LONG INTERNATIONAL

PATRICK NICHOLSON, P.E.

Mr. Nicholson is an Executive Consultant with Long International. For the past 11 years, Mr. Nicholson was employed by Skanska, an international heavy civil engineering contractor, where he oversaw 43 Engineers-of-Record in various disciplines, including support of excavation, utilities, roadway, structural, architectural, mechanical, plumbing, fire protection, electrical, transit systems, geotechnical, tunnel, track, and hydrogeology. Mr. Nicholson participated in numerous mediated construction disputes and five large DRB/Neutral Evaluator hearings, totaling over $500M in claims, which were successfully resolved without litigation. Prior to Skanska, Mr. Nicholson was a vice president at AECOM, providing day-to-day operations management for a staff of over 300 in four offices in the Southern California District: Los Angeles, Orange, San Diego, and Ontario. Mr. Nicholson was responsible for ensuring the success of the district in technical practice, operational management, profitability, and client satisfaction, and managed administrative functions to ensure the four offices ran smoothly.

Mr. Nicholson worked for 31 years with various design firms. He has extensive civil engineering experience that he has employed for projects involving subways, bridges (highway, railroad, and transit), tunnels (hard rock and soft ground), transit yards and shops, railroads, structural design for commercial and residential buildings, geotechnical, seawalls, highways, industrial facilities, and military installations.

EDUCATION

Masters Studies in Civil Engineering, California State University, Long Beach, California, 1983–1986
BS Civil Engineering, Dalhousie University, Halifax, Nova Scotia, 1983

PROFESSIONAL AFFILIATIONS

Professional Engineer (Civil), 1986, California, Registration No. C40993
General Building Contractor's License, 1986, License No. 499232
General Engineering Contractor's License, 2018, No. 499232

AWARDS AND RECOGNITION

- Caltrans/Metro Iconic Bridge Arcadia. Project won numerous awards, including the ENR Highway-Bridge Project of the Year in Southern California, 2012.
- Caltrans/Metrolink, I-5 widening, Empire Avenue and Buena Vista Grade Separations, Burbank, California. ASCE Project of the Year, 2011.
- Los Angeles County Metropolitan Transportation Authority, Gold Line Eastside Extension Design-Build Project, Los Angeles County, CA. Project won numerous awards, including the ASCE Project of the Year in California, 2009.

TECHNICAL EXPERIENCE

Representative international technical experience includes:

- Expertise on large-scale transit projects leading multidisciplined teams during project design and design support

- Coordination of subconsultants, supervision of technical production by engineering, architects and support staff, and performance of quality control checks
- Preliminary planning and final contract plans
- Project risk assessment and program management oversight for the Federal Transit Administration (FTA)
- Contract administration specifications and cost estimates
- Construction claims analysis, defense, dispute resolution, and negotiation of settlements

PROJECT EXPERIENCE

Mr. Nicholson is a registered civil engineer with 43 years of engineering management experience on both traditional design-bid-build and design-build projects. His project experience includes heavy, light, freight and commuter rail transit projects, subway stations, grade separations, bridges, and highway/street improvements. Representative projects include the following:

Underground Transit

- Los Angeles Metropolitan Transportation Authority, Hollywood and Vine Subway Station, Los Angeles, California, 1991–1993, Structural Design Manager for INCA: Structural design manager for the Metro Red Line underground station and crossover structure. This underground facility is part of the Metro Red Line Project for MTA. The transit station and crossover structure are, respectively, 520 feet and 372 feet long. They are approximately 52 feet high, 67 feet wide, and buried 25 feet below Hollywood Boulevard. The structure houses mechanical and electrical equipment on the ancillary level and supports the train on a "floating" slab on the track level, which eliminates train vibration to motion-sensitive buildings such as the adjacent Pantages Theater. Responsibilities included structural analysis, design and detailing of the massive concrete structure. Computer modeling was utilized to investigate the behavior of the structure due to movement of the soil resulting from seismic activity, and for the likelihood that "plastic" hinges would be formed. Special detailing was required for seismic considerations, and to assure that the structure remains watertight, as it lies below the water table.
- First and Boyle Subway Station, Metropolitan Transportation Authority, Boyle Heights, California, 1997. Design Manager for the design of the 372-foot-long crossover module. As part of the heavy rail Eastside Extension of the Metro Red Line, the First & Boyle Subway Station is an 822-foot-long cut-and-cover construction buried 30 feet below grade. Responsibilities included structural analysis, design and detailing of the crossover module. Soil-structure interaction computer modeling was utilized to investigate the behavior of the structure due to at-rest pressure and racking movement caused by near fault ground displacement. This effort was coordinated with the designers of the 450-foot platform module.
- Metropolitan Transit Development Board, Mission Valley East LRT Tunnel and Underground Station, San Diego, California, 1998–2000, Station Design Manager for INCA. Oversaw the design of the light rail transit underground station at San Diego State University. The station was part of the light rail extension of the San Diego Metropolitan Transit Development Board Mission Valley East rail line. The station is 666 feet long with a 360-foot-long side-loaded platform that can accommodate a four-car train. The station is approximately 50 feet below the new at-grade bus transit facility. Served as station design manager and was responsible for overseeing the structural, electrical, mechanical, and geotechnical design disciplines and for coordinating this effort with the architect, the bus transit designers, and the New Austrian Tunneling Method (NATM) tunnel designers. The station was designed using state-of-the-art soil-structure interaction computer modeling. The project opened in 2005.

- Los Angeles County Metropolitan Transportation Authority, Gold Line Eastside Extension Design-Build Project, Los Angeles County, California, 2004–2009, Design Manager for AECOM. Involved in the project from its inception in 2004 to the project opening in 2009. In 2010, Mr. Nicholson was awarded the California ASCE Project of the Year Award for this project, along with representatives from Metro and the construction contractor. Mr. Nicholson earned this honor by taking over the most difficult design management responsibility in 2006 and delivering all the various architectural and engineering design packages. To ensure project completion, continued as the construction support design manager and worked from the construction field office. The 6.8-mile light-rail project from Union Station to East Los Angeles was completed on schedule and within budget in 2009. The City and County of Los Angeles and Caltrans were the other major stakeholders. The two main components of the project are the tunnel and excavation contract, and the at-grade and underground stations, guideway, trackwork, and rail systems contract. The project is divided into 5 miles of at-grade street-running along First and Third Streets and 1.8 miles of twin tunnels under Boyle Heights. The tunnels are 21 feet in diameter and are mined with an earth pressure balance tunnel boring machine. The Gold Line has grade separations of the US 101, the Los Angeles River, the SR-60, and US 710. The light rail cars are powered by a 750 VDC electrified overhead catenary system.
- Design-Build Manager for Skanska-Traylor-Shea (STS), a Joint Venture, Los Angeles, California. Westside Subway Extension Project, Section 1 Design/Build Contract. The project is commonly referred to as the Purple Line Extension—Section One. The Purple Line Extension is a new heavy rail subway corridor of twin tunnel alignment and three subway stations. It extends the D Line (Purple Line) 3.92 miles from its current terminus at Wilshire and Western in Koreatown to Wilshire and La Cienega in Beverly Hills. Responsible for the project's 43 Engineers-of-Record in various disciplines, including support of excavation, utilities, roadway, structural, architectural, mechanical, plumbing, fire protection, electrical, systems, geotechnical, tunnel, track, and hydrogeology.

Dams and Tunnels

- U.S. Army Corps of Engineers, Cougar Dam Diversion Tunnel, McKenzie River, Oregon, 1997–1999, Design Manager for INCA. Design manager for the U.S. Army Corp of Engineers (COE) Cougar Dam Diversion Tunnel. This project was part of the selective withdrawal system for the Cougar Dam. The Dam is a 452-foot-high, 1,600-foot-long rock-filled structure on the McKenzie River, the tallest of its kind in the United States. The goal of the project was to draw water from the intake tower at different elevations of the reservoir pool in order to replicate pre-reservoir water temperatures required for anadromous fish. In order to modify the intake tower, it was necessary to reconstruct the 1,850-foot-long, 20-foot-high, horseshoe-shaped diversion tunnel and regulate the reservoir pool with a new gate structure. Responsible for all of the design disciplines including civil, structural, mechanical, and electrical. Coordinated the effort of the lake tap blasting consultant and the COE's hydraulic and geotechnical engineers. A new gate chamber was built to house the high head slide gates and switch gear. The chamber was mined from the rock, and the crown was rock bolted. The tunnel has a pressurized, 2-foot-thick composite steel liner designed to withstand 417 ft of head.

Roads and Highways

- Caltrans field engineer for the I-5 landslide slide repairs at various sites from Castaic to Hungry Valley, and I-134 median barrier from Pass Ave to 134/5 Separation, 1983.
- Caltrans traffic engineer for the accident investigation at Pacific Coast Highway and Serra Resort in Malibu, 1984.

- Piuma Road Emergency Repair, Los Angeles County Department of Public Works, Malibu, California, 1992–1993, INCA's Design Manager for the emergency slide repair of Piuma Road located in the hills above Malibu. Worked closely with L.A. County Department of Public Works to accelerate the design and construction.
- Nicholas Canyon Beach Access Road: Los Angeles County Department of Public Works Projects Malibu, California, 1992–1993, INCA's Design Manager for design of the beach access road protected with an elaborate anchored sheet piling retaining wall designed to resist El Nino wave action. A coastal permit was required for the project.
- San Joaquin Toll Road, 1994, San Joaquin Toll Road Consortium: INCA Engineers' Segment Design Manager for the San Joaquin Toll Road design-build project. Various sound walls and retaining walls along the alignment were designed and constructed. INCA Engineers was a sub-design consultant to PTG.
- Los Angeles Metropolitan Transportation Authority, Chinatown Aerial Structure Design-Build Project, Los Angeles, California, 1999–2000, Civil Design Manager for INCA: Served as the Civil Design Manager for the design-build contract with Modern Continental Construction. Oversaw the civil improvements necessary to accommodate the aerial guideway as it passes over the busy streets of Los Angeles. Responsible for the guideway plan and profile; widening and realignment of Vignes, Alpine, Alameda, Spring, and College streets; surveying; and identification of right-of-way requirements. A hydrology/drainage report was prepared to determine necessary street drainage, relocate a 66-inch storm drain, and obtain L.A. County flood control. The project opened in 2002.
- Los Angeles County Metropolitan Transportation Authority, Universal City Station Multimodal Transit Center, Los Angeles, California, 1999–2000, Design Manager for INCA: Design Manager for the design of this MTA Red Line Station multimodal transit center with separate bus transfer/layover, kiss-n-ride, and park-n-ride; and the widening of Lankershim and Ventura Boulevards. Mr. Nicholson headed the prime designer effort. Several alternative layouts were developed for the bus plaza, kiss-n-ride, and park-n-ride. The design was coordinated with the City of Los Angeles Department of Transportation, Bureau of Engineering, Department of Water and Power, and Department of Recreation and Parks. Community forums were held with the local residents and the Campo De Cahuenga Historic Society. Extensive architectural landscape design was used to create a park-like atmosphere. The design included the preparation of a hydrology/drainage report, several drainage systems and construction permit from the Los Angeles County and the U.S. Army Corps of Engineers. The project opened in 2001.

Bridges

- Seismic Retrofit of California Bridges, 1991–1996, Caltrans: INCA Engineers' Design Manager for the Caltrans' bridge retrofit program. Responsibilities included: seismic analysis; preparation of plans, specifications and estimates; and estimates and performance of independent design checks for the earthquake upgrade of highway and local agency structures throughout California. These bridges include:

  - I-134/710/210 Separation
  - I-710 Walnut Street O.C.
  - SR 2 Slide Canyon Arch Bridge
  - I-5 San Luis Rey River Bridge (Left)
  - I-5 San Luis Rey River Bridge (Right)
  - SR 70 Beaumont O.H.
  - I-405 Spring Street O.C.
  - SR-57 San Jose Flood Control Channel
  - I-10 East Connector O.C.

- I-280 Ocean Avenue O.C.
- I-280 Virginia St. O.C.
- Donner Summit Bridge over the Yuba River

- 59th/65th Street Grade Separation, Sacramento Regional Transit District (SRTD), Sacramento, California, 1995–1996, Structural Design Manager for INCA: Served as the Structural Design Manager for the Sacramento Regional Transit Center under crossing. Structural design included the grade separation, sheet pile abutment and retaining walls, cast-in-drilled hole (CIDH) foundations and all related structures. Extensive construction staging plans were developed in order to construct this bridge under light rail traffic and also to avoid the overhead catenary system. The project opened in 1996.
- Seismic Retrofit of County Bridges, Los Angeles County Public Works Department, 1995–1997: INCA Engineers' Design Manager for L.A. County Department of Public Works' bridge retrofit program. Responsibilities included seismic analysis; preparation of plans, specifications, and estimates; and performance of independent design checks for the earthquake upgrade of highway and local agency structures throughout California. These bridges include:

  - Del Amo Blvd. Bridge over the L.A. River
  - Beverly Blvd. Bridge over the San Gabriel River
  - Figueroa St. Bridge (L&R) over the Dominguez Channel
  - Valley Blvd. Bridge over the UPRR

- MTA – Chinatown Aerial Structure, Los Angeles, California (Design completed 1994): Design Manager responsible for providing structural engineering design for the transition segment of the guideway. This portion is the most unique of the entire structure because the guideway transitions from a single to a double box girder. The superstructure is supported on a variety of support bents due to their placement in the street right-of-way and has a reverse spiral curve horizontal alignment straightening to a tangent as it enters Chinatown Transit Station. Designed for Cooper E60 live load equivalent.
- Los Angeles MTA Gold Line Foothill Extension, Iconic Freeway Structure Design-Build Project Arcadia, California, 2010–2012, Design Manager for AECOM: Design Manager for the Iconic Freeway Structure in Arcadia that spans the I-210 freeway. The bridge is the first component of the 11.5-mile Gold Line Foothill Extension design-build light rail project from Pasadena to Azusa. Foothill Construction Authority board chairman Doug Tessitor said, "The bridge is the most visible element of the Foothill Extension Project, and we wanted to utilize that prominence to create a true gateway to the San Gabriel Valley. The details on the bridge are representative of the rich and proud heritage of the region and will become an important marker for future generations as they enter the Valley by train or car."

  AECOM had to coordinate with both Caltrans and Metro to integrate their different design standards into the structural and aesthetics design for the bridge, going through multiple design submittals. To assess any damage following an earthquake, AECOM integrated Time Domain Reflectometry (TDR) technology in bridge foundations. This has never been used before on a bridge foundation. The bridge's 110-foot deep, 11-foot diameter CIDH piles were wired with "smart column" technology to make an initial assessment of structural integrity after an earthquake. Habib Balian, CEO for the Construction Authority, said, "The engineers had a true challenge in making the design a reality. Caltrans required a bridge that can withstand a significant earthquake. Metro added that the structure needs to be operational the day after an event, and the Authority wanted to create an attractive gateway to the San Gabriel Valley…the engineering team met all of these challenges to create a bridge design that will become a recognized, iconic feature for the region."

Cut and Cover Tunnels

- MTA – Del Mar Depressed Alignment, Pasadena, California (Design completed 1995). Structural Design Manager for the Blue Line Del Mar to Memorial Park Depressed Alignment located in the historic section of Old Town Pasadena. Responsible for the structural design concept for the depressed alignment from the Pasadena Station to Colorado Avenue. The design tasks included: cantilevered and "U" section retaining walls, up to 32' in height, to support existing buildings; building shoring; station platform and canopy; sump pump building; and OCS pole foundations.
- Pasadena Blue Line – Colorado Street LRT Tunnel, Pasadena, California (Opened July 26, 2003). The designers overcame the particularly difficult technical challenge of fitting a double-track cut-and-cover tunnel section under the Historic Section of Old Pasadena where inches mattered (The Rose Bowl Parade route along Colorado Boulevard goes over the tunnel). The Colorado Tunnel in Old Pasadena is approximately 1,300 feet long with the design incorporating complex construction techniques of underpinning adjacent 100-year-old un-reinforced masonry (URM) buildings. Extensive noise and vibration mitigation measures were incorporated into the tunnel structure, as well as use of the latest fire-life/safety provisions.

  A total of ten buildings were underpinned in order to allow for the construction of the Colorado cut-and-cover tunnel from Green Street to Holly Street in Old Pasadena. The underpinning system formed a permanent foundation support for the building and served as part of the temporary construction bulkhead to allow for the excavation down to the tunnel invert. An elaborate and detailed sequence of support of excavation consisting of grade beams and underpinning shafts was developed. Either a post-tensioned or inter-pier reinforced concrete grade beam first supported each building. Hand-excavated shafts were then dug down to below the tunnel invert elevation. A total of 120 (4-foot wide by 6-foot long) pits were hand excavated to a depth of 35 feet along the building foundations. Each shaft was cast with steel reinforced concrete.

  Once the buildings were underpinned, the entire grade could be lowered using soldier piles, walers and cross struts, integrated with the underpinning shafts, to support the earth and adjacent buildings. This formed a total excavation support system. Due to the complex arrangement of the cross-strut support system, a typical traveling bulkhead form could not be used in some areas. After an extensive quality control demonstration and certification process, PBLA allowed the tunnel walls in these areas to be shotcreted. Pozzolan was used in the Shotcrete mix to enhance flowability and curing.

  The entire wall surface of the support of excavation system was covered with two 1"-thick layers of neoprene noise isolation mat. This is twice the thickness required by MTA Design Guidelines. The isolation mat has superior ground borne noise and vibration mitigation performance due to its enhanced material properties. Special noise and vibration direct rail fasteners were used throughout the tunnel. They are typically called "egg" fasteners because of their shape. Each fastener must meet extremely stringent qualification certification testing. The wall isolation mat and the egg rail fastener formed a redundant approach to noise and vibration control in the Colorado tunnel.
- Pasadena Blue Line – Figueroa Street LRT Tunnel, Pasadena, California (Opened July 26, 2003). Figueroa Avenue /Marmion Way is a very busy, highly skewed intersection, with a non-standard geometric layout. The Los Angeles Department of Transportation required that the intersection be grade separated with a tunnel (400 feet long, 20 feet high, and 30 feet wide). During construction, a hazardous ground water discharge permit was obtained from the Los Angeles Bureau of Sanitation. Construction of the tunnel required the modification and reconstruction of the storm drains, sanitary sewer lines, and the water main. Since the tunnel is so short, no additional emergency exits, or smoke exhaust fans, were necessary.

Transit

- MTA – Yard and Shop Facilities, Los Angeles, California (Design Completed 1996): Structural Design Manager for this maintenance facility. This project consists of a maintenance structure, car wash building, and blowdown building, along with several other minor structural facilities and numerous retaining walls. As part of this facility, over 2600 LF of fill and cut retaining walls were designed for the yard site and access roads with retained heights over 30 feet. The secondary access road is perched on the hill next to Elysian Park and required a tangent pile tie-back in the cut section and a mechanically stabilized embankment in the fill section.
- Los Angeles to Pasadena Gold Line Arroyo Seco Design-Build Project, Los Angeles County, California, 2000–2003, Technical Support Design Manager for Parsons. Served as the Technical Support Design Manager for the 13.7-mile Gold Line Arroyo Seco Light Rail Design-Build Project. Responsible for design management for utilities, environmental, traffic, geotechnical, surveying, civil, specifications, landscaping, and structural. To ensure project completion, was stationed in the field office as the design manager during construction. The project consists of 13 stations, a maintenance facility, two tunnel sections, one elevated guideway, 32 at-grade crossings, traction power/overhead contact system, signaling and communications systems. For this project, 4,689 drawings were prepared in 185 work packages. The Colorado Tunnel in Old Pasadena is approximately 1,300 feet long with the design incorporating complex underpinning of adjacent URM buildings. Extensive noise and vibration mitigation measures and fire-life/safety provisions were incorporated into the tunnel. Approximately four miles were constructed in the median of the I-210 freeway. A street-running section along Marmion Way in Highland Park required diligent attention to the existing neighborhood. The project was responsive to the urban design requirements complementing architectural, cultural, and historic features. State-of-the-art safety design features, such as quad traffic/pedestrian gate, were used throughout the 32 grade crossings. The project opened in 2003.
- Greater Cleveland RTA, Euclid Corridor BRT Project, Cleveland, Ohio, 2003–2004, Project Management Oversight for Parsons. Served as the Project Management Oversight Consultant (PMOC) to the FTA. Also, served as the Technical Specialist to monitor Greater Cleveland RTA's (GCRTA) project development and implementation of the Euclid Corridor Bus Rapid Transit Project (BRT). Responsible for completing the probabilistic cost and schedule risk assessment and implementing risk mitigation plan. The project opened in 2004.

Railroad

- Metrolink, Garey Avenue Underpass at the Pomona Metrolink Center, Pomona, California, 1996, Project Manager. Served as the project manager for the type selection study, staged construction, and final design of this two-span, ballasted deck, steel girder railroad bridge consisting of two separate structures: a rail bridge and a passenger platform. The railroad bridge design was based on the latest AREMA Manual for E80 Cooper Loading. The bridge was designed for Union Pacific Railroad and is part of the Pomona Metrolink Station. The design was completed in May 1996 and opened for revenue operation in January 2001.
- Caltrans and Metrolink, I-5 Widening, Empire Avenue and Buena Vista Grade Separations, Burbank, California, 2009–2014, Design Manager for AECOM. Served as the Design Manager for the Empire Avenue railroad project. The I-5 freeway is to be widened to add HOV lanes within the City of Burbank. The railroad is being moved west to make room for the highway widening and elevated in order to grade separate Buena Vista Street and Empire Avenue. The project required careful planning, coordination, and construction phasing between Caltrans, Metrolink, Amtrak, the Union Pacific Railroad (UPRR), and major utility companies. An 11,000-foot-long shoofly track with a temporary bridge will be constructed first. 21,000 feet of track will be elevated on an MSE embankment structure, and a new built-up plate

girder railroad bridge will be constructed at Empire Avenue and Buena Vista Street. Space has been reserved for a second mainline track and a future elevated two-track MTA light rail guideway. Railroad signaling modifications and traffic signal preemptions are required. City-owned water, sewer, and electrical utilities and private oil and fiber optic lines are being relocated. A drainage pump station is required at the Empire Avenue Underpass.

Petrochemical

- ARCO Central Gas Facility – Enhanced Oil Recovery Refinery, Prudhoe Bay, Alaska, 1984–1986: Structural Design Engineer of the prefabricated modules constructed in Tacoma, Washington, which were then barged to the site on the North Slope of Alaska. After the bay water froze, two crawlers moved the modules onto the pile foundation.

Military

- U.S. Air Force, MX in Minuteman Missile Silo Retrofit, Warren AFB, Cheyenne, Wyoming, 1988: Structural Design Engineer to retrofit the Minuteman silos to accommodate the MX Intercontinental Ballistic Missile. Finite element analysis of the upper launch tube to resist the MX cold launch steam pressure. Was issued top-secret security clearance to work on this project.

Geotechnical

- As Project Engineer to a geologist, prepared geotechnical reports for commercial and residential projects in the California counties of Orange, San Bernardino, and Riverside, 1988–1989.

Apartment Buildings and Single-Family Residential

- As a Project Engineer for a structural engineer in Westwood, California, prepared structural calculations and drawings for apartment buildings and custom homes in Los Angeles, California. The most notable project was the design of Norman Lear's house in Los Angeles, 1989–1990.
- As a Project Engineer for Architrave Architects in Los Angeles, California, prepared structural calculations and drawings for commercial buildings, condominiums, and custom homes in Los Angeles, Manhattan Beach, and Redondo Beach. The most notable project was the design of the Manhattan Terrace Senior Center in Manhattan Beach, 1990–1991.

PROFESSIONAL EXPERIENCE

Long International, Inc.
Los Angeles, CA (Present)

As an Executive Consultant with Long International, Mr. Nicholson provides construction claims analyses related to construction means and methods, technical issues, schedule delays, productivity losses, and damages quantification. Other duties include proactive CPM scheduling and schedule assurance services, cost control and monitoring services, and property damage and business interruption claims analyses.

Skanska USA Civil
Los Angeles, CA (2015 to 2026)

Mr. Nicholson was a Design-Build Manager for Skanska-Traylor-Shea (STS), a Joint Venture Westside Subway Extension Project, Section 1 Design/Build Contract involving a new heavy rail subway corridor of twin tunnel alignment and three subway stations. It extends the D Line (Purple Line) 3.92 miles from its

current terminus at Wilshire and Western in Koreatown to Wilshire and La Cienega in Beverly Hills. The contract amount was over $2 billion. Mr. Nicholson was the responsible charge for the project's 43 Engineers-of-Record in various disciplines including: support of excavation, utilities, roadway, structural, architectural, mechanical, plumbing, fire protection, electrical, systems, geotechnical, tunnel, track, and hydrogeology.

AECOM
Los Angeles, CA (2005 to 2015)

From 2012 to 2015, Mr. Nicholson served as Vice President of Southern California Transportation Operations. In this role, he provided day-to-day operations management for a staff of over 300 in four offices in the Southern California District: Los Angeles, Orange, San Diego, and Ontario. Mr. Nicholson was responsible for ensuring the success of the district from both the technical practice as well as the operational management aspects. He was ultimately responsible for the district's profitability and client satisfaction, as well as managing administrative functions to ensure the four offices ran smoothly. From 2005 to 2012 DMJM-Harris/AECOM, he was a Senior Project Manager and was in charge of many notable projects including the Los Angeles County Metropolitan Transportation Authority, Gold Line Eastside Extension, Design-Build Project, Caltrans/MTA Iconic Freeway Structure in Arcadia, CA, and the Caltrans/Metrolink Empire Avenue Railroad Grade Separation and Freeway Interchange in Burbank, CA.

Parsons Transportation Group
Pasadena, CA (2001 to 2005)

Mr. Nicholson was the Technical Support Design Manager for the 13.7-mile Gold Line Arroyo Seco Light Rail Design-Build Project. He was responsible for design management for utilities, environmental, traffic, geotechnical, surveying, civil, specifications, landscaping, and structural. To ensure project completion, Mr. Nicholson was stationed in the field office as the design manager during construction. The project consists of 13 stations, a maintenance facility, two tunnel sections, one elevated guideway, 32 at-grade crossings, traction power/overhead contact system, and signaling and communications systems.

INCA Engineers
Los Angeles, CA (1991 to 2001)

Mr. Nicholson was the Design Manager for the Los Angeles Metro Red Line Hollywood and Vine underground station, numerous bridge seismic retrofits for Caltrans and the Los Angeles County Dept. of Public Works, and the U.S. Army Corp of Engineers Cougar Dam Diversion Tunnel in Oregon.

Architrave Architects
Los Angeles, CA (1990 to 1991)

Mr. Nicholson was Project Structural Engineer for commercial buildings, condominiums, and custom homes in Los Angeles, Manhattan Beach, and Redondo Beach. The most notable project was the design of the Manhattan Terrace Senior Center in Manhattan Beach, CA.

Brad Graves Structural Engineer
Westwood, CA (1989 to 1990)

Mr. Nicholson was Project Structural Engineer for apartment buildings and custom homes in Los Angeles, CA. The most notable project was the design of Norman Lear's house in Los Angeles, CA.

John Sayers Geologist
Laguna Hills, CA (1988 to 1989)

As Project Geotechnical Engineer, Mr. Nicholson prepared geotechnical reports for commercial and residential projects in the Counties of Orange, San Bernardino, and Riverside.

Ralph M. Parsons
Pasadena, CA (1984 to 1988)

Mr. Nicholson served as Structural Design Engineer for the ARCO Central Gas Facility Enhanced Oil Recovery Refinery, in Prudhoe Bay, Alaska, and the U.S. Air Force, MX in Minuteman Missile Silo Retrofit, Warren AFB, Cheyenne, Wyoming.

Caltrans District 7
Los Angeles, CA (1983 to 1984)

Mr. Nicholson was Field Engineer for the I-5 landslide slide repairs at various sites from Castaic to Hungry Valley, CA, and I-134 median barrier from Pass Ave to 134/5 Separation. He was also Traffic Engineer for the accident investigation at Pacific Coast Highway and Serra Resort in Malibu, CA.

WRITTEN AND ORAL TESTIMONY

On the Westside Subway Extension Project, Mr. Nicholson was Skanska's technical lead on numerous mediated construction claims and five large DRB/Neutral Evaluator hearings totaling over $500M. All but one claim was successfully resolved without litigation. In the one claim that proceeded to court, Skanska prevailed. Mr. Nicholson was also the lead author and presenter at the DRB hearing for the City of Los Angeles Sixth Street Bridge Project. Skanska prevailed and was awarded $85M.