/transport-related uses; and therefore, AGT operations would be compatible with these uses. The relocation of the airport AGT station would not create any new or more severe land use impacts.

### **3.2.2 Doolittle Drive Maintenance and Storage Facility**

The 3.61-acre Teamsters' parcel contains the Teamsters' union hall and a large parking lot. The parking lot was used for training semi-truck drivers, who practice truck maneuvers in the parking lot. The site is bound by arterial roadways on three sides: Hegenberger Road on the

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<sup>10</sup> Hugh Johnson, Port of Oakland, Airport Planning Division, personal communication, July 20, 2006.

north, 98<sup>th</sup> Avenue on the south, and Airport Drive on the east. Commercial hotel property, adjacent to the site on the west (currently the Ibiza, formerly the Edgewater West), occupies the fourth side.<sup>11</sup> Other land uses in the area include the Warehouse Union Hall across Hegenberger Road to the north, the United Labor Bank across Airport Drive to the northeast, parking across Airport Drive to the east and southeast, and commercial office space across 98<sup>th</sup> Avenue to the south.

Land uses in the vicinity of the Doolittle site have not changed since the FEIR/FEIS was published in 2002. The FEIR/FEIS identifies the Teamsters' parcel as part of the "Airport Parking/ Auto Shops Area," where land uses include long-term parking, auto shops, car-rental services, cab services, and airport/aircraft-related industries. The parcel is adjacent to the "Gateway Hotels Area," an area containing hotels primarily serving the airport, including the Hilton and the Holiday Inn Express.

As it was in 2002, the Doolittle site is designated as *Regional Commercial* by the City of Oakland's General Plan and zoned C-36/S-4 (Gateway Boulevard Service Commercial Zone/Design Review Combining Zone). In addition, the Doolittle site was identified as one of five opportunity sites in the Gateway Study, a joint effort by the City of Oakland, the Port of Oakland, area businesses, and nearby cities to improve the physical environment, create a positive image, and attract new commercial and office development to the area. The Gateway Study recommended that the Gateway West Hotel property be combined with the Teamsters' parcel. The new site (approximately 7.5 acres combined), known as the Doolittle Gateway site, would allow development of a 300-plus-room "flagship" hotel.

In the Preferred Alternative described in the FEIR/FEIS, the AGT guideway crosses the Doolittle site and the easternmost corner of the Gateway West Hotel site, approaching within approximately 30 feet of the hotel building. The location of the guideway and the future Doolittle intermediate stop do not change in the revised plan for the Doolittle site. However, the maintenance and storage facility has been moved from its original location over the Coliseum Station parking area to the previously unoccupied corner of the Doolittle site adjacent to 98<sup>th</sup> Avenue and Airport Drive.

As noted above, the Doolittle site is designated as *Regional Commercial* by the City of Oakland's General Plan and zoned C-36/S-4 (Gateway Boulevard Service Commercial Zone/Design Review Combining Zone). Primary uses in *Regional Commercial* designated areas include retail, recreation, and visitor serving-uses. In addition, the C-36 zoning district is intended to create, preserve, and enhance areas with a variety of offices, travel accommodations, and related consumer and business activities needing prominent and attractive locations and abundant vehicle access. The proposed maintenance facility would not generally be considered a primary use for the *Regional Commercial/C-36* designated area, as it is not a retail or recreational use. However, the maintenance facility is an important component of AGT system, which is a visitor-serving system. In addition, the zoning code (Section 17.52.060) allows "utility and

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<sup>11</sup> This hotel was referred to as the Edgewater West in the FEIR/FEIS. For consistency, that name has been retained in this document.

vehicular” uses with a conditional use permit. For these reasons the MSF is not inconsistent with the existing city land use designations and would meet standard city zoning requirements such as minimum lot area, setbacks, and floor-area ratio. The location of the MSF on the eastern corner of the site, east of the guideway, would not interfere with any future development of the adjacent Gateway West Hotel parcel as a “flagship” hotel or other visitor-serving use as recommended in the Gateway Study.

Repair and maintenance activities are expected to take place within an enclosed maintenance structure. Because the vehicles would be in use during daytime hours, it is assumed that many maintenance activities would be conducted at night. The FEIR/FEIS identified noise from vehicle washing as a potentially significant noise impact, and mitigation measures were adopted as part of the project. (See the noise analysis for the MSF in the Noise and Vibration section below.)

The facility is enclosed and has some separation from adjoining land uses. The closest land use is the Gateway West Hotel immediately to the west. The maintenance facility is approximately 135 feet from the Hotel, with the guideway and guideway support columns located in the intervening space and providing some sense of separation. The next closest land use would be commercial office space across 98<sup>th</sup> Avenue approximately 195 feet to the south. Other land uses in the area, such as the Warehouse Union Hall, commercial office space, and parking lots, are further away and separated from the site by the multi-lane width of the adjacent streets.

The level of activity, a maximum of 18 employees per shift, would be consistent with other commercial and industrial services in the area. The mixture of uses within the maintenance facility (control room, offices, BART Police services, storage, shipping/receiving, mechanical rooms, and light and heavy maintenance) would not be inconsistent with the mixture of existing uses in the project area (commercial office, hotel, parking). Given the mixture of land uses in the area and the auto-dominated nature of the immediate surroundings, the maintenance and storage facility would be compatible with existing land uses.

### **3.2.3 Revised Alignment at Edgewater Drive**

When the FEIR/FEIS was published in 2002, the City of Oakland anticipated that the northeast quadrant of the Edgewater Drive/Hegenberger Road intersection would be developed with a major 300-room hotel and 500,000 to 1,000,000 square feet of office space. This was also to be the location of the Edgewater intermediate stop, which was designed to take advantage of anticipated ridership from the proposed hotel and office development. As noted above, that project never came to fruition, and the site has been developed with a Wal-Mart store and other smaller, auto-associated retail outlets. Subsequently, the City of Oakland and BART agreed to drop the Edgewater intermediate stop and relocate the alignment to the median of Hegenberger Road. This action reduced land use impacts to other properties in the area and reduced project costs. The general plan and zoning designations (Business Mix/C-36/S-4) for the area are the same as described in the FEIR/FEIS. Other land uses in the project corridor are also largely the same as described in the FEIR/FEIS. Other land uses in the project vicinity include auto service, office, and retail commercial uses.

Eliminating the Edgewater intermediate stop allows the revised AGT alignment to be located in the median of Hegenberger Road between Edgewater Drive and I-880 rather than along the west side of Hegenberger Road as in the Preferred Alternative. Relocation of the AGT alignment to the median would reduce its impacts on land uses west of Hegenberger Road, particularly the two service stations located on the two western corners of the Edgewater Drive/Hegenberger Road intersection. (This is discussed further in the socioeconomics and hazardous materials sections below.) Although the revised alignment would be physically closer to existing commercial uses east of Hegenberger Road, including the Union Bank building, the four-lane width (each way) of Hegenberger Road and its high traffic volumes would provide a barrier that would reduce potential land use effects on the east side of Hegenberger Road to a less-than-significant impact.

As noted in the FEIR/FEIS, the inclusion of the Edgewater intermediate stop in the Preferred Alternative supported economic development in the area and a number of BART and City of Oakland policies that emphasized linking transportation facilities with recreation uses, job centers and commercial nodes. Although the inclusion of the Edgewater intermediate stop in the Preferred Alternative was a benefit for the project, its elimination does not create any adverse land use impacts in the Edgewater district.

The revised location of the alternate power distribution system substation is east of Hegenberger Road on an irregularly shaped parcel within the curve of the southbound I-880 on-ramp. The site is currently undeveloped. The substation would be constructed adjacent to the south property line. Land uses in the vicinity include the southbound I-880 on-ramp and I-880 to the north, Hegenberger Road to the west, and commercial development to the south. The commercial structure (Union Bank) is located on the Hegenberger Road street frontage, and the area immediately adjacent to the substation location is a large parking lot. For practical purposes, the parcel is in the freeway corridor. The proposed power distribution system substation is consistent with existing land uses. The zoning for the parcel is C-36 (Commercial), which allows utility-related use with a conditional use permit.

### **3.2.4 Revised Median Alignment-Coliseum Way to Elmhurst Channel**

Land use in the project segment between I-880 and Elmhurst Channel is the same as described in the FEIR/FEIS with the two changes noted above: the former Home Base site on the west side of Hegenberger Road has been cleared and is now vacant, and Sam's Hofbrau site at 595 Hegenberger Road, located on the northwest corner of Hegenberger Road and Coliseum Way, has been cleared and is vacant. Both properties are located in an area that Oakland General Plan designates as *Regional Commercial* with C-36/S-4 zoning (Gateway Boulevard Service Commercial Zone/Design Review Combining District). The City of Oakland is considering a shopping center project on the former Home Base site that would redevelop the site with approximately 155,000 square feet of retail space.

Existing land uses in the Coliseum Way-Elmhurst Channel segment of the AGT corridor include retail, office, restaurant, hotel, storage, and service station uses. Under the Preferred Alternative, the AGT guideway would have been located over the west curb lane of Hegenberger Road. As with the Preferred Alternative, although the Revised Median Alignment for the AGT would introduce a new transit use to the area, it would be functionally compatible

with existing uses. Due to the width of Hegenberger Road (eight lanes in this segment), the relocation of the AGT to the Revised Median Alignment would increase the separation between the guideway and adjacent land uses. This would also reduce land use effects on the west side of Hegenberger Road compared to the Preferred Alternative without creating new impacts on the east side. In particular, adverse effects to the Caltrans property (GMC Truck sales), the former Sam's Hofbrau site, Denny's, the former Home Base site, and the Economic Development Department building (675 Hegenberger Road) would be reduced compared to the Preferred Alternative. These reduced effects also are discussed in the Socioeconomics and Noise and Vibration discussions below.

The revised location for the power distribution system substation is on the west side of Hegenberger Road south of Coliseum Way. The site is part of an existing parking area for GMC truck sales. The location is bordered by Hegenberger Road to the east, GMC Truck sales to the west and north, and undeveloped drainage channels on Caltrans property (I-880) to the south. The Hegenberger Corridor is dominated by vehicular traffic and auto-oriented commercial uses. The substation would not be out of place in this auto-intensive, commercial corridor.

### **3.2.5 Changes at Coliseum Station**

The Coliseum BART Station is a transportation hub surrounded by railroads (UPRR), roadways (Hegenberger Road, San Leandro Street), light industrial land uses (warehousing, storage) and housing (North of BART neighborhood located north of 71<sup>st</sup> Avenue). Land use in the vicinity of the Coliseum BART Station has been stable and consistent with the description in the FEIR/FEIS, with the exception of the Lion Creek Crossings housing development, which is being constructed between 66<sup>th</sup> and 69<sup>th</sup> Avenues.

BART and the city's Community and Economic Development Agency (CEDA) have been discussing the development of a transit village on the BART parking lot. The "Coliseum Transit Village" would be a mixed use, sustainable transit-oriented development that would take advantage of the inter-modal mass transit hub at the Coliseum BART Station. Currently the City of Oakland and BART have entered into an Exclusive Negotiating Agreement with the OEDC/MacFarlane Partners for the development, which would replace the existing Coliseum BART Station parking lot with 600-800 units of housing and approximately 20,000 square feet of ground-floor, neighborhood-serving retail space.<sup>12</sup> Planning is currently in the conceptual stage.

The relocation of the MSF from the Coliseum Station to the Doolittle site would eliminate any land use impacts from the MSF on the existing residential neighborhood north of Coliseum Station. In addition, it would increase the potential for transit-oriented development at the Coliseum BART Station parking lot. This would be a benefit of the revised project.

The revised location of the power distribution system substation is on the west side of San Leandro Street between Hegenberger Road and the Hegenberger Road on-ramp. The only structure on the site is the Arroyo Viejo Creek box culvert, which is located under the

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<sup>12</sup> Community and Economic Development Agency website, City of Oakland, accessed May 31, 2006.

northwestern corner of the triangular-shaped site. The site is periodically used for construction parking and storage. The substation site is bordered by the three roadways. Both San Leandro Street and Hegenberger Road are six to seven lanes wide and major automotive corridors. West of the Hegenberger Road on-ramp is the Arroyo Viejo Creek channel and light industrial land uses. Other land uses in the area are transportation (BART, Union Pacific Railroad) and light industrial. The site is zoned M-40 (Industrial). Construction of the power substation on this site would not conflict with other uses of the site or land uses in the area.

### **3.3 Socioeconomics**

The socioeconomics evaluation in the FEIR/FEIS discussed project effects related to acquisition of property, job creation, dividing an established community, and growth-inducement not in accordance with existing plans. The construction discussion evaluated impacts in these same areas.

#### **3.3.1 Airport AGT Station Relocation**

The revised airport AGT station is the same concept as evaluated in the FEIR/FEIS. Only its location within the airport area is revised. No additional property would be required. The same number of workers (both operational and construction) would be involved. Therefore, the relocated airport AGT station would have the same operational and construction effects on socioeconomic conditions as the Preferred Alternative.

#### **3.3.2 Doolittle Drive Maintenance and Storage Facility**

Relocating the maintenance and storage facility to the Doolittle site would not have a socioeconomic effect. The facility would employ the same number of workers (both operational and construction) as would the Preferred Alternative, only the location of their employment within the project corridor would change.

The Teamsters' parcel is identified in the Gateway Development Study as part of the Doolittle gateway site (see Land Use discussion in Section 3.2 above). As illustrated in the FEIR/FEIS (Figure 3.3-2), the conceptual design for the Doolittle Opportunity Site focuses development of the hotel and retail components toward the south/western portion of the combined site closest to Doolittle Drive. The conceptual site layout would allow incorporating the AGT alignment and future intermediate stop into the Teamsters' parcel, which is located on the north/eastern portion of the site. As expressed in the 2002 FEIR/FEIS, "the preferred alternative [AGT alignment] would result in a substantial investment in the project area and result in growth, in terms of direct jobs and indirect growth, that is anticipated and desired in accordance with the City of Oakland General Plan. This is considered a beneficial effect." Relocation of the maintenance and storage facility, to the northeast corner to the site and separated from it by the AGT guideway, would not affect the potential for developing a hotel-retail complex in the southwest portion of the site as originally envisioned in the Gateway Development Plan. (The conceptual plan for the Doolittle Opportunity Site indicates that the portion of the site where the MSF is proposed would have been parking.) Therefore, relocation of the maintenance and storage facility to the Teamsters' parcel would have the same operational and construction effects on socioeconomic conditions as the Preferred Alternative.

### 3.3.3 Revised Alignment at Edgewater Drive

The FEIR/FEIS identified the partial acquisition of three parcels near the Edgewater Drive/Hegenberger Road intersection for the Preferred Alternative: the Wal-Mart site (former Metroport), the Superstop gas station (formerly Chevron), and the Circle K gas station. The FEIR/FEIS identified the partial acquisition of these properties, as well as other acquisitions, as a significant impact. Relocating the AGT alignment to the median of Hegenberger Road would eliminate the need to acquire any portion of these three properties and would reduce the level of this impact.

As noted in the FEIR/FEIS, intermediate AGT stops at Edgewater Drive and the Doolittle site were included as part of the Preferred Alternative. The intermediate AGT stops would be highly consistent with Oakland's general plan policies linking transportation facilities and infrastructure improvements with the recreational uses, job centers, and commercial nodes along the project corridor. For reasons independent of BART and the Connector project, transit-oriented development never came to fruition. Subsequently, the site has been developed as a Wal-Mart. BART and the City of Oakland agreed that the Edgewater intermediate stop should be dropped from the project. The revised alignment for the AGT in the median of Hegenberger Road would effectively preclude future construction of an intermediate AGT stop at Edgewater Drive and whatever socioeconomic benefits that might derive from it. Although intermediate stops were part of the Preferred Alternative, the elimination of the Edgewater intermediate stops does not cause any significant socioeconomic impacts. The inability to realize potential socioeconomic benefits that had been associated with the Edgewater intermediate stop does not represent an adverse change to the existing environment. (For discussion of ridership impacts, see the Transportation section above.)

The revised alignment would have the same construction-related impacts as the Preferred Alternative, with the exception that the temporary use of a portion of the Chevron property (two parking stalls) would not occur. Based on this discussion, there would be no new or more severe socioeconomic impacts related to the realignment.

Construction of the power distribution system substation on the alternate site east of Hegenberger Road would require full or partial acquisition of the proposed substation site. The site is undeveloped and owned by Caltrans as part of the I-880 right of way. This parcel would be acquired through standard real estate procedures as would other parcels required for the project as discussed in the FEIR/FEIS. Implementation of Mitigation Measure SE-1(i) (Relocate Displaced Facilities or Compensate) would reduce this impact to a less-than-significant level. Relocation of the power substation would have no other socio-economic effects.

### 3.3.4 Revised Median Alignment-Coliseum Way to Elmhurst Channel

The Preferred Alternative, which had an alignment over the west curb of Hegenberger Road, required the partial acquisition of several parcels along Hegenberger Road. Property acquisition was identified as a significant impact of the Preferred Alternative. Partial acquisitions included the Caltrans property (GMC Truck sales), the former Sam's Hofbrau site, Denny's, the former Home Base site, and the Economic Development Department building (EDD) at 675 Hegenberger Road.

Relocation of the AGT guideway to the Revised Median Alignment would eliminate the need to acquire any portion of the Sam's Hofbrau site, Denny's, the Home Base site, or the EDD building. Construction of the power distribution system substation on the Caltrans property would not increase the property acquisition for the project. A portion of the Caltrans property was identified for partial acquisition in the FEIR/FEIS. With the Revised Median Alignment (including the substation), the portion of the Caltrans property acquired would be smaller than that for the Preferred Alternative. The reduction in property acquisition would be a benefit of the Revised Median Alignment compared to the Preferred Alternative.

Impacts related to the loss of access or use of property during construction would be reduced with this alignment compared to the Preferred Alternative. Impacts to the Caltrans, Home Base, and 675 Hegenberger properties would be reduced. Other construction-related impacts would be the same as described in the FEIR/FEIS. Therefore, there would be no new or more severe socioeconomic impacts related to the revised alignment.

### **3.3.5 Changes at Coliseum Station**

Relocation of the facility to Doolittle Drive would enable transit-oriented development to occur over the entire Coliseum Station parking lot compared to only a portion of the lot if the maintenance facility remained at the Coliseum Station. (See Land Use discussion above.) This would be a net socio-economic benefit.

Relocation of the power distribution system substation to the parcel west of San Leandro Street would require the acquisition or partial acquisition of this site (7303 San Leandro Street, APN (041-417300104), a vacant parcel currently owned by the City of Oakland. This parcel would be acquired through standard real estate procedures as would other parcels required for the project as discussed in the FEIR/FEIS. Implementation of Mitigation Measure SE-1(i) (Relocate Displaced Facilities or Compensate) would reduce this impact to a less-than-significant level. Relocation of the power substation would have no other socio-economic effects.

## **3.4 Visual Quality**

The Visual Quality section of the FEIR/FEIS evaluated the effects of the Connector related to its visual compatibility with the surrounding environment, the effect on significant views, and the potential for disruptive light and glare. The visual environment in the Hegenberger Road corridor has remained largely consistent with the description in the FEIR/FEIS. Several structures have been demolished (Home Base, Sam's Hofbrau) and new structures constructed (Harley Davidson, Carpenters' Union), but the great majority of the alignment is largely unchanged.

### **3.4.1 Airport AGT Station Relocation**

The revised AGT station location would be more centrally located within the terminal area than the station location identified in the FEIR/FEIS. However, the revised station plan is not substantially different from the original plan. The station's size, mass, and footprint are comparable to the original design. There is one notable change. The original station was to be integrated into the Port's planned multi-level parking structure. The parking structure, as well

as the double-deck loop road, is not being constructed at this time. Therefore, the AGT station is currently planned as a freestanding, elevated structure over the airport roadways.

As noted in the 2002 FEIR/FEIS, the aerial guideway and Airport AGT Station would contribute to the overall intensity of development at the airport, thus contributing to building mass and altering the visual setting in the Airport terminal area. The relocation of the airport AGT station would result in a visual scenario in which the AGT station would not be integrated visually or physically into a new multi-story garage, but would be on an elevated guideway between the two terminals. As a result, the Connector facilities would be more visible than anticipated in the Preferred Alternative. These changes to the visual setting would be noticeable, but they would not be visually incompatible with the scale of existing structures in the terminal area. In addition, the visual setting for the Airport terminal area currently is defined by transportation-related uses--parking, loading and unloading zones, and shuttle services. By association, the elevated AGT guideway and AGT vehicles would not appear out of character or incompatible with the surroundings.

The AGT guideway would obstruct some views of the Oakland Hills from a few ground-level vantage points at the airport, but air passengers, visitors, and employees would still retain views from most locations. As noted with the Preferred Alternative, the AGT would create new vista opportunities and viewpoints for those using the Connector, which would be a beneficial effect. The effects related to light and glare would be the same with the relocated airport AGT station as with the Preferred Alternative. The construction effects on the visual character of the corridor and the effects of construction light and glare would be the same as with the Preferred Alternative, only slightly relocated within the OIA terminal area. Consequently, there would be no new or more severe visual quality impacts related to the relocated Airport AGT Station.

The power distribution system substation would be a concrete building approximately 1,000 square feet in size, with a maximum width of 26 feet (to correspond to the width of the guideway) and height of approximately 14 feet. It would be located under the guideway at a location north of Neil Armstrong Way. The size and scale of the substation would be much smaller than other structures in the airport area, including the guideway, which would partially shield the substation from several directions. Views of the substation would be from Airport Road and Neil Armstrong Way. Given the small size and scale of the substation, its visual impacts would be less-than-significant.

### **3.4.2 Doolittle Drive Maintenance and Storage Facility**

As noted in the FEIR/FEIS, the built environment in the vicinity of the Doolittle site generally consists of two-story, stand-alone commercial structures of modern architectural design. Building facades are discontinuous and mixed with off-street parking. There is extensive commercial signage. Sidewalks are discontinuous or non-existent. Large parking lots for long-term off-airport parking are prominent. The Teamsters' parcel, the site for the relocated maintenance and storage facility, contains the Teamsters' Union Hall and a large parking lot.

Where existing buildings do not block the view from ground-level locations, the Oakland Hills in the distance to the north and northeast are the primary scenic resource visible from the corridor. The Doolittle site is within the "Oakland Gateway," as identified by the City of

Oakland, an important urban activity center between the Oakland Coliseum BART Station and the Doolittle Drive entrance to OIA. The streets of the gateway are the primary access corridors for the Oakland Coliseum and the airport. The Gateway Study area is arrayed along four major roadways, Hegenberger Road, 98<sup>th</sup> Avenue, I-880, and Doolittle Drive. These roadways shape the environment experienced by travelers arriving and departing from the airport, attending events at the Coliseum, working at businesses in the Airport Business Park, or seeking hotel rooms and restaurants as part of their stay in Oakland.

The Gateway Design Plan is the implementation program for the landscape and paving concepts proposed in the Gateway study. The plan is a “themed” landscape/graphics treatment along Hegenberger Road between the Coliseum BART Station and Doolittle Drive. Phase 1 of the plan, which provided for palms and banners along Hegenberger Road, has been completed. The City of Oakland estimates that the Gateway project is about 70 percent completed overall. Additional phases of plan implementation include streetscape designs for Doolittle Drive and Airport Access Road, which should be in construction by fiscal year 2006-2007.<sup>13</sup>

The City of Oakland also has the S-4 Design Review Combining Zone, which is intended to create, preserve, and enhance the visual harmony and attractiveness of the areas that require special treatment.

The proposed AGT maintenance and storage facility would be located in the northeast corner of the Teamsters’ parcel, adjacent to 98<sup>th</sup> Avenue and Airport Drive. The building’s envelope, as defined by its 50-foot height, 105-foot width and 210-foot length, would be visually substantial when viewed from roadways approaching the site. Although construction materials and design details of the building have not been developed, as a maintenance facility, the building is expected to retain the appearance of an industrial structure with flat sides and unadorned building facades. Windows would be provided to enhance natural light for improved visibility in maintenance areas and for energy efficiency. These features, coupled with the size of the structure, indicate that the change in visual conditions could be substantial.

Primary public views of the structure would be from 98<sup>th</sup> Avenue and Airport Drive, with secondary views possible from Hegenberger Road. Figure 3-1 provides a view of the Doolittle site, looking west from the northeast corner of 98<sup>th</sup> Avenue and Airport Drive. Figure 3-1a provides an existing view of the Doolittle site. Figure 3-1b illustrates the Doolittle site with the maintenance and storage facility. Although the MSF is generally consistent with the height and mass of structures in the Hegenberger Road corridor, the 50-foot height and mass of the structure contrast with the relatively low-level development in the vicinity of the Doolittle site. This, coupled with the fact that the site has been identified as part of a Gateway Development Opportunity site, indicates that the MSF could have a significant visual impact. However, implementation of adopted mitigation measures, specifically VQ-1(i) (Integrate Site Planning and Design Details with the Concepts and Themes Contained in the Hegenberger Road-98<sup>th</sup> Avenue Gateway Development Plan and the Airport Roadway Plan) and VQ-1(iii) (Screen the

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<sup>13</sup> City of Oakland, Airport Gateway Streetscape Update, March 27, 2006.

Maintenance and Central Control Facility) would reduce this impact to a less-than-significant level. As part of Mitigation Measure VQ-1(i), BART will consult with City of Oakland and Port staff and then identify site planning and design guidelines for various components of the project, including the maintenance facility.

The location of the MSF could obstruct some views for guests from lower portions of the Edgewater West Hotel. However, the AGT guideway lies between the hotel and the maintenance facility and would block views to the east. In addition, the hotel rooms are built with small window openings, and they do not provide panoramic or focused views of the Oakland Hills. Therefore, the impact due to the MSF would be less than significant.

The maintenance and storage facility is envisioned as a self-contained facility. Maintenance operations would take place within the building and not in the open. Mitigation Measure VQ-3(i) (Control Spillover from System Lighting) requires that the lighting fixtures along the alignment and at stations be designed to control light intensity on adjacent land uses. Implementation of this measure would reduce potential effects from light and glare to a less-than-significant level. Construction of the MSF would be focused on the Doolittle site and would not create any additional construction effects on the project corridor or new effects related to construction light and glare.

Figure 3-1a  
Existing Views - Doolittle site. View looking west from 98<sup>th</sup> Avenue and Airport Drive



Source: VBN Architects

Figure 3-1b  
Future Views - Visual Simulation of Maintenance Facility. View looking west from 98<sup>th</sup> Avenue and Airport Drive



Source: VBN Architects

### 3.4.3 Revised Alignment at Edgewater Drive

As noted in the FEIR/FEIS (page 3.4-22), the AGT guideway would be a new, prominent feature in the viewshed, and the change in visual conditions along Hegenberger Road due to the guideway would be substantial. The FEIR/FEIS analysis determined that the AGT guideway and support columns would contribute to the unattractive visual conditions of the urban setting that exists today. The guideway would not be a building consisting of defined width, depth, and height and would not strongly correlate with the mostly rectangular shapes of the buildings along the Hegenberger corridor. Thus, the visual impact in this portion of the corridor would be adverse and significant (FEIR/FEIS, page 3.4-29).

The relocation of the AGT guideway to the median of Hegenberger Road between Edgewater Drive and I-880 would not change the appearance of the guideway. The support columns and guideway beams would be the same whether the guideway is located in the median or along the west curb of the roadway. The original visual analysis identified the project, even with the implementation of mitigation measures, as a significant, adverse effect. Although relocation of the guideway to the median would not change this conclusion, it would not create any new or more severe visual impacts. No impacts related to the Edgewater intermediate stop were identified in the FEIR/FEIS. Therefore, elimination of the station would not have any visual quality effects.

In the vicinity of the Edgewater Drive/Hegenberger Road intersection, the high-rise office buildings to the south, southwest, and southeast have views of the Oakland Hills, as well as views of the Oakland Estuary, Martin Luther King Jr. Shoreline Park, and downtown Oakland. As noted in the FEIR/FEIS, introduction of the elevated AGT system and intermediate station would partially interfere with the views of the Oakland hills from lower building levels, but would not eliminate them. Elimination of the Edgewater intermediate stop would reduce this visual impact somewhat, but relocation of the guideway to the median of Hegenberger Road also would place the AGT structure closer to the commercial buildings on the east side of Hegenberger Road. This would increase the degree of interference with views to the Oakland Hills from lower building levels, but would not eliminate them. Therefore, the impact on significant views would not be substantially more severe than with the Preferred Alternative.

The FEIR/FEIS identified light and glare from AGT trains as a potential impact of the AGT project. Relocation of the AGT alignment to the Hegenberger Road median would not increase the light and glare impacts and would not change any of the conclusions stated in the document. The implementation of adopted mitigation measures would reduce light and glare impacts to a less-than-significant level. Construction methods would be the same for this alignment as for the Preferred Alternative. Therefore, construction impacts would be the same as those for the Preferred Alternative.

The power distribution system substation would be located on a vacant parcel located on the east side of Hegenberger road in the curve of the southbound I-880 on-ramp. The freeway on-ramp borders the site on three sides. The fourth (south) side contains a parking lot for an office building. Immediate views of the site are largely limited to views from freeway-bound automobiles. The power distribution system substation would be a concrete building approximately 1,000 square feet in size, with a maximum width of 26 feet and height of

approximately 14 feet. It would be a single stand-alone industrial structure. Power lines, both primary incoming feeds and secondary outgoing feeds, would be underground. Given the existing visual environment, modest size of the structure, and its relative lack of visibility, the power distribution substation would have a less-than-significant visual impact.

#### **3.4.4 Revised Median Alignment-Coliseum Way to Elmhurst Channel**

The portion of Hegenberger Road between Elmhurst Channel and I-880 contains mostly single-story commercial structures surrounded by parking lots, and a mixture of prominent, often freestanding, outdoor advertising signs. Examples of buildings in this segment of the corridor include Pak 'n' Save, Taco Bell, and McDonalds. The varied architectural building styles and signs yield a mixture of visual conditions within this short segment of the project corridor. The Oakland Hills to the north and northeast are the primary scenic resource visible from the corridor.

The Preferred Alternative was located over the west curb lane of Hegenberger Road. As stated in the FEIR/FEIS, the Preferred Alternative guideway would be about 20 to 40 feet from the office building at 675 Hegenberger Road, and its route was directly in front of Sam's Hofbrau and Denny's restaurants. The guideway was perceived to be visually encroaching on existing land uses and would be physically and visually dominant. This visual incompatibility was identified as a significant, adverse impact.

The Revised Median Alignment in the Coliseum Way-Elmhurst Channel largely would follow the same alignment as the median option evaluated in the FEIR/FEIS. One important difference between the Revised Median Alignment and the 2002 median option is the additional length of the revised alignment located in the median. The transition at the southern end of the Revised Median Alignment from the median to the west-side curb would occur approximately 450 feet further south than with the Preferred Alternative, and the transition from the median to the west-side curb at the northern end of the alignment would occur approximately 150 feet further north than the Preferred Alternative. Compared to the Preferred Alternative, this extended transition increases the distance between the guideway and street front properties and reduces visual impacts to previously affected properties, particularly Sam's Hofbrau, Denny's and the EDD building at 675 Hegenberger. Implementation of Mitigation Measures VQ-1(i) (Integrate Connector Site Planning and Design Details with the Concepts and Themes Contained in the Hegenberger Road-98<sup>th</sup> Avenue Gateway Development Plan and the Airport Roadway Plan) and Mitigation Measure VQ-1(ii) (Improve Guideway and Support Column Appearances) would further reduce the visual impacts related to the Revised Median Alignment. Construction of the Revised Median Alignment would be substantially the same as the Preferred Alternative. Therefore, construction impacts would be the same as the Preferred Alternative.

The power distribution system substation would be located on the west side of Hegenberger Road adjacent to the AGT guideway. The proposed site is a truck sales lot for GMC Trucks. The power distribution system substation would be a stand-alone concrete building approximately 1,000 square feet in size, with a maximum width of 26 feet and a maximum height of 20 feet. As noted above, the visual environment is a commercial-oriented auto corridor. Public views of the site are largely limited to people in automobiles on Hegenberger

Road. The aerial guideway itself, which transitions between the west side of Hegenberger Road and the median at this location, would also serve to shield the substation from some views along Hegenberger Road. Given the existing visual environment, modest size of the structure, and its relative lack of visibility, the power distribution substation would have a less-than-significant visual impact.

### **3.4.5 Changes at Coliseum Station**

In the Preferred Alternative, the maintenance and storage facility would have been a three-level structure located over a portion of the Coliseum BART Station parking lot. Due to its size, elevation, and industrial nature, the MSF was identified as a significant and adverse visual impact in the FEIR/FEIS. Relocation of the MSF to the Doolittle site would reduce visual impacts in the vicinity of the Coliseum Station, which would be a benefit of the revised project.

The power distribution system substation would be relocated to a parcel west of San Leandro Street, bound by San Leandro Street, Hegenberger Road, and the Hegenberger Road on-ramp. The parcel is undeveloped and within the auto-dominated industrial corridor along San Leandro Street. Views of the site are limited due to the fact that the Hegenberger Road on-ramp is constructed on an embankment as it approaches Hegenberger Road. The substation would be located in the low area between the two roadways. The power substation would be a simple concrete building approximately 1,000 square feet in size, with a maximum width of 26 feet and height of approximately 14 feet. It would be located adjacent to the guideway, which would pass nearly overhead. Compared to the height of the Coliseum BART Station, the Hegenberger Road bridge over San Leandro Street, and the planned guideway, the size and scale of the substation would be modest. Given the small size and scale of the substation and limits on its visibility, the visual impacts of the substation would be less-than-significant.

## **3.5 Cultural Resources**

The FEIR/FEIS evaluated the operational and construction effects of the Connector on paleontological, archaeological, and historic resources in the project corridor. No operational impacts were identified. However, subsurface effects on archaeological deposits during construction was identified as a potential impact.

There have been no changes to cultural resources identified in the project corridor. All the revisions to the alignment are within the Area of Potential Effect (APE) that was previously evaluated in the FEIR/FEIS.

### **3.5.1 Airport AGT Station Relocation**

There are no known cultural sites at the airport. Therefore, relocation of the AGT Station at the airport would not affect any cultural resources. Mitigation Measure C-CR-2(ii) (Conduct Spot-Checks for Archaeological Resources During Construction Activities) requires that a qualified archaeologist be retained by BART to conduct spot-checks during ground-disturbing activities in the project corridor. If any potentially significant materials were found, a cultural resources management plan for subsurface exploration would be prepared.

### **3.5.2 Doolittle Drive Maintenance and Storage Facility**

No known cultural resources are located at the Doolittle site. The relocation of the maintenance and storage facility to the Doolittle site would not have any effect on cultural resources. Mitigation Measure C-CR-2(ii) (Conduct Spot-Checks for Archaeological Resources During Construction Activities) requires that a qualified archaeologist be retained by BART to conduct spot-checks during ground-disturbing activities in the project corridor. If any potentially significant materials were found, a cultural resources management plan for subsurface exploration would be prepared.

### **3.5.3 Revised Alignment at Edgewater Drive**

There are no known cultural resources in the Edgewater Drive to I-880 segment of the alignment. The relocation of the AGT guideway to the median of Hegenberger Road and construction of the alternate power distribution substation would not affect any cultural resources. Mitigation Measure C-CR-2(ii) (Conduct Spot-Checks for Archaeological Resources During Construction Activities) requires that a qualified archaeologist be retained by BART to conduct spot-checks during ground-disturbing activities in the project corridor. If any potentially significant materials were found, a cultural resources management plan for subsurface exploration would be prepared.

### **3.5.4 Revised Median Alignment-Coliseum Way to Elmhurst Channel**

There are three prehistoric sites (Nelson sites) that lie within or adjacent to Area of Potential Effect (APE) in this segment of the Connector alignment. The FEIR/FEIS, with SHPO concurrence, considered these sites to be potentially significant. Although the sites generally lie on the eastern side of the APE, the Connector could affect these sites. Due to lack of ground visibility during the field survey (due to paving), there also may be other previously unidentified archaeological sites in the area. Two mitigation measures were included in the FEIR/FEIS: C-CR-2(i) (Conduct Subsurface Archaeological Testing/Exploration) and C-CR-2(ii) (Conduct Spot-Checks for Archaeological Resources During Construction Activities). Because the Revised Median Alignment would extend a greater distance in the Hegenberger Road median than the 2002 median option, the potential affects on subsurface archaeological resources could be proportionally greater. Implementation of Mitigation Measures C-CR-2(i) and C-CR-2(ii) would reduce these potential effects to a less-than-significant level.

### **3.5.5 Changes at Coliseum Station**

The location of the proposed power distribution system substation is immediately adjacent to the abutments supporting the bridge where Hegenberger Road crosses San Leandro Street. The entire area around the footings for the bridge was disturbed during construction of the bridge, and it is highly unlikely that there are any subsurface resources in the vicinity. However, Mitigation Measure C-CR-2(ii) (Conduct Spot-Checks for Archaeological Resources During Construction Activities) requires that a qualified archaeologist be retained by BART to conduct spot-checks during ground-disturbing activities in the project corridor. If any potentially significant materials were found, a cultural resources management plan for subsurface exploration would be prepared.

### **3.6 Community Services**

The FEIR/FEIS evaluated the need for increased police, fire, and emergency response services during operation and construction of the Connector. The increased need for fire protection and police services during the operational phase was identified as an effect of the Preferred Alternative. No construction-related community service impacts were identified. Fire and police services have not changed appreciably in the project corridor since the FEIR/FEIS was published.

#### **3.6.1 Airport AGT Station Relocation**

Relocating the Airport AGT station within the airport would have the same community service impacts as the Preferred Alternative. Additional space for BART Police services is currently planned at the MSF at the Doolittle site. (See Section 2.2 above.) This would supersede implementation of Mitigation Measure CS-2(i) (Incorporate a Full Police Reporting Station into the Airport Station) and CS-2(ii) (Improve Coliseum BART Police Reporting Station). Like these mitigation measures, this would reduce community services affects to a less-than-significant level.

#### **3.6.2 Doolittle Drive Maintenance and Storage Facility**

No community service impacts were identified for the maintenance and storage facility in the Preferred Alternative, and relocation of the maintenance facility from the Coliseum BART Station to the Doolittle Drive site would not create any new impacts. As noted above, BART is providing additional space for AGT-related police services at the MSF.

#### **3.6.3 Revised Alignment at Edgewater Drive**

The relocation of the AGT guideway to the median of Hegenberger Road would not have any effect on community services.

#### **3.6.4 Revised Median Alignment-Coliseum Way to Elmhurst Channel**

The relocation of the AGT guideway to the median of Hegenberger Road would not have any effect on community services.

#### **3.6.5 Changes at Coliseum Station**

The relocation of the MSF from the Coliseum location to the Doolittle site and construction of the power distribution system substation would not have any effect on community services.

### **3.7 Utilities**

The Utilities chapter evaluated the effect the Preferred Alternative would have on water, wastewater, and stormwater facilities, as well as telephone, natural gas, and electrical providers. No impacts to utility service during operations were identified. A mitigation measure was provided to minimize the interruption of utility services during construction (C-UT-1(i)). There has been no substantial change in utility service or operations from that described in the FEIR/FEIS.

### **3.7.1 Airport AGT Station Relocation**

The relocation of the Airport AGT Station within the airport area would not change the demand for utilities or affect utility providers. Implementation of Mitigation Measure C-UT-1(i) would reduce construction-related impacts to a less-than-significant level.

### **3.7.2 Doolittle Drive Maintenance and Storage Facility**

The need for additional water and wastewater service related to the maintenance and storage facility was analyzed in the FEIR/FEIS. No adverse affect on these two utilities was identified. The relocation of the maintenance facility to the Doolittle site would not change this conclusion. Implementation of Mitigation Measure C-UT-1(i) would reduce construction-related impacts to a less-than-significant level.

### **3.7.3 Revised Alignment at Edgewater Drive**

The relocation of the AGT alignment to the median of Hegenberger Road would not affect the demand for utilities. Implementation of Mitigation Measure C-UT-1(i) would reduce construction-related impacts to a less-than-significant level.

### **3.7.4 Revised Median Alignment-Coliseum Way to Elmhurst Channel**

The relocation of the AGT alignment to the median of Hegenberger Road would not affect the demand for utilities. Implementation of Mitigation Measure C-UT-1(i) would reduce construction-related impacts to a less-than-significant level.

### **3.7.5 Changes at Coliseum Station**

No adverse effect on water and wastewater facilities was identified in the FEIR/FEIS. The relocation of the maintenance facility to the Doolittle site and away from the Coliseum BART Station would not change this conclusion. Construction of the power distribution system substation west of San Leandro Street also would not affect on these utilities. Implementation of Mitigation Measure C-UT-1(i) would reduce any construction-related impacts to a less-than-significant level.

## **3.8 Geology, Soils, and Seismicity**

The FEIR/FEIS identified a number of potential effects including fault rupture, landslides, soil erosion, seismically induced ground failure, ground shaking, settlement, flooding, and corrosive soil. Design and construction of structural elements to BART design criteria would minimize the potential adverse effects of these geologic hazards and reduce these hazards to a less-than-significant level. Two mitigation measures were adopted to mitigate geologic impacts during construction: C-GE-1(i) (Dewatering and Groundwater Control in Excavations) and C-GE-2(i) (Settlement due to construction-related activities). The five areas of revised project alignment are all within the project corridor evaluated in the FEIR/FEIS. No geologic changes would have occurred in the period since the FEIR/FEIS was published.

### **3.8.1 Airport AGT Station Relocation**

A relocated Airport AGT Station would be within the project corridor with the same geologic features that were analyzed in the 2002 FEIR/FEIS. Incorporating BART design criteria and

construction-related mitigation measures would reduce potential impacts to a less-than-significant level.

### **3.8.2 Doolittle Drive Maintenance and Storage Facility**

As is much of the area west of Interstate 880, the Doolittle site is located in an area underlain by undifferentiated fill. Implementation of BART design criteria and construction-related mitigation measures identified in the FEIR/FEIS would reduce geologic, soils, and seismic hazards related to the relocated maintenance facility to a less-than-significant level.

### **3.8.3 Revised Alignment at Edgewater Drive**

The segment of the project corridor between Edgewater Drive and I-880 is underlain by undifferentiated fill. Subsurface conditions do not differ between the alignment for the Preferred Alternative and the revised Edgewater median alignment. Implementation of BART design criteria and mitigation measures identified in the FEIR/FEIS would reduce geologic, soils, and seismic hazards related to the revised Edgewater alignment to a less-than-significant level.

### **3.8.4 Revised Median Alignment-Coliseum Way to Elmhurst Channel**

The segment of the project corridor between Coliseum Way and Elmhurst Channel is underlain by natural alluvium and undifferentiated fill. Subsurface conditions do not differ between the alignment for the Preferred Alternative and the Revised Median Alignment. Implementation of BART design criteria and mitigation measures identified in the FEIR/FEIS would reduce geologic, soils, and seismic hazards related to the revised Coliseum Way-Elmhurst Channel alignment to a less-than-significant level.

### **3.8.5 Changes at Coliseum Station**

The site proposed for the power distribution system substation west of San Leandro Street is located on natural alluvium and sufficiently close to its original location in the footprint of the MSF in the Coliseum BART Station parking lot that the geologic evaluation presented in the FEIR/FEIS are still valid. Incorporating BART design criteria and construction-related mitigation measures would reduce potential impacts to a less-than-significant level.

## **3.9 Hydrology and Water Quality**

The FEIR/FEIS evaluated the effects of stormwater pollution, encroachment into 100-year flood plains, exposure to hydrostatic uplift forces, storm water erosion, and discharge of construction water. Mitigation measures were adopted to ensure implementation of stormwater best management practices during construction (Mitigation Measure C-HY-1(i)) and the discharge of construction water (Mitigation Measure C-HY-2). The five areas of revised project alignment are all within the project corridor evaluated in the FEIR/FEIS. No substantial hydrologic changes would have occurred in the period since the FEIR/FEIS was published.

### **3.9.1 Airport AGT Station Relocation**

The relocated Airport AGT Station would not be within the 100-year floodplain, and mitigation measures for a Storm Water Pollution Prevention Plan would be implemented prior to

construction. Relocation of the Airport AGT Station would not change any of the conclusions in the FEIR/FEIS.

### **3.9.2 Doolittle Drive Maintenance and Storage Facility**

The relocated maintenance and storage facility would not be within the 100-year floodplain, and mitigation measures for a Storm Water Pollution Prevention Plan would be implemented prior to construction. Construction of the MSF at the Doolittle site would not change any of the conclusions of the FEIR/FEIS.

### **3.9.3 Revised Alignment at Edgewater Drive**

Hydrological conditions do not differ between the alignment for the Preferred Alternative and the revised Edgewater median alignment. The analysis conducted for the Preferred Alternative would be applicable for the revised alignment and alternate substation location. Implementation of the construction mitigation measures identified in the FEIR/FEIS would reduce hydrologic and water quality effects to the revised Edgewater alignment to a less-than-significant level.

### **3.9.4 Revised Median Alignment-Coliseum Way to Elmhurst Channel**

Hydrological conditions do not differ between the alignment for the Preferred Alternative and the Revised Median Alignment. The analysis conducted for the Preferred Alternative would be applicable for the revised median alignment in the Coliseum to Elmhurst Channel segment. However, construction-related activities in the median may require additional utility relocation, and therefore, may cause greater potential for stormwater-related erosion. Implementation of Mitigation Measure C-HY-1(i) (Implement Stormwater Best Management Practices) would reduce this impact to a less-than-significant level.

### **3.9.5 Changes at Coliseum Station**

The site proposed for the power distribution system substation west of San Leandro Street is sufficiently close to its original location in the footprint of the MSF in the Coliseum BART Station parking lot that the hydrologic evaluation presented in the FEIR/FEIS are still valid. Incorporating BART design criteria and construction-related mitigation measures would reduce potential impacts to a less-than-significant level.

## **3.10 Biological Resources**

The FEIR/FEIS evaluated the potential disturbance to wetlands, loss of trees, shading of vegetation, and disturbance to sensitive species. The five locations where modifications to the Preferred Alternative would take place are in urban environments. Since the FEIR/FEIS was originally published, several endangered species and critical habitat listings have been designated in the Alameda County region. These listings included several vernal pool animals and plants (70 Fed. Reg. 46,924 (August 11, 2005)), the central population of the California Tiger Salamander (70 Fed. Reg. 49,380 (August 23, 2005)) and the California Red-legged Frog (71 Fed. Reg. 19,244 (April 13, 2006)). In addition, critical habitat for the Alameda Whipsnake has been proposed (70 Fed. Reg. 60608 (October 18, 2005)). None of these endangered species or critical habitats is likely to occur in the area affected by the project.

### **3.10.1 Airport AGT Station Relocation**

There are no wetlands or other sensitive habitat within the airport terminal parking area, a paved and developed environment. Therefore, no sensitive habitat or species would be affected by the relocation of the AGT Station within this area. Construction of the relocated airport AGT station would be substantially the same as described in the FEIR/FEIS. There would be no new or substantially more severe biological impacts.

### **3.10.2 Doolittle Drive Maintenance and Storage Facility**

The Teamsters' parcel is located within a broad corridor of urban development. The site itself is developed with the Teamsters Union Hall, with the remainder of the site paved as a parking area. There is no sensitive habitat on the site. No habitat or species would be affected by the relocation of the maintenance facility to this site. There would be no new or substantially more severe biological impacts.

### **3.10.3 Revised Alignment at Edgewater Drive**

The project is located in an urban corridor. The location of the revised AGT alignment is in the median of an eight-lane arterial roadway. No sensitive habitat or species would be affected by the relocation of the AGT alignment to the median in this segment of Hegenberger Road. There would be no new or substantially more severe biological impacts.

Construction of the power distribution system substation on the Caltrans parcel adjacent to the I-880 southbound on-ramp would be adjacent to the southern property line of the irregularly-shaped parcel. The parcel appears to have been graded and landscaped as part of the Caltrans on-ramp design. The area closest to the freeway on-ramp contains a roadside drainage ditch that contains cattails and other wetlands vegetation. The area proposed for the substation is higher and much better drained. It has been landscaped with small trees and appears to have semi-regular maintenance. The substation would not affect any wetland areas or native habitat. There would be no new or substantially more severe biological impacts.

### **3.10.4 Revised Median Alignment-Coliseum Way to Elmhurst Channel**

The project is located in an urban corridor. The location of the revised AGT alignment is in the median of an eight-lane arterial roadway. No sensitive habitat or species would be affected by the relocation of the AGT alignment to the median in this segment of Hegenberger Road. However, relocation of the AGT alignment to the Hegenberger Road median would most likely preserve four coast redwood trees that would be lost with the Preferred Alternative. This would be a benefit of the Revised Median Alternative. The site proposed for the power distribution system substation is currently a paved parking area. There would be no new or substantially more severe biological impacts.

### **3.10.5 Changes at Coliseum Station**

The site proposed for the power distribution system substation is immediately adjacent to the Hegenberger Road bridge over San Leandro Street. The site is hard-packed earth most likely compacted by heavy equipment during construction of the Hegenberger Roadway Bridge or the Arroyo Viejo Creek box culvert that is located under the northwestern corner of the triangular-

shaped site. The site is still used for construction parking or storage. Some construction materials were present on the day of the site survey.<sup>14</sup> Vegetation is sparse or nonexistent. The closest habitat is riparian and potential wetland habitat along Arroyo Viejo Creek located west of the Hegenberger Road on-ramp. The Arroyo Viejo Creek riparian area is separated from the project site by the two-lane width of the Hegenberger Road on-ramp (plus sidewalk), which is approximately 30 feet wide. Therefore, no sensitive habitat or species would be affected by the relocation of the substation to this area. There would be no new or substantially more severe biological impacts.

### **3.11 Noise and Vibration**

A technical report was prepared by Wilson, Ihrig and Associates, Inc. (WIA), acoustical and vibration consultants, that presents a noise and vibration analysis for the revised BART Oakland International Airport Connector AGT system alignment (July 2006). This report is attached to this Addendum as Appendix B. The WIA report evaluated operational noise, operational vibration, construction noise, construction vibration, and cumulative noise issues related to the alignment changes and facility relocations proposed subsequent to the certification of the OAC project FEIR/FEIS in 2002.

#### **3.11.1 Methodology**

There is no vehicle technology specified for use on the OAC project. AGT Vehicle technologies with an electrical powered system could include steel-wheel, rubber-tired, or maglev design. Consequently, WIA has considered these alternative technologies and how they might contribute to adverse wayside noise and vibration levels in nearby community areas. Specifically, to assess wayside noise and vibration, two AGT technologies were evaluated: steel-wheel-on-rail and monorail vehicles. Noise levels for vehicles with Maglev technology are quieter than steel-wheel and rubber-tired vehicles; therefore, steel-wheel-on-steel-rail and monorail technologies represent the worst-case scenario.

Both BART and FTA have noise and vibration criteria. BART standards are based on project-generated noise or vibration compared to existing land uses around a given receptor and the typical noise levels occurring near the receptor. BART assigns the land uses an "area category" (for example, residential, commercial, industrial/highway) that characterizes the sensitivity of the location to its noise and vibration environment. FTA's criteria are also based on the sensitivity of the receptors, but the FTA method characterizes project performance in terms of noise and vibration criteria that are relative; that is, the impact is based on the project-generated change in noise exposure, but the level of impact varies depending on the existing noise environment. Subsequent to the 2002 FEIR/FEIS, BART adopted the FTA criteria as its design criteria (BART Facilities Standards). However, to be consistent with the analysis in the FEIR/FEIS, both BART and FTA criteria were addressed in the WIA report. Project-generated passby noise and groundborne vibration were evaluated with the BART criteria, and cumulative noise impacts were evaluated with the FTA noise criteria. Construction noise and

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<sup>14</sup> Site survey conducted July 20, 2006 by Donald Dean.

construction vibration also were evaluated according to BART construction noise and vibration criteria.

A more detailed description of the noise impacts and groundborne vibration related to each segment of the changed alignment is presented below. Cumulative noise, construction noise, and construction vibration are discussed collectively at the end of the noise discussion.

### 3.11.2 Existing Conditions

Ambient noise in the vicinity of the project corridor is dominated by heavy vehicle traffic on Interstate 880 as well as traffic on local roads such as Hegenberger Road, Airport Drive, and Doolittle Drive. Aircraft at the Oakland International Airport (OIA) are another important source of ambient noise in the vicinity of the alignment. In the proximity of the Coliseum BART Station, ambient noise is dominated by train noise from both BART and Union Pacific Railroad trains as well as noise from traffic on Hegenberger Road.

Current ambient noise levels in the vicinity of North Field are lower than those originally reported in the 2002 document, apparently due to the noise abatement program recently implemented by the OIA. On the other hand, existing ambient noise levels along the remainder of the alignment have increased slightly from those reported in the 2002 FEIR/FEIS document. The increase between year 2000 and 2005 has occurred mostly along Hegenberger Road. The increase in the Ldn is about 2 dBA. Moreover, this increase was anticipated during preparation of the original environmental document. It was anticipated that due to traffic noise an increase of 2 dBA would occur between the existing conditions in 2000 and 2005, and an increase of 3 dBA between the year 2000 and 2020. These assumptions made for the 2002 FEIR/FEIS document, have been confirmed by the noise data obtained from the recently revised City of Oakland Noise Element.

The existing traffic volume along I-880 is approximately 230,000 daily vehicles, based on annual average daily traffic (AADT) reported by CALTRANS.<sup>15</sup> Compared with traffic volumes presented in the 2002 FEIR/FEIS document, the increase is approximately 20 percent, which results in noise levels above 70 Ldn for unobstructed receptors up to distances of 1,000 feet away from I-880.

### 3.11.3 Airport AGT Station Relocation

*Operational Noise.* The revised alignment in the area of the Oakland International Airport starts between Terminals 1 and 2, and would run straight over the existing daily parking lot until it crosses the Airport Road loop road. No noise sensitive receptors are located at the Oakland Airport, but there is one commercial/office building (LSG Sky Chefs), located on Neil Armstrong Way at a distance of 160 feet from the revised alignment. The wayside noise level from the AGT is expected to be 12 dBA below the 85 dBA BART criterion at the location of this commercial/office building. Therefore AGT operation would result in a less-than-significant noise impact in this area.

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<sup>15</sup> California Department of Transportation, Annual Average Daily Traffic, 2004.

*Groundborne Vibration.* In the vicinity of the OIA, there are no vibration-sensitive receptors close enough to be affected by AGT operations. Therefore, the revised alignment would have a less-than-significant impact in this segment of the corridor.

#### **3.11.4 Doolittle Drive Maintenance and Storage Facility**

*Operational Noise.* The AGT guideway alignment in the vicinity of the Doolittle site has not changed. Therefore, there are no changes to the conclusions in the FEIR/FEIS relating to operational noise impacts in this segment of the alignment.

The maintenance facility would be relocated from the Coliseum BART Station to the northwest corner of Airport Access Road and 98<sup>th</sup> Avenue. At the proposed relocated maintenance facility (Doolittle Maintenance Facility), and based on the current site plan (Figure 2-5 and 2-6), noise generating activities such as vehicle washing and wheel truing were used as sources to calculate noise levels at the closest noise sensitive receptors. At this time, it is not clear whether wheel truing would occur at the proposed Doolittle facility. However, if wheel truing is located at the MSF, it would potentially be the noisiest activity inside the building. Car wash operations were assumed to take place outside the building. However, in the course of final design, the decision may be made to relocate car wash operations inside the building. Therefore, an outside car wash combined with wheel-truing is a worst-case condition for noise modeling purposes. The third noisiest source at the Doolittle site is the power distribution station, which is proposed for a location under the guideway approximately 100 feet from the Edgewater West Hotel.<sup>16</sup>

The BART criteria require that auxiliary facilities not exceed 50 dBA. The maximum noise level from the Doolittle Maintenance Facility is expected to be approximately 63 dBA at the nearest façade of the Edgewater West Hotel without mitigation. Relocating the maintenance facility to the Doolittle site will result in a significant impact for the Edgewater West Hotel. However, implementing noise mitigation measures NV-2(i) (Provide Noise Buffers or Sound Barriers) and NV-2(ii) (Mitigate Noise from Ancillary Vehicle Washing Facility) from the FEIR/FEIS would reduce noise from the maintenance and storage facility to a less-than-significant level.

The next closest noise sensitive receptors in the area of the Doolittle maintenance facility are the Hilton hotel located along Hegenberger Road and the Holiday Inn Express located on Airport Access Road. These hotel buildings would be approximately 600 to 700 feet from the Doolittle maintenance facility. The projected noise due to maintenance facility is 56 to 57 Ldn at the Hilton Hotel and 53 Ldn at the Holiday Inn Express. The Hilton hotel is currently exposed to an Ldn level of about 70 dBA. The Holiday Inn Express is exposed to a level of approximately 69 Ldn. Maximum noise is expected to be about 53 dBA or lower with implementing mitigation measures. The appropriate BART standard is 55 dBA. Consequently, the noise impacts are projected to be less than significant at both of these hotels from this noise source.

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<sup>16</sup> The Edgewater West Hotel is currently known as the Ibiza Hotel. The original name Edgewater West is retained in this document for consistency with the original FEIR/FEIS.

*Groundborne Vibration.* The alignment for the AGT guideway would not change in the vicinity of the Doolittle site. Therefore, there would be no change in groundborne vibration related to the AGT alignment from that described in the FEIR/FEIS.

### **3.11.5 Revised Alignment at Edgewater**

*Operational Noise.* Along Hegenberger Road, in the area of Edgewater, the revised alignment is about 70 feet closer to office buildings located on the east side of Hegenberger Road. Both the Union Bank of California and the Oakland SPCA buildings, located on the east side of Hegenberger Road, are at a distance of 100 feet from the alignment centerline. The maximum wayside noise level from AGT passbys is expected to be about 77 dBA, or 8 dBA below the BART criterion of 85 dBA. Therefore, a less-than-significant noise impact is projected for these commercial buildings.

*Groundborne Vibration.* Groundborne vibration is expected to be 8 dB below the 80 dB BART criterion at the location of one office building (460 Hegenberger-Union Bank Building). Therefore, the revised AGT alignment would cause less-than-significant impacts related to groundborne vibration in this segment of the alignment.

### **3.11.6 Revised Median Alignment-Coliseum Way to Elmhurst Channel**

*Operational Noise.* Crossing I-880, the revised alignment is approximately, 40 feet further west than the original alignment. North of I-880, the alignment transitions to the east south of Coliseum Way compared to the original median alignment that transitioned to the median north of Coliseum Way (Figures 2-13a and 2-13b). Buildings in this segment of Hegenberger Road are primarily restaurants and gas stations; however, there is one hotel located on Edes Avenue at approximately 360 feet from the revised alignment. For this one receptor, wayside noise levels are projected to be 14 dBA below the BART criteria of 80 dBA. The project would cause a less-than-significant noise impact to this receptor. Three additional hotel buildings are located further east along Edes Avenue, although one of them is currently vacant (former Holiday Inn). The revised alignment in the vicinity of these hotels is proposed to be about 40 feet further west than the original median option alignment. A less-than-significant noise impact was projected in 2002, and a less-than-significant impact is projected with the revised alignment.

Between Baldwin Street and Elmhurst Channel, the alignment continues in the Hegenberger Road median for another 300 feet before crossing to the west side of Hegenberger Road compared to the original median option. The proposed alignment shift would benefit an office building on the west side of AGT alignment (675 Hegenberger Road) by reducing passby noise levels approximately 4 dBA compared to the original median option. Noise sensitive receptors east of the AGT alignment are commercial and are located at a distance of 200 feet from the near track centerline. Maximum wayside noise levels for this receptor are projected to be 77 dBA or lower compared to the BART standard of 85 dBA. Therefore, a less-than-significant impact is projected for receptors on the eastern side of the alignment. One single-family residence has been identified at 690 Hegenberger Road. At the single-family residence, which is located in an Area Category IV for maximum noise per the BART criteria, the maximum passby noise from

AGT operations is projected to be 69 dBA. This will be less than the BART impact criterion of 80 dBA.

*Groundborne Vibration.* North of I-880, for the hotel buildings located along Edes Avenue, AGT operations are expected to generate vibration levels below 57 dB compared to the BART standard of 75 dB and a FTA standard of 72 dB and therefore result in a less-than-significant impact. Two other sensitive receptors on Hegenberger Road were evaluated: a medical office building at 675 Hegenberger Road and a single-family residence at 690 Hegenberger Road. The medical office building would be exposed to a vibration level of 74 dB compared to the BART criteria (80 dB) and FTA criteria (75 dB). Groundborne vibration is expected to be 9 to 11 dB below the BART criteria (70 dB) and FTA criteria (72 dB) respectively at the single-family residence. Based on both the BART and FTA criteria, the revised alignment would have a less-than-significant impact.

### **3.11.7 Changes at Coliseum Station**

*Operational Noise.* The relocation of the MSF from the Coliseum BART Station to the Doolittle site would benefit residences located on 70<sup>th</sup> and 71<sup>st</sup> Streets near the Coliseum BART station. With the original alignment, residences would likely have been exposed to a significant noise impact due to operation of the maintenance facility. However, with the maintenance facility relocated, the level of AGT impact on the area is greatly reduced. This is a beneficial impact of the revised project.

No sensitive receptors were identified in the vicinity of the proposed power distribution system substation west of San Leandro Street. No noise impacts related to the substation are anticipated.

*Groundborne Vibration.* An electric power distribution center does not generate groundborne vibration; therefore, the revised location for the substation would not have a vibration impact.

### **3.11.8 Cumulative Noise**

Cumulative noise was identified as an unavoidable significant impact in the 2002 FEIR/FEIS. This cumulative impact is attributable to the combined traffic, airport, and AGT noise. The cumulative noise analysis in the WIA report focused on noise sensitive receptors where changes to the proposed revised alignment could cause noise impacts based on the FTA criteria. Cumulative noise impacts are considered significant if AGT operations exceed the threshold for *Severe Impact* as described by FTA. The FTA criteria threshold is based on the noise exposure increase from the existing ambient noise. Receptors along Hegenberger Road are primarily commercial (that is, retail stores, gas stations, and chain restaurants), office buildings, and hotel buildings. According to the guidelines provided by the FTA, the cumulative noise impact analysis is applicable only to the office and hotel buildings.

The future noise increase is the noise associated with project operation in combination with other programmed projects in the study area. Future noise levels in the area of the alignment are expected to increase by 1 dBA independent of the connector project. This increase is predicted due to the growth in traffic along Hegenberger Road and I-880.

Results of the WIA noise analysis for the revised alignment showed no additional significant impacts beyond those identified in the FEIR/FEIS. Moreover, fewer significant impacts are expected for the nearby receptors based on the single train passby noise (BART) and cumulative noise (FTA) criteria, when the analysis is based on the current (2006) ambient noise conditions. When the analysis is based on the ambient conditions existing in 2001 and the current Project alignment, there would be a minor increase in the impact level according to the FTA criteria, and there would be significant and unavoidable noise impacts as established in the 2002 FEIR/FEIS. No additional noise mitigation is necessary beyond that described in Mitigation Measure NV-1(i) (Mitigate Passby Noise) in the FEIR/FEIS.

### 3.11.9 Construction Noise

Construction noise was identified in the FEIR/FEIS as a significant unavoidable impact. The FEIR/FEIS identified construction noise impacts (Impact C-NV-1) involving numerous receptors along the Connector alignment. The BART criteria are more restrictive than the FTA criteria. Therefore, WIA evaluated construction noise impacts against the BART criteria. This approach was consistent with the analysis presented for the 2002 FEIR/FEIS.

The original median alignment option presented in the FEIR/FEIS report, identified pile driving as a cause of significant impacts at noise sensitive receptors within 650 feet of the project right-of-way. All sensitive receptors in the proximity of the revised alignment were part of the 650-foot-wide corridor for a potentially significant noise impact with the original alignment and therefore previously identified as being impacted. In general, the revised alignment changes would result in minor changes in proximity of construction equipment to noise sensitive receptors. Consequently, there are no new construction noise impacts projected for construction of the AGT guideway structure with the revised alignment.

During construction of the Doolittle Maintenance Facility, noise from pile driving is expected to generate the highest levels and to exceed the BART limits for intermittent noise by 2 to 9 dBA. Noise impact is expected to be significant for short-term operations in the vicinity of the Hilton and Edgewater West hotel buildings, United Labor Bank, and Gateway business center. Moreover, noise levels associated with long-term construction activity on the Doolittle Facility are expected to be about 5 to 8 dBA above the 70 dBA BART criteria.

Significant short-term impacts would occur and existing mitigation measures C-NV-1(i) (Implement Best Management Practices to Reduce Construction Noise), C-NV-1(ii) (Provide Noise Buffer of Sound Barrier between Construction Activities and Noise-Sensitive Receptors), and C-NV-1(iii) (Reduce Noise from Pile Driving) need to be implemented.

Similarly, significant impacts due to long-term construction activities were accounted for in the FEIR/FEIS. These impacts were projected to occur at noise sensitive receptors in the vicinity of the original median option alignment. The revised alignment would result in no additional long-term impacts. However, significant long-term noise impacts would occur and mitigation measures need to be implemented.

### 3.11.10 Construction Vibration

The FEIR/FEIS identified construction vibration as a significant unavoidable impact of the OAC project, and identified two construction vibration impacts (Impacts C-NV-2 and C-NV-3): the first relates to construction vibration annoyance, and the second relates to potential building damage due to construction vibration. The BART criteria are more restrictive than the FTA criteria. Therefore, WIA evaluated construction vibration impacts against the BART criteria. This approach was consistent with the analysis presented for the 2002 FEIR/FEIS.

Groundborne vibration from short-term construction activity such as pile driving is expected to be about 100 VdB at a distance equivalent to the typical building setback along Hegenberger Road. However, vibration level depends directly upon the local soil conditions characteristics and the pile-driving technique used.

For construction activities, long-term effects such as excavation, movement of bulldozers and loaded trucks, maximum groundborne vibration is expected to be about 76 VdB along Hegenberger Road. Furthermore, at distances further than 60 feet, vibration levels are expected to be below the 80 VdB BART criteria for sustained construction activities and therefore projected to cause a less-than-significant impact.

Results of the vibration analysis for short-term construction operations result in a significant impact at sensitive receptors. However, with the revised alignment no additional significant vibration impacts beyond those identified in the 2002 FEIR/FEIS document are projected.

Vibration mitigation measures would be required where feasible to reduce potential impacts in areas where a significant impact has been determined for the original alignment to a level that is less than significant. As stated in the FEIR/FEIS document, vibration mitigation would reduce the effect of the vibration impact, although the impact would remain a significant unavoidable (SU) impact as identified in the FEIR/FEIS document.

Finally, vibration impacts from sustained construction operations are expected to result in levels that are less than significant for the revised alignment. Therefore, no additional significant impacts are expected for the revised alignment.

## 3.12 Air Quality

The FEIR/FEIS identified air quality impacts for the Connector project, including regional air quality impacts, local PM<sub>10</sub> impacts, local CO impacts, secondary emissions from electricity generation, and air toxic emissions. Overall the Connector project would have a beneficial effect on air quality by reducing the vehicle miles traveled by auto to the airport, thereby reducing regional air pollutants.

In Section 3.12.2, Existing Conditions, the FEIR/FEIS discusses Applicable Regulations, Plans and Policies. Subsequent to the adoption of the FEIR/FEIS in 2002, the U.S. EPA began its adoption process for designations under and implementation of the new National Ambient Air Quality Standards (NAAQS) for ozone (8-hour averaging time) and fine particulate matter (PM<sub>2.5</sub>) which had been adopted in 1997. EPA has now designated areas as attainment or nonattainment for purposes of the 8-hour ozone and PM<sub>2.5</sub> standards. For the PM<sub>2.5</sub> standard,

EPA designated the Bay Area as attainment, effective April 5, 2005 (70 Fed. Reg. 944, at 958-59, Jan. 5, 2005). Because the Bay Area is designated attainment for this standard, no conformity determination is required with regard to PM<sub>2.5</sub>. For the 8-hour ozone standard, EPA designated the Bay Area as nonattainment, classified as subpart 2/marginal, effective June 15, 2004 (69 Fed. Reg. 23858, at 23887-88, Apr. 30, 2004). The 1-hour ozone standard was accordingly revoked for the Bay Area effective June 15, 2005 (see 40 CFR § 50.9(b) and 40 CFR § 81.305, fn. 4 to California – Ozone (1-Hour Standard) table; 69 Fed. Reg. 23951, at 23996, Apr. 30, 2004; and 70 Fed. Reg. 44470, at 44475, Aug. 3, 2005; corrected at 70 Fed. Reg. 48238, Aug. 16, 2005).

With regard to the 2001 Bay Area Ozone Attainment Plan, on April 22, 2004, EPA determined that the San Francisco Bay Area ozone nonattainment area has attained the 1-hour ozone national ambient air quality standard (NAAQS) and approved all elements of the plan that address deficiencies identified by EPA in its previous partial disapproval (see 69 Fed. Reg. 21717, at 21718, 21725, 21731, April 22, 2004).

On July 1, 2004, EPA published revised transportation conformity standards to incorporate requirements related to the new ozone and PM standards (69 Fed. Reg. 40004). For the Oakland Airport Connector, a re-determination of conformity is not necessary at this time since no FTA approval of a “major step to advance the project” as defined in 40 CFR § 93.104(d) is expected, and no three-year period had elapsed between such major project steps.

In Section 3.12.3, Impact Assessment and Mitigation Measures, the FEIR/FEIS discussed the Conformity Assessment. The following information updates that assessment. The Connector project comes from a conforming transportation plan and program. The Oakland Airport Connector is identified in the 2005 Regional Transportation Plan, titled the *Transportation 2030 Plan for the San Francisco Bay Area*, which is the current conforming transportation plan. The Transportation 2030 Plan was adopted (MTC Resolution No. 3681) with conformity findings (MTC Resolution No. 3679) on February 23, 2005. The Oakland Airport Connector is also identified in the 2005 Transportation Improvement Program, which was approved (MTC Resolution No. 3630) and found to be conforming (MTC Resolution No. 3629) on July 28, 2004. The U.S. Department of Transportation approved the conformity determination in the plan and program on March 17, 2005.<sup>17</sup> Under EPA’s new conformity rule for the national 8-hour ozone standard, the existing approved 1-hour ozone motor vehicle emission budget is to be used for conformity analyses until it is replaced by a new motor vehicle emissions budget approved for inclusion in the state implementation plan (SIP) for attainment of the 8-hour ozone standard. MTC’s conformity findings are based on the approved motor vehicle emissions budget in the 2001 Ozone Attainment Plan (the SIP for attainment of the 1-hour ozone standard) and thus satisfy this requirement. MTC has used the latest planning assumptions for the purpose of preparing the conformity analysis for the Transportation 2030 Plan and the 2005 Transportation Improvement Program (TIP). MTC’s findings of conformity are based on MTC’s travel demand

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<sup>17</sup> Also of note, although the project is not included in list of federal TCMs, the Oakland Airport Connector is among the regional rail service projects identified in TCM 4, one of the state TCMs included in the now-adopted 2005 Bay Area Ozone Strategy (adopted January 4, 2006) and listed in the Transportation 2030 Plan. The State TCMs are adopted for state air quality planning purposes rather than for the federal SIP.

forecast model (BAYCAST 2000), which estimates vehicle activity in the Bay Area, and the California Air Resources Board's latest model for determining motor vehicle emissions (EMFAC2002). EMFAC2002 is the currently approved model for use in California.

In the context of increased transit demand (see pages 3-1 to 3-4), none of the five project modifications would appreciably change the ridership or vehicle miles traveled, which form the basis of the air quality analysis. Construction methods would be the same for the project revisions as with the Preferred Alternative analyzed in the FEIR/FEIS; therefore, construction-related air quality impacts would be the same. The mitigation measures in the FEIR/FEIS would reduce those construction impacts to a less-than-significant level.

### **3.12.1 Airport AGT Station Relocation**

Relocating the Airport AGT Station within the airport parking lot would not change the air quality analysis. Impacts and mitigation measures would be the same as for the Preferred Alternative.

### **3.12.2 Doolittle Drive Maintenance and Storage Facility**

Relocating the maintenance and storage facility from the Coliseum Station to the Doolittle site would not change the air quality analysis. Impacts and mitigation measures would be the same as for the Preferred Alternative.

### **3.12.3 Revised Alignment at Edgewater Drive**

Relocating the alignment to the median would not change the air quality analysis. Impacts and mitigation measures would be the same as for the Preferred Alternative.

### **3.12.4 Revised Median Alignment-Coliseum Way to Elmhurst Channel**

Relocating the alignment to the median would not change the air quality analysis. Impacts and mitigation measures would be the same as for the Preferred Alternative.

### **3.12.5 Changes at Coliseum Station**

Relocating the MSF from the Coliseum Station to the Doolittle site and relocation of the power distribution system substation would not change the air quality analysis. Impacts and mitigation measures would be the same as for the Preferred Alternative.

## **3.13 Energy**

The FEIR/FEIS evaluated the Connector's energy use, demand and supply of energy resources, and energy consumption during construction. Energy use for the Connector was calculated by adding the energy required by the AGT's traction power system and the energy required to operate the AGT stations. Known energy factors were used to estimate the energy required for construction.

The 2002 FEIR/FEIS determined that the construction of the Preferred alternative would increase transit use to OIA and reduce the number of vehicle miles traveled (VMT) by automobiles. This reduction in VMT would result in a net reduction in regional energy use, a

beneficial effect. However, because the AGT typically is an electrically-powered system, and due to the uncertainty over the region's energy supply and energy transmission system in 2002, any increase in the demand for electric energy was considered a potentially significant effect on the electric energy supply. BART normally adopts energy conservation techniques, such as running fewer cars during off-peak hours, but considering the uncertainty of energy supplies, these measures were not considered sufficient. The FEIR/FEIS identified electric energy use as a significant and unavoidable impact.

Energy supply and demand is still a critical issue in California. Information from the California Energy Commission shows that electric use has increased from 244,409 gigawatt-hours<sup>18</sup> (GWh) in 1998 to 264,740 GWh in 2003, an increase of 8 percent. The Energy Commission staff expects supplies in all regions of California to be adequate to meet growing electricity demand and the required 7 percent operating reserve under average conditions. Improved resource adequacy is due to new generation facilities since 2000, transmission improvements, increased energy efficiency, and voluntary conservation. However, if very hot summer occurs (a 10 percent probability), demand for northern California electricity resources is expected to exceed the 7 percent reserve requirement.<sup>19</sup>

### **3.13.1 Airport AGT Station Relocation**

The Airport AGT Station would be relocated, but size and operational energy needs would not vary substantially from those proposed for the AGT station described in the FEIR/FEIS. The relocation of the Airport AGT Station also would not appreciably affect the length of the AGT guideway system, which is the primary factor in system energy use. Construction of the relocated station would be substantially the same as described in the FEIR/FEIS. No new or substantially more severe operational or construction energy impacts are anticipated.

### **3.13.2 Doolittle Drive Maintenance and Storage Facility**

Energy use for the maintenance facility was estimated as part of AGT system requirements in the FEIR/FEIS. The maintenance and storage functions for the facility proposed for the Doolittle site are the same as the facility originally proposed at the BART Coliseum Station. The relocation of the maintenance facility would not change the operational energy estimates prepared for the FEIR/FEIS.

Construction of the relocated MSF would be substantially the same as described in the FEIR/FEIS. However, the MSF at the Doolittle site is a lower facility (two-stories versus three-stories) than the MSF at the Coliseum BART Station. Because the MSF would not be as tall as originally envisioned, the energy required for construction would most likely be less than that required for the Coliseum BART MSF. This would be a benefit of the revised project. No new or substantially more severe operational or construction energy impacts are anticipated.

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<sup>18</sup> Electric consumption over time is measured in watt-hours. A kilowatt-hour is 1,000 watt-hours; a gigawatt-hour is one million kilowatts-hours.

<sup>19</sup> California Energy Commission, *Summer 2006 Electricity Supply and Demand Outlook-Final Staff Report*, April 2006

### **3.13.3 Revised Alignment at Edgewater Drive**

The relocation of the AGT alignment to the Hegenberger Road median would not appreciably lengthen the guideway. Therefore, the energy requirements for the Revised Median Alignment at Edgewater Drive would be the same as the Preferred Alternative. Construction of the revised alignment would be substantially the same as the Preferred Alternative. No new or substantially more severe operational or construction energy impacts are anticipated.

### **3.13.4 Revised Median Alignment-Coliseum Way to Elmhurst Channel**

The relocation of the AGT alignment to the Hegenberger Road median would not appreciably lengthen the guideway. Therefore, the energy requirements for the Revised Median Alignment between Coliseum Way and Elmhurst Channel would be the same as the Preferred Alternative. Construction of the revised alignment would be substantially the same as the Preferred Alternative. No new or substantially more severe operational or construction energy impacts are anticipated.

### **3.13.5 Changes at Coliseum Station**

The MSF and power distribution system substation would be relocated, but operational and construction energy needs would not vary substantially from those described in the FEIR/FEIS.

## **3.14 Hazardous Materials**

The FEIR/FEIS evaluated the potential for exposure to hazardous materials during AGT operations and exposure to known contaminated sites or accidental releases of hazardous materials during construction. Operation of the AGT would not involve the transport, use, or disposal of hazardous materials that would create a potentially significant hazard. The FEIR/FEIS documented the known location of Category I hazardous materials sites along the project corridor. New developments in the project corridor have been commercial retail establishments. (See Land Use above.) These land uses do not entail the use of substantial amounts of hazardous materials.

### **3.14.1 Airport AGT Station Relocation**

There are no known hazardous materials sites within the airport parking area. Construction of the AGT station would be substantially the same as described in the FEIR/FEIS. Relocation of the Airport AGT Station would not result in any changes to the analysis presented in the FEIR/FEIS.

### **3.14.2 Doolittle Drive Maintenance and Storage Facility**

There are no known hazardous materials within the Doolittle site. The AGT maintenance facility would potentially use, store, and handle hazardous materials and hazardous waste, including batteries, oil-containing liquids or solids, and solvents. Overall, some of the materials are potentially hazardous, but do not pose a significant health and safety risk because of limited volumes and concentrations required, and because BART will require the Connector operator to meet all legal requirements for handling and disposal practices. Construction of the MSF at the Doolittle site would use essentially the same construction methods as would be used at the Coliseum Station and would have the same hazardous materials impacts. Compared to the

Preferred Alternative, relocation of the maintenance facility would not cause greater or more severe impacts related to hazardous materials.

### **3.14.3 Revised Alignment at Edgewater Drive**

Four Category I hazardous materials sites have been identified near the Edgewater Drive to I-880 segment of the AGT corridor. Two of the sites, the Super Stop (formerly Chevron) and Circle K (formerly Unocal) service stations are located on the west side of the Edgewater Drive/Hegenberger Road intersection. As noted in the socioeconomic discussion above, the Preferred Alternative would have required the partial property acquisition from both service station sites. Relocation of the AGT alignment to the Hegenberger Road median would not require the use of these sites, and would reduce the potential impacts related to hazardous materials. This would be a beneficial effect of the revised alignment. Construction of the revised alignment would use essentially the same construction methods and would have the same impacts as the Preferred Alternative.

### **3.14.4 Revised Median Alignment-Coliseum Way to Elmhurst Channel**

Three properties along the Coliseum Way to Elmhurst Channel segment of the project corridor are listed on state regulatory databases: Environmental Innovations Corp. at 675 Hegenberger Road, Oakland International Trade Center (Home Base site) at 625-655 Hegenberger Road, and Caltrans (GMC lot) at 555 Hegenberger Road. Construction of the Revised Median Alignment in the Coliseum Way to Elmhurst Channel segment of the corridor would avoid two of these sites altogether (Environmental Innovations, Home Base) and reduce contact with the third (Caltrans). This would reduce the potential for exposure to hazardous material and would be a benefit of the revised median alignment. Construction of the revised alignment would use essentially the same construction methods and would have the same impacts as the Preferred Alternative.

### **3.14.5 Changes at Coliseum Station**

The proposed location of the power distribution system substation is not a known hazardous materials site. Relocation and construction of the substation would be the same as described in the FEIR/FEIS.

## **3.15 Environmental Justice**

The FEIR/FEIS evaluated the potential effect the Connector could have on environmental justice communities. Two environmental justice communities were identified. The first is located north of the Coliseum BART Station (North of BART) and the second is the Columbian Garden neighborhood (located east of Hegenberger Road between San Leandro Creek and I-880). Both communities are relatively stable. As noted in the Land Use section above, the Lion Creek Crossings is a new residential project with affordable and low-income units being developed on San Leandro Boulevard between 66<sup>th</sup> and 69<sup>th</sup> Avenues, approximately one block from the northern end of the Coliseum BART Station.

### **3.15.1 Airport AGT Station Relocation**

Both communities are located more than 1.5 miles from the airport terminal area. Neither community would be affected by the relocation of the Airport AGT Station.

### **3.15.2 Doolittle Drive Maintenance and Storage Facility**

The closest environmental justice community to the Doolittle site is the Columbian Garden residential neighborhood east of Hegenberger Loop, which is approximately 1,700 feet (0.3 miles) from the site. Columbian Gardens is separated from the Doolittle site by San Leandro Creek and several blocks of urban development containing commercial and light manufacturing uses and long-term airport parking. This existing development would buffer any impact of the maintenance facility on Columbian Gardens.

### **3.15.3 Revised Alignment at Edgewater Drive**

The closest environmental justice community to the Edgewater Drive to I-880 segment of the AGT alignment is the Columbian Garden residential neighborhood approximately 0.2 miles southeast of Edgewater Drive. Columbian Gardens is separated from the revised alignment by commercial development. The slight difference in distance between the Preferred Alternative and the Revised Median Alignment would not affect the analysis in the FEIR/FEIS and would not affect the Columbian Garden community.

### **3.15.4 Revised Median Alignment-Coliseum Way to Elmhurst Channel**

The closest environmental justice community to the Coliseum Way to Elmhurst Channel segment of the AGT alignment is the residential neighborhood North of BART, approximately 0.4 miles northwest of the Elmhurst Channel. The area between the revised median alignment and the North of BART neighborhood is occupied by Union Pacific Railroad tracks, the elevated BART tracks, the BART station, and storage and light industrial facilities along San Leandro Avenue. These transportation uses and associated industrial developments provide a substantial buffer between the Revised Median Alignment in the vicinity of Elmhurst Channel and the North of BART neighborhood. The slight difference in distance between the Preferred Alternative and the Revised Median Alignment would not affect the analysis in the FEIR/FEIS and would not affect the North of BART community.

### **3.15.5 Changes at Coliseum Station**

The closest environmental justice community to the Coliseum BART Station is the residential neighborhood North of BART, immediately north of the Coliseum BART Station parking lot. The relocation of the maintenance and storage facility to the Doolittle site would remove at least one source of OAC project impacts, noise related to the maintenance and storage facility, from the Coliseum BART Station. This would be a benefit for the North of BART neighborhood.

The power distribution system substation would be relocated to a parcel west of San Leandro Street, approximately 800 feet from the North of BART neighborhood. The area between the substation site and the North of BART neighborhood is occupied by San Leandro Street, a major thoroughfare, the elevated BART tracks, the BART station, and the Union Pacific Railroad tracks

(eastern branch). These transportation uses provide a substantial buffer between the substation site and the North of BART neighborhood.

### **3.16 Other CEQA/NEPA Considerations**

A summary of Significant Unavoidable Adverse Impacts, Significant Irreversible Environmental Changes, Significant Cumulative Impacts, and Growth-Inducing Impacts was presented in the Section 4 of the FEIR/FEIS, Other CEQA/NEPA Considerations.

Cumulative impacts are those resulting from future growth and other foreseeable development projects in the project corridor. There have been a number of changes to the list of reasonably foreseeable future projects that were included in the FEIR/FEIS analysis. Section 4.4 of the FEIR/FEIS listed the potential projects in the project corridor. The FEIR/FEIS list of cumulative projects has been updated and augmented (below).

#### Projects on 2002 Cumulative List-Completed

- Capitol Corridor-Amtrak rail platform at 73<sup>rd</sup> Avenue and San Leandro Street
- Best Western Hotel at 170 Hegenberger Loop Road
- Edgewater Distribution Center at 7200 Edgewater Drive
- Hegenberger/Pardee Site (Now Harley Davidson)
- Courtyard by Marriot at 350 Hegenberger Road
- Zhong Technologies project at 66<sup>th</sup> and Oakport Road

#### Projects on the 2002 Cumulative List-Not Completed

- Metroport office and hotel project at Hegenberger Road and I-880-withdrawn; replaced by a Wal-Mart and associated retail development.
- Wingate Hotel at Hegenberger and Pardee Drive (northwest corner)

#### Projects Not on the 2002 Cumulative List

- Lion Creek Crossing residential development on San Leandro Street between 66<sup>th</sup> and 69<sup>th</sup> Streets; first phase of a multi-phase residential development completed. The remainder of the project is scheduled to be complete by December 2008.
- Champions Coliseum Shopping Center. The 12.4-acre parcel on the west side of Hegenberger Road between Coliseum Way and Elmhurst Channel, which was formerly the Home Base site, is the proposed location for 155,000 square feet of retail development. The project is tentatively scheduled to open in 2008.

- **Holiday Inn.** A 147-room Holiday Inn is proposed for a 2.6-acre site at 77 Hegenberger Road (at Pardee Drive). A Negative Declaration was adopted for the project on May 4, 2006.

The list of cumulative projects analyzed in the FEIR/FEIS included eight projects, of which six were constructed and two were not. Three new projects (Lion Creek Crossing, Champions Coliseum Shopping Center, and Holiday Inn) were not considered in the FEIR/FEIS and have been added to the cumulative list.

Lion Creek Crossing is located approximately one block from the north end of the Coliseum BART Station. Project changes at the Coliseum Station entail the removal of the MSF and its relocation to the Doolittle parcel. This would be a reduction in OAC activity at the Coliseum Station and would benefit the residential community around the Coliseum Station, including Lion Creek Crossing. Lion Creek Crossing is scheduled to be complete in 2008. Depending on the OAC construction schedule, OAC could contribute to potential cumulative construction traffic impacts in the vicinity of the Coliseum BART Station.

The Champions Coliseum Shopping Center is located on Hegenberger Road between Coliseum Way and Elmhurst Channel, adjacent to the revised median alignment. Moving the OAC alignment from the west curb (Preferred Alternative) to the median would reduce project impacts on the shopping center site, but depending on the construction schedules for the two projects, OAC could contribute to potential cumulative construction traffic impacts in the area.

The proposed Holiday Inn is located on Hegenberger Road near the intersection of Pardee Drive, opposite the Doolittle site. The construction of the MSF is on the corner of the Doolittle site furthest from the Holiday Inn parcel. Although no direct impacts are anticipated, depending on the construction schedules for the two projects, construction of the OAC project could contribute to cumulative construction traffic impacts along Hegenberger Road.

These potential cumulative impacts were discussed in section 3.16.3 of the FEIR/FEIS, which identified both beneficial and adverse cumulative impacts. Beneficial cumulative impacts related to the Connector project included transportation, land use/socioeconomics, and air quality/energy.

*Transportation.* Although traffic volumes in the project corridor have increased as a result of cumulative development since publication of the FEIR/FEIS, the OAC Connector would remain a cumulative transportation benefit by converting current automobile trips to transit trips.

*Land Use/Socioeconomics.* In spite of the elimination of the Edgewater intermediate stop, the OAC Connector would support land use and economic development goals for the project corridor. The combined operations of the Amtrak/Capitol Corridor and the Connector would complement residential, commercial, and transit-oriented development in the project corridor.

*Air Quality/Energy.* The AGT would have cumulative beneficial effects on air quality and regional energy consumption by reducing the number of automobiles on the road.

The FEIR/FEIS identified adverse cumulative impacts including visual quality, noise, energy, and construction activities.

*Visual Quality.* The AGT would be the largest single contributor to altering the visual character of the project corridor. The changes to the project evaluated in this Addendum would not change this conclusion. However, the project changes would not increase the Connector's contribution to adverse visual impacts.

*Noise.* As predicted in the FEIR/FEIS, cumulative growth in automobile traffic has caused an increase in cumulative noise in the project corridor. Project changes evaluated in this Addendum would not increase the project's contribution to cumulative noise levels.

*Energy.* The AGT system (unless a petroleum-based fuel is used) would consume large amounts of electrical energy. The state and regional energy situation has improved since 2002, but state energy estimates indicate that electrical reserves are still limited, and the project could have an impact on peak energy demand. The project changes evaluated in this Addendum would not increase the project's contribution to cumulative energy demand.

*Construction Activities.* The Connector project, in combination with other development in the project corridor could contribute to significant construction-related impacts. However, none of the changes described in this Addendum would increase the project's contribution to construction-related impacts.

The FEIR/FEIS included a variety of mitigation measures that were adopted as part of the Mitigation Monitoring and Reporting Plan. The implementation of these mitigation measures would reduce these cumulative impacts to a less-than-significant level.

As noted in the evaluation in Section 3 of this Addendum, the five areas of OAC project modifications will not result in any new or more severe impacts. Therefore, there would be no new Significant Unavoidable Impacts, Significant Irreversible Changes, Significant Cumulative Impacts or Growth-Inducing Impacts related to the revised Connector project.

### **3.17 Section 4(f) Evaluation**

Section 4(f) of the Department of Transportation Act of 1966, codified at 49 USC Section 303, created a national policy to preserve the natural beauty of the countryside, public park and recreation lands, wildlife refuges, and historic sites. There are no wildlife refuges or historic sites that would be affected by the Connector project. The FEIR/FEIS identified three parklands and trails that would be affected by the Connector project. These include the Lew F. Galbraith Golf Course, the San Leandro Creek Trail, and the proposed extension of the Bay Trail. As noted above, the Bay Trail adjacent to Lew F. Galbraith Golf Course and the OAC alignment has been completed since the publication of the FEIR/FEIS. The current OAC alignment along Airport Drive does not impinge on the Bay Trail. No new recreation areas have been designated in the project corridor.

None of the alignment segments with project modifications (airport terminal area, Doolittle Drive site, Edgewater Drive to I-880 segment, Coliseum Way to Elmhurst Channel segment, or

Coliseum Station) are located adjacent to any of the three park resources. As discussed in Section 3.5 above, no historic resources would be significantly affected by the project revisions, and implementation of Mitigation Measure C-CR-2(i) (Conduct Subsurface Archaeological Testing/Exploration) would mitigate potential impacts to unknown archaeological sites. Therefore, the revisions to the Connector project would not affect Section 4(f) resources.

### **3.18 Summary**

This Addendum to the *Bart-Oakland Airport International Airport Connector FEIR/FEIS* evaluates the potential effects of the proposed project changes. Project changes and changed circumstances were evaluated for all the disciplines analyzed in the original document. The analysis did not identify any substantial changes in the existing environment and did not identify any new or more severe impacts not identified in the FEIR/FEIS. Implementation of adopted mitigation measures would reduce all identified impacts to a less-than-significant level.

Based on the evaluation presented in this Addendum, there is no substantial evidence in the light of the whole record that there are any substantial changes proposed in the project or substantial changes with respect to the circumstances under which the project is undertaken, which will require major revisions of the previous EIR due to new or substantially more severe significant environmental impacts; or new information of substantial importance, which was not known at the time of the previous EIR, indicating new or substantially more severe significant impacts or new mitigation measures or alternatives that would substantially reduce significant impacts. Therefore, the revised OAC project does not meet any of the conditions of CEQA Section 15162, and an EIR addendum is appropriate.

## 4.0 References

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Port of Oakland, Oakland International Master Plan-Final, Figure 8.3, March 2006.

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Wilbur Smith Associates, BART to Oakland Airport Connector Ridership Update-Final Report, September 19, 2005.



## **5.0 List of Preparers**

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# **APPENDIX A**

## **Revised OAC Alignment Maps**



## **APPENDIX B**

### **Supplemental Noise and Vibration Technical Report**