

# TRANSPORTATION



**70!**  
ANNIVERSARY

**miyamoto.** EARTHQUAKE +  
STRUCTURAL  
ENGINEERS







# miyamoto.

save lives, impact economies

Miyamoto International is a global earthquake + structural engineering and project management company providing critical services that sustain industries and safeguard communities around the world.

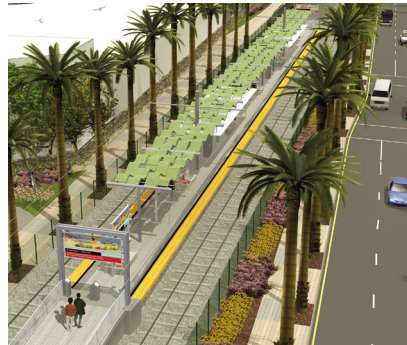
We are experts in high-performance engineering that reduces lifecycle costs and produces a positive net impact on a structure's operation. We assess the performance of structures to identify specific vulnerabilities, and prioritize solutions that limit business interruption and reduce property damage.

Built on decades of earthquake and structural engineering experience in the field, our expertise supports how clients address the economic, political, social, sustainability and resiliency challenges in earthquake risk reduction and post-disaster recovery and reconstruction.

Miyamoto offices are strategically located worldwide in earthquake-hazard regions to positively impact economies and save lives.

Sacramento  
San Francisco  
San Jose  
Los Angeles  
Orange County  
San Diego  
Reno  
Washington, D.C.  
Mexico  
Costa Rica  
Colombia  
Haiti  
Liberia  
Italy  
Turkey  
India  
Nepal  
Japan  
New Zealand

**make the world a better, safer place.**



Miyamoto provided structural design and construction administration for all 17 stations on both phases of the Exposition Light Rail Line, which extends from Pico Station in Downtown Los Angeles to 4th and Colorado Station in Santa Monica. Both phases were developed under a Design-Build delivery method. Station elements included raised platforms, ramps, retaining walls, canopies, control/

signaling buildings, OCS bases and signage support. At the five grade-separated stations, our work also included stairs, escalators, elevator shafts and machine rooms. All stations were designed to a common theme featuring cantilevered canopy roofs and undulating, highly sculpted structural steel elements at the canopies and elevator shafts.

## Metro Exposition Light Rail Line, Phases I & II

### LOCATION:

Phase I: Downtown LA to Culver City  
Phase II: Culver City to Santa Monica

### YEAR:

Phase I: 2006 - 2010  
Phase II: 2010-2016

### CLIENT:

Phase I: Flatiron/Fluor/Parsons JV  
Phase II: Skanska Rados JV

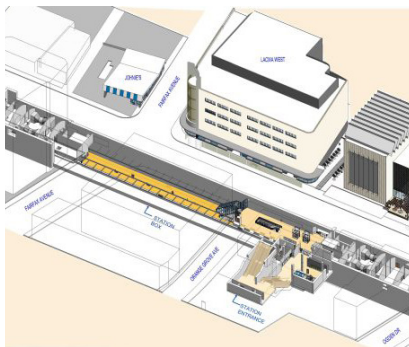
### PROJECT COST:

Phase I: \$868 Million  
Phase II: \$1.5 Billion

### SCALE:

Phase I: 10 stations along 8.6 miles  
Phase II: 7 stations along 6.6 miles





## Metro Westside Subway Extension Transit Corridor

Purple Line

**LOCATION:**  
Los Angeles, CA

**YEAR:**  
2011 - Present

**CLIENT:**  
Parsons Brinckerhoff

**OVERALL PROJECT COST:**  
\$6.3 Billion

Since 2011, Miyamoto has provided Conceptual, Preliminary and Advanced Preliminary Design services for the seven underground stations of the Metro Westside Subway Extension. This line, which will extend the Purple Line from its current Mid-City terminus to Westwood, includes station stops in the Museum District, Beverly Hills, Century City, UCLA and the Westwood VA Hospital. Our work has included the development of column-free

station cross sections for zones of high seismicity; time-history soil-structure interaction modeling of stations in soft soil; updating of Metro seismic design criteria to reflect increases in seismic demand; entrance, emergency exit and stair shaft design, and support of non-structural elements. This is part of the funding provided by Measure R for the Long Range Transportation Plan for Los Angeles County, in which more than \$4.2 billion has been budgeted.





The Universal Pedestrian Bridge is the fulfillment of a decades-long quest by Metro and NBC Universal to provide a grade-separated path of travel between the Universal Studios Theme Park and the Universal City Red Line Station. The L-shaped, 400-foot bridge spans over both Lankershim Boulevard and Universal Hollywood Drive, and serves as a high-profile gateway to the Theme Park. The structure of this unique bridge consists of an exposed V-section steel through-truss supported on four tubular steel columns,

with a maximum span of nearly 150 feet across Lankershim Boulevard. Wind and seismic forces are resisted by steel buckling-restrained braced frames in the three elevator shafts and in the middle staircase. Extensive 3-D dynamic modeling of the structure was needed to ensure that it performed well under seismic, wind, vehicle collision and pedestrian loading. Miyamoto served as the design lead for the project and managed a full team of design professionals, including architects and civil, MEP, geotechnical and traffic engineers.

## Metro, Universal Pedestrian Bridge

**LOCATION:**  
Universal City, CA

**YEAR:**  
2016

**CLIENT:**  
Los Angeles County Metropolitan Transportation Authority, Griffith Company

**DESIGN TEAM:**  
Miyamoto International (Prime, Structural), Structural Integrity Systems (Bridge Design Consultant), Gruen Associates (Architecture), Moffatt & Nichol (Civil), Glumac (MEP), Diaz Yourman Associates (Geotechnical), Intueor (Traffic)

**CONSTRUCTION COST:**  
\$22 Million

**SCALE:**  
400-Foot Bridge

**AWARD:**  
ASCE OUTSTANDING BRIDGE PROJECT OF THE YEAR





Cosumnes River College Light Rail Station is a vital link in the proposed South Sacramento Corridor Phase 2, 4.3 mile light rail extension. Miyamoto provided structural engineering services for this \$3 million project, an intermodal terminal on grounds campus. The new terminal provides transit options to students, faculty and the surrounding community. This

Sacramento Regional Transit District project includes a 150-foot concrete pedestrian bridge, pedestrian ramp from bridge to vertical circulation, consisting of stairs and a ramp down to the platform, two large waiting shelter structures, four mini-high platforms with three shelters, operator restroom/break room building and shelter structures at bus berths.

## Cosumnes River College Light Rail Station

Sacramento Regional Transit District

**LOCATION:**  
Sacramento, CA

**YEAR:**  
2017

**CLIENT:**  
MFDB Architects

**CONSTRUCTION COST:**  
\$3 Million





The Gold Line, which originally ran from downtown Los Angeles to Pasadena, was extended in 2009 to also serve passengers in Little Tokyo, Boyle Heights and the East Los Angeles area. The entire project consists of six at-grade stations and two, 700-foot-long underground stations at Mariachi Plaza and at the corner of First Street and Soto Street. Twin tunnels with a diameter of 22 feet and 1.8 miles in length extend under Boyle Heights to link the two stations. Miyamoto Engineers provided

structural design services for the two underground stations including entrance structures, appendages and associated plaza and canopy structures. Our engineers also participated in the design of several at-grade stations, each of which featured a unique canopy design. Challenges included stations located near fault lines and restricted space for mechanical, electrical and plumbing systems.

## Metro Gold Line Eastside Expansion

Mariachi & Soto Stations

**LOCATION:**  
Los Angeles, CA

**YEAR:**  
2009

**CLIENT:**  
LRT Construction

**CONSTRUCTION COST:**  
\$898 Million

**SCALE:**  
50,000 SF Mariachi Station  
50,000 SF Soto Station

**AWARDS:**  
2010 PROJECT OF THE YEAR  
AMERICAN SOCIETY OF CIVIL ENGINEERS





## Sacramento Regional Transit (SRT) Heavy Rail Maintenance Facility

**LOCATION:**  
Sacramento, CA

**YEAR:**  
2001

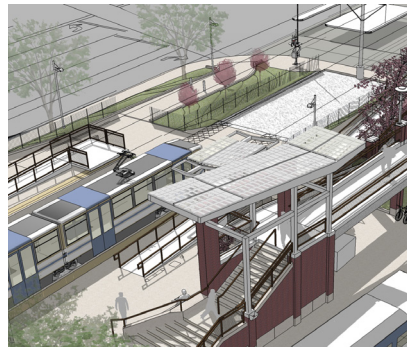
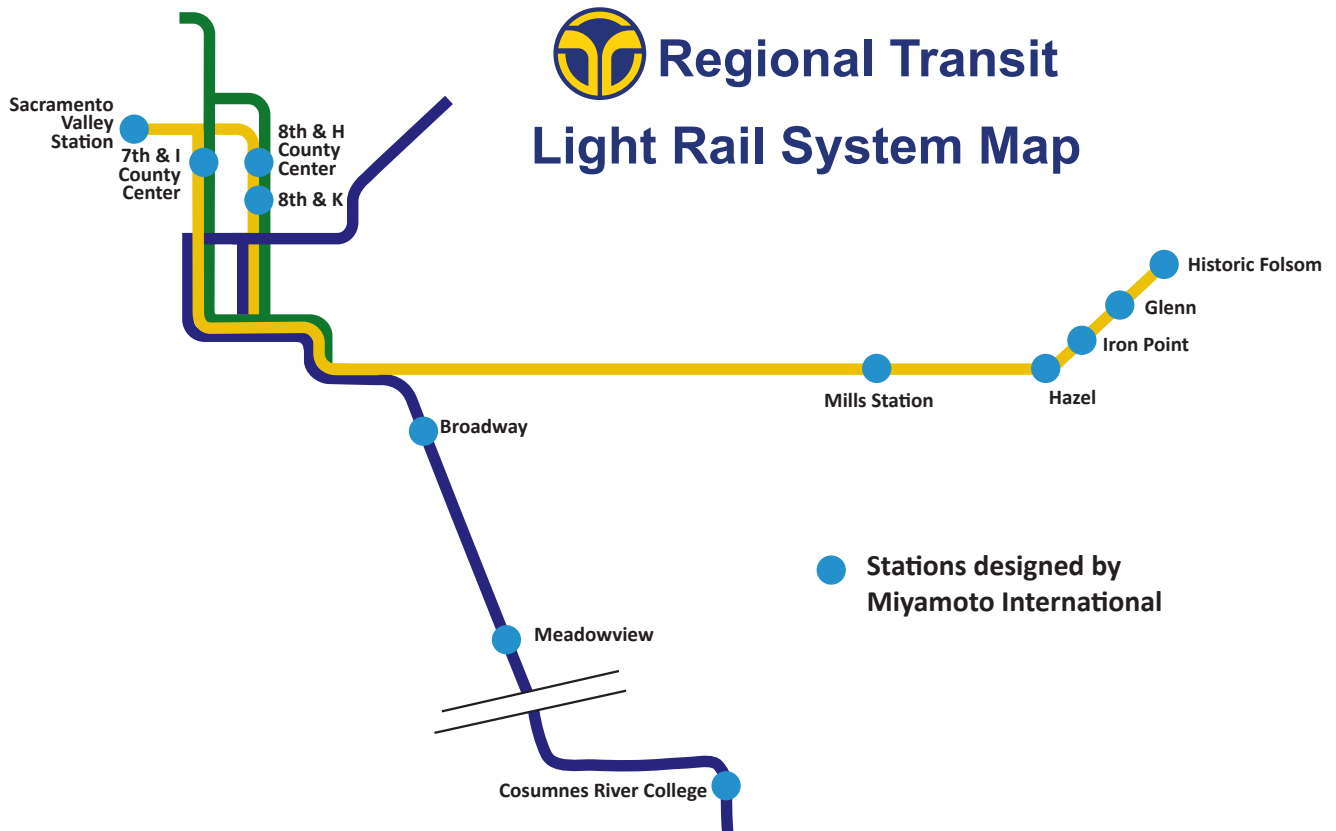
**CLIENT:**  
Waterleaf Architects

**SCALE:**  
40,000 SF

Miyamoto contributed to the development of design-build bridging documents for this heavy rail maintenance facility, which provides maintenance, storage, service and parts exchange for the SRT's fleet of rail cars and maintenance trucks.

The scope included: determining the gravity, wind and seismic resisting systems for the main structure; curtain wall system and overhead platforms; preliminary foundation; equipment support and pit design.





### Sacramento Regional Transit Light Rail Stations

**LOCATION:**  
Greater Sacramento, California

**YEAR:**  
2017

**CLIENT:**  
Acanthus  
MFDB Architects

**CONSTRUCTION COST:**  
\$21.5 Million

**SCALE:**  
11 Stations

Since 1999, Miyamoto has provided design services for Sacramento Regional Transit's light rail stations in the greater Sacramento metropolitan area. Miyamoto's work has included stations on each of the Gold, Blue and Green Lines, including the Sacramento Valley Intermodal Station and nine other stations throughout the cities of Sacramento, Rancho Cordova and

Folsom. Miyamoto recently completed the Cosumnes River College (CRC) station for phase two of the Blue Line South Corridor Extension. The CRC Station includes several passenger shelters for the light rail and bus transfer center, a pedestrian bridge over the east entrance to the campus, pedestrian ramps, mini-high structures and a break room and utility structures.





This locomotive servicing facility incorporates bridge cranes, inspection and servicing pits, turntables and all other equipment necessary to maintain Amtrak's west coast locomotive fleet. Miyamoto engineers designed all foundations, pits and interior

inspection and service platforms. In addition, the Miyamoto team worked with the design team, owner and metal building manufacturer to adapt a standardized pre-engineered building shell to the specialized needs of the railroad industry.

## Amtrak West Oakland Maintenance Facility

**LOCATION:**  
Oakland, CA

**YEAR:**  
2005

**CLIENT:**  
STV Incorporated

**SCALE:**  
300,000 SF

**CONSTRUCTION COST:**  
\$65 Million





A crucial link in the design-build Metro Gold Line light rail project, the Midway yard and shops provide maintenance, repair, cleaning, storage and revenue collection services for all trains on the 13-mile route between Los Angeles and Pasadena. Miyamoto engineers

designed all foundations, platforms and pits and worked hand-in-hand with the general contractor and metal building supplier to adapt typical metal building design methods to this unique facility.

## Metro Gold Line

Midway Yard & Shops

**LOCATION:**  
Los Angeles, CA

**YEAR:**  
2003

**CLIENT:**  
Tetra Design

**CONSTRUCTION COST:**  
\$80 Million

*\*STAFF EXPERIENCE*



## Red Line Vermont/Santa Monica Station

**LOCATION:**  
Los Angeles, CA

**YEAR:**  
1998

**CLIENT:**  
STV Inc.

**CONSTRUCTION COST:**  
\$61 Million

**SCALE:**  
998 Feet Long

This 998-foot long underground concrete cut-and-cover box structure is a key link in the Los Angeles Metro Red Line subway system serving midtown Los Angeles and Los Angeles City College. The station features a 450-foot long center platform,

crossover and two entrance structures. The main entry plaza is highlighted by a dramatic 35-foot stainless steel canopy cantilevered at the entrance in the shape of a tilted airfoil and a 45-foot high skylight main entrance passageway.





Photo courtesy of Coffman Engineers



The Los Angeles Regional Transportation Management Center serves as the emergency command center for Caltrans District 7, California Highway Patrol, and Los Angeles County Metro, and was designed to remain operational after a severe earthquake. This five-story, base isolated building was built to allow emergency dispatchers to help manage freeway traffic and maximize roadway capacity, providing safer

travels for the general public. This essential services facility was designed using performance-based engineering to maximize its optimal performance. The building is supported on twenty-three, 36-inch diameter rubber isolators, which allows it to move up to 24 inches relative to the ground. Seismic energy is dissipated through 300-kip fluid viscous dampers. The recommended system was a mat foundation.

## Caltrans Los Angeles Regional Transportation Management Center

**LOCATION:**  
Los Angeles, CA

**YEAR:**  
2007

**CLIENT:**  
Holmes & Narver Inc.

**CONSTRUCTION COST:**  
\$40 Million

**SCALE:**  
70,000 SF



For this new bus maintenance and operations facility Miyamoto used a variety of materials and structural systems to maximize the cost-effectiveness of the various building functions. A combination of pitched steel trusses and masonry walls was used for the maintenance building, which emphasized strong natural lighting in the service bays. The bus wash was built in precast concrete due

to its functional resistance to moisture and corrosion, and for its local availability. Finally, an economical yet durable design for the Spanish mission style-themed administration building relied on a combination of structural steel and cold-formed exterior framing. This maintenance, operations, fueling and warehouse facility services 150 buses.

## Foothill Transit Irwindale Maintenance & Operations Facilities

**LOCATION:**  
Irwindale, CA

**YEAR:**  
2002

**CLIENT:**  
RNL Design

**CONSTRUCTION COST:**  
\$14.5 Million

**SCALE:**  
59,820 SF





The maintenance and replacement facility is an elegant combination of open-web steel joists, structural steel framing and tilt-up concrete walls. This maximizes the efficiency of the facility, which services all Caltrans-owned vehicles in the Los Angeles District.

Miyamoto International provided structural engineering design and construction administration services for the maintenance building with 30 service bays, a fueling station and an administration building.

## Caltrans District 7 Operations & Maintenance Replacement Facility

**LOCATION:**  
Sylmar, CA

**YEAR:**  
2004-06

**CLIENT:**  
RNL Design, Pat McKelvey

**CONSTRUCTION COST:**  
\$20 Million





Miyamoto International is the Structural Engineer for this new facility, which includes a 17,000-SF Administration Building, an eight-bay 28,000-SF Maintenance Building, CNG Fueling Building and Yard, and Bus Wash.

Care was taken to provide the most economical structures possible while still meeting LEED Certification requirements and the operational needs of the owner.

## Gold Coast Transit

**LOCATION:**  
Oxnard, CA

**YEAR:**  
Estimated 2016

**CLIENT:**  
Maintenance Design Group

**CONSTRUCTION COST:**  
\$35 Million

**SCALE:**  
50,000 SF





## Metro Gateway Plaza/ Patsaouras Transit Plaza

**LOCATION:**  
Los Angeles, CA

**YEAR:**  
2010

**CLIENT:**  
Ehrenkrantz Eckstut and Kuhn;  
McLarand Vasquez Partners

Miyamoto provided structural engineering for the Metro Gateway Plaza, the major multi-modal transportation terminal serving Metropolitan Los Angeles. Located at historic LA Union Station, the complex includes the Patsaouras Transit Plaza, a multi-bay bus plaza featuring landscaping, seating, fountains and

a series of unique leaf-shaped bus shelters constructed over several stories of parking and pedestrian amenities; the Union Station East Portal, a sky-lit rotunda which connects Patsaouras Plaza to the Union Station subway stop and light rail and commuter rail platforms; and the 25-story MTA headquarters Building.



This \$45.9 million design-build project consists of three separate buildings all working together for one purpose - the maintenance of the RTD vehicle fleet. The three buildings are CMU structures with steel frames and industrial/commercial finishes. The first of the three buildings is the 100,000-SF maintenance building that contains 20 repair bays, electronic repair shop, machine shop, signage shop, storage, parts room, brake shop, training rooms and offices. The second building is the 20,000-SF fuel brake tire building with four fueling, detailing and brake

inspection lanes along with a tire shop. The last building is the 8,000-SF wash building that has two automatic bus wash lanes and two steam cleaning lanes. The buildings are on a 10 acre site that will predominantly be surfaced with concrete paving as well as oil/separator and storm water interceptor systems to manage on-site drainage. Our team revised the original structural system that was provided within the criteria documents and was able to document a 30 percent savings in structural costs.

## San Joaquin Regional Transit District (SJRTD), Regional Transportation Center

**LOCATION:**  
Stockton, CA

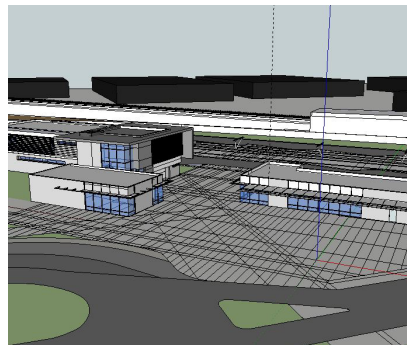
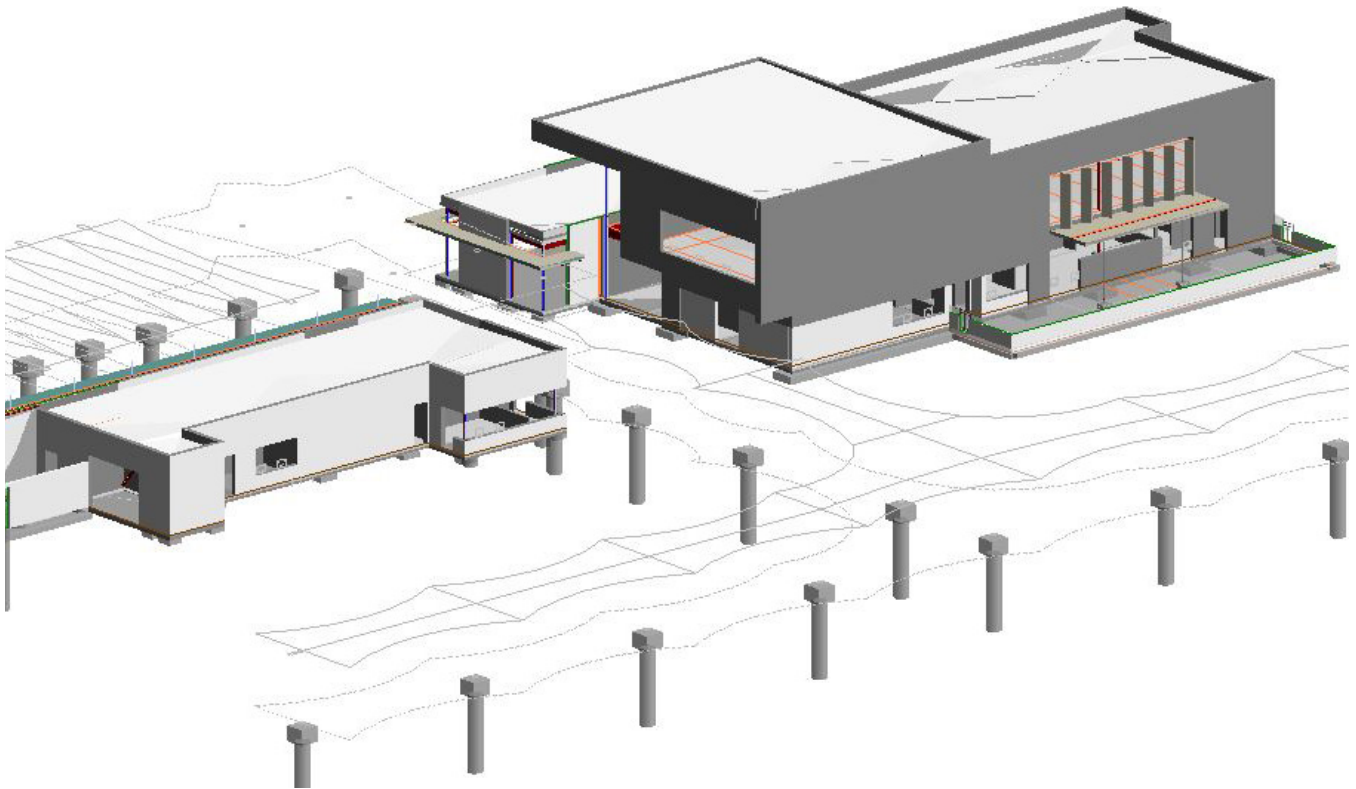
**YEAR:**  
April 2015

**DESIGN-BUILD ENTITY:**  
McCarthy Building Companies, Inc.  
Dreyfuss & Blackford

**CONSTRUCTION COST:**  
\$45.9 Million

**SCALE:**  
100,000 SF Maintenance Building  
20,000 SF Fuel Brake Tire Building  
8,000 SF Wash Building





## Torrance Transit Park and Ride Regional Terminal

**LOCATION:**  
Torrance, CA

**YEAR:**  
2012

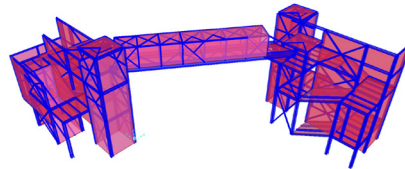
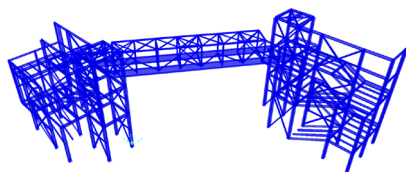
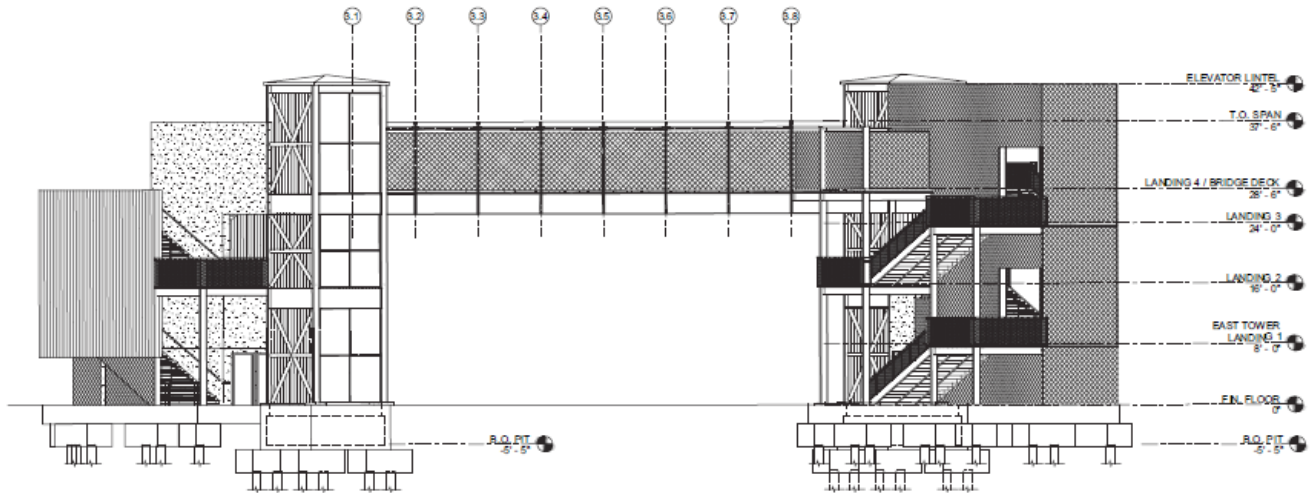
**CLIENT:**  
RNL Design, Glumac

**CONSTRUCTION COST:**  
\$21 Million

**SCALE:**  
15,000 SF

Miyamoto provided structural engineering for the Advanced Conceptual Engineering phase of the Torrance Transit Park and Ride Regional Terminal. Miyamoto developed a cost-effective structural steel framing system which best

harmonized with the open, highly transparent architectural design concept of the 10,000-SF Terminal Buildings. Miyamoto also provided preliminary foundation design for the tensile canopy system and conceptual design for the parking garage.



Miyamoto International provided peer review, final design and detailing assistance, and design services during construction for the Port of Los Angeles Berth 136-139 Trapac Terminal expansion. The project consists of nine structures: a five-story Administration Building, one-story Yard Operations Building and Driver Services Buildings, four canopy structures, a guard house, and the signature steel pedestrian bridge. We reviewed the structural construction documents and specifications for overall design intent, conformance to

current codes and industry standards, appropriate level of completeness, and coordination with other disciplines. For the pedestrian bridge, our services included independent analysis and structural calculations, review of Structural Engineer of Record design documents, detailing and CAD support. During construction, our work included reviewing contractor submittals and responding to questions from the field, coordinating foundations with existing utilities and providing structural field observation.

## Port of Los Angeles Berth 136-139 Trapac Terminal Expansion

**LOCATION:**  
San Pedro, CA

**YEAR:**  
2012

**OWNER:**  
The Port of Los Angeles

**CONSTRUCTION COST:**  
\$50 million

**SCALE:**  
21,170 SF Administration Building  
5,665 SF Yard Operations Building  
2,188 SF Pedestrian Bridge (including 2 towers)





## Warehouse No. 1 Renovation Feasibility Study Port of Los Angeles

**LOCATION:**  
San Pedro

**YEAR:**  
2007

**CLIENT:**  
Wilson & Company

**SCALE:**  
500,000 SF

Warehouse No. 1, a landmark waterfront building at the Port of Los Angeles built in 1917, is a six story-plus-basement, 500,000 square foot reinforced concrete structure. The primary goal of the renovation is to create a new, usable space with an occupancy and functionality other than the current heavy storage use. A scheme was developed to increase floor to floor heights and provide internal atriums while preserving prominent historic features. This will allow natural light into the building,

converting a compact storage structure into a comfortable office or museum environment. Special consideration was made to the foundations which consisted of driven piles, a solution to pressure grout. The loosely compacted man-made fill under the structure was proposed. Miyamoto provided a conceptual cost estimate and proposed structural modifications and foundation improvements to the client so they could make a cost-effective decision regarding their property.





## Port of San Diego Earthquake Risk Assessment

**LOCATION:**  
San Diego, CA

**YEAR:**  
2007

**CLIENT:**  
Unified Port of San Diego

**SCALE:**  
14 Properties/Buildings

Miyamoto provided a seismic risk assessment of selected Unified Port of San Diego properties located in San Diego, CA. The purpose of the study is to quantify the existing earthquake risk to certain properties by estimating the Probable Maximum Damage (PML). Associated with the PML for each property is an estimate of downtime or business interruption (BI). Secondly, conceptual retrofitting or other actions were proposed that are likely to substantially reduce the

expected level of damage. A two-day site survey was performed and reviews of available building and pier construction drawings and pier soils reports were performed. Drawings were not available for all properties and some properties only had limited drawings available. Site specific soils reports were not available for most of the buildings, so general published soil information for the region was referenced.



## TRANSPORTATION EXPERIENCE

### Aviation

Burbank Airport, Regional Intermodal Transportation Center (RITC)  
Burbank, CA

Burbank Airport, Elevated Walkway  
Burbank, CA

Fresno Air Terminal  
Fresno, CA

John Wayne Airport, Maintenance Building, Design-Build  
Costa Mesa, CA

LAWA, Earthquake Business Interruption Loss Control Program  
Los Angeles, CA

LAWA, LAX Theme Building, Seismic Retrofit  
Los Angeles, CA

LAX Bradley West Enabling Projects  
Los Angeles, CA

LAX Airport, Garage & Terminal Elevator Rehabilitation  
Los Angeles, CA

LAX Airport, Southwest Terminal I Modernization  
Los Angeles, CA

LAX Airport, TWA Hangar Feasibility Study  
Los Angeles, CA

LAX Airport, Police Headquarters  
Los Angeles, CA

LAX People Mover System, Maintenance Facility Stations  
Los Angeles, CA

Madera Municipal Airport Tee Hanger Buildings  
Madera, CA

Otopeni International Airport, Finger Building  
Bucharest, Romania

Otopeni International Airport Development - Bucharest  
Bucharest, Romania

Toussaint Louverture International Airport  
Port-au-Prince, Haiti

### Bridge Design

3rd Bosphorus Suspension Bridge Crossing for Chodai Feasibility Study  
Istanbul, Turkey

3rd Bosphorus Suspension Bridge Crossing for Mitsubishi Survey Studies  
Istanbul, Turkey

Kwang-Ahn Grand Bridge Project  
Pusan, South Korea

Metro Universal Pedestrian Bridge  
Universal City, CA

Regional Transit, Cosumnes River College Station Pedestrian Bridge  
Sacramento, CA

Tokyo Bay (Rainbow) Bridge Project  
Tokyo, Japan

Tokyo Bay Suspension Bridge Health Check Analyses  
Tokyo, Japan

Tokyo Metropolitan Expressway Bridges  
Tokyo, Japan

### Bus and Fleet Facilities

Caltrans, District 7 Operations & Maintenance Replacement Facility  
Sylmar, CA

Colusa County Transit Maintenance Facility  
Colusa, CA

Elk Grove School District Transportation Building  
Elk Grove, CA

Foothill Transit Irwindale Maintenance and Operational Facilities  
Irwindale, CA

Gateway Center  
Los Angeles, CA

Gold Coast Transit  
Oxnard, CA

Glendale Beeline Transit, Bus Maintenance Facility  
Glendale, CA

Long Beach Fleet Services Facility  
Long Beach, CA



LAX Airport Theme Building  
Los Angeles, CA



Toussaint Louverture International Airport  
Port-au-Prince, Haiti

MTA Division 9 Bus Maintenance Facility Expansion  
Los Angeles, CA

Metro Gateway Plaza, Patsaouras Transit Plaza  
Los Angeles, CA

Samtrans Bus Maintenance Facility Expansions  
San Carlos & South San Francisco, CA

San Joaquin Regional Transit District (SJRTD), Regional Transportation Center  
Stockton, CA

Torrance Transit Park and Ride Regional Terminal  
Torrance, CA

## Emergency Management Center

Caltrans Los Angeles Regional Transportation Management Center  
Los Angeles, CA

## Marine

National City Marine Terminal  
National City, CA

Old Sacramento Marina Structures  
Sacramento, CA

Port of Long Beach - Pier J  
Long Beach, CA

Port of Los Angeles, Berths 121-126 Container Terminal  
San Pedro, CA

Port of Los Angeles, Harbor Administrative Building Waterproofing Investigation  
San Pedro, CA

Port of Los Angeles, Marine Administrative Building & Structures  
San Pedro, CA

Port of Los Angeles, Mitsui Terminal  
San Pedro, CA

Port of Los Angeles, NYK Terminal Facilities  
San Pedro, CA

Port of Los Angeles, On-Call Services  
Los Angeles, CA

Port of Los Angeles, Trapac Terminal Facilities, Berths 136-139 (2012)  
San Pedro, CA

Port of Los Angeles, Trapac Terminal Facilities, Berths 136-139 (1992)  
San Pedro, CA

Port of Los Angeles, Warehouse No.1, Renovation Feasibility Study and Seismic Evaluation  
San Pedro, CA

Port of San Diego Earthquake Risk Assessment  
San Diego, CA

Port of San Francisco Waterfront Structure Investigation  
San Francisco, CA

Sacramento Yacht Club  
Sacramento, CA

Yoncat Onuk Shipyard  
Istanbul, Turkey

## Rail

Amtrak West, Oakland Maintenance Facility  
Oakland, CA

Amtrak West, 8th Street Yard Maintenance Facilities  
Los Angeles, CA

Amtrak West, Seattle Maintenance Yard Design Review  
Seattle, WA

Amtrak-Folsom Corridor Light Rail Extension, Amtrak Extension, 7th and I County Center Station  
Sacramento, CA

Amtrak-Folsom Corridor Light Rail Extension, Amtrak Extension, 8th and K Station  
Sacramento, CA

BART-Silicon Valley Rapid Transit Maintenance Facility  
San Jose, CA

Istanbul Light Rail Transition System  
Istanbul, Turkey

Istanbul Light Rail Transition System Feasibility Study  
Istanbul, Turkey

Istanbul Transportation Pilot Project for Kadikoy (JICA and ALMEC)  
Istanbul, Turkey

Istanbul Urban Transportation Master Plan Feasibility (JICA and ALMEC)  
Istanbul, Turkey

Joint Powers Board Lenzen Maintenance Facility



Metro Red Line Vermont/Santa Monica Station  
Los Angeles, CA



Sacramento Rail Transit Heavy Maintenance Facility  
Sacramento, CA



**Metro, Exposition Light Rail Line,  
Phase I and II, Design-Build**  
Downtown Los Angeles to Culver City,  
CA

**Metro, Exposition Line, Storage and  
Maintenance Facility (Design Only)**  
Los Angeles, CA

**Metro Exposition Light Rail Line  
Expansion**  
Los Angeles to Santa Monica, CA

**Metro Gold Line, Chinatown Aerial  
Structure**  
Los Angeles, CA

**Metro Gold Line Eastside Extension  
Mariachi Plaza Station**  
Los Angeles, CA

**Metro Gold Line, Eastside Extension  
First/Soto Station**  
Los Angeles, CA

**Metro Gold Line, Midway Yard and  
Shops**  
Los Angeles, CA

**Metro Green Line, Light Rail Airport  
Extension Stations**  
Los Angeles/El Segundo, CA

**Metro Purple Line, Subway Extension**  
Los Angeles, CA

**Metro Red Line, Cesar Chavez/Soto  
Station**  
Los Angeles, CA

**Metro Red Line, First/Lorena Station**  
Los Angeles, CA

**Metro Red Line, Vermont/Santa  
Monica Station**  
Los Angeles, CA

**Metro Westside Subway Extension  
Transit Corridor, Phase I**  
Downtown Los Angeles to Westside,  
CA

**Sacramento Regional Transit Light  
Rail Stations**  
Greater Sacramento, CA

**Sacramento Regional Transit, Amtrak**  
Folsom, CA

**Sacramento Regional Transit,  
Broadway Station**  
Sacramento, CA

**Sacramento Regional Transit,  
Cosumnes River College Station**  
Sacramento, CA

**Sacramento Regional Transit,  
Meadowview Station**

Sacramento, CA

**Sacramento Regional Transit, Mills  
Station**  
Rancho Cordova, CA

**Sacramento Regional Transit, Folsom  
Corridor Light Rail Extension, Glenn  
Station**  
Folsom CA

**Sacramento Regional Transit, Folsom  
Corridor Light Rail Extension, Hazel  
Station**  
Rancho Cordova, CA

**Sacramento Regional Transit, Folsom  
Corridor Light Rail Extension, Historic  
Folsom Station**  
Folsom CA

**Sacramento Regional Transit, Folsom  
Corridor Light Rail Extension, Iron  
Point Station**  
Folsom CA

**Sacramento Regional Transit,  
Cosumnes River College Light Rail  
Station**  
Sacramento, CA

**Sacramento Rail Transit District,  
Heavy Maintenance Facility**  
Sacramento, CA



San Joaquin Regional Transit District (SJRTD), Regional Transportation Center Stockton, CA



Metro Universal Pedestrian Bridge Universal City, CA



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