

# Mario Garcia-Gillespie, P.E. (He/Him)

Assistant Office Director, Project Engineer

**Phone:** 951-833-8827

**Email:** mariog.cpp@gmail.com

**LinkedIn:** linkedin.com/in/mariogg

**Website:** mariogillespie.weebly.com

## Education:

California State Polytechnic University,  
Pomona, 2010 - 2016

Bachelor of Science in Civil  
Engineering, Transportation Emphasis

## Professional Registration:

California Professional Engineer  
License Number: C 95691

## Distinctions:

- Employee of the Quarter, Q1 2023
- Excellence in Client Relations, 2017-2023

## Skills:

- Knowledge of Local, State, and Transportation Design Standards
- Ability to quickly learn software and programming languages
- Great understanding of project goals and timelines
- Hard work ethic, detail-oriented, and strong communication

## Software:

- Microsoft Office 365
- Bluebeam Revu 21
- AutoCAD Civil 3D
- Bentley MicroStation
- Bentley ProjectWise
- Transoft GuideSIGN PLUS
- Transoft AutoTURN
- Navisworks
- Adobe Suite
- Revit
- Lumion
- SketchUp
- MS SharePoint Admin
- PTV VISSIM
- Synchro
- License Management
  - Bentley, Bluebeam, Transoft

Civil engineer with eight years of experience and an interest in transportation and transit projects with an aim to improve user travel experiences and expand user choices on how they reach their destination within a reasonable time and cost.

## Work Experience:

**ADVANTEC Consulting Engineers, Assistant Director Engineer, June 2016 – Present**

- Assistant Office Director, Diamond Bar Office, July 2022 – Present
- Project Engineer II, July 2018 – June 2022

**Balfour Beatty, West Covina, Intern Engineer, June 2015 – September 2015**

## Leadership Experience:

Business Operations and Management:

- Led efforts for the design and execution of an office remodel and move, sourcing of furniture, IT equipment, safety supplies, and coordination with contractor and IT.
- Increased retention by 3%, doubled engineering staff and increased morale and in-person office attendance.
- Created and implemented processes for onboarding, IT infrastructure, CAD management, software license management, SharePoint infrastructure, website redesign, office security, and a cyber security upgrade to use 2FA with SSO, and transition towards being Passwordless.
- Participated in company committees to create ADVANTEC University, a mentorship program, CAD training and standards control, and holding weekly staff development sessions which keep staff engaged and moving towards their next goal.

Projects:

- Led teams of 2 to 19 individuals with a range of experiences and technical knowledge.
- Managed delegation of tasks for projects to be within budget for internal and external projects
- Created and implemented processes for quality control, document management, logging correspondences, and transfer of knowledge.
- Addressed client concerns, comments, design development, change orders, issue resolution, and tracking and prevention of scope creep.

## Project Experience:

**LACMTA Westside Purple Line Extension Project Sections 1, 2, and 3**

Design-Build Transit Project with 6 major contracts totaling \$10 Billion

City of Los Angeles, City of Beverly Hills, Los Angeles County, and Veteran's Affairs

ADVANTEC Consulting Engineers, Sub-consultant to WSP, June 2016 - Present

**Section 2** (2 cut and cover stations with 2.59 miles of twin-bore tunnels) Responsibilities included aiding in design services during construction, construction progress updates, third-party coordination, interdisciplinary coordination, team management, and civil design issues led under the direction of the Design Program Managers.

- Contract administration and review of contractor/consultant construction and design submittals, RFIs, cost proposals, requests for change, and claim support.

- Civil Design Issue Lead: Coordinating the resolution of construction and design hurdles related to the temporary and restoration phases of civil construction that impact the project and stakeholders. Drafting Change Notice documents, quality control for CAD standards, and file management. Performed comprehensive paving engineering design for restoration of pavement per City of Beverly Hills standards and LABOE pavement design manual. The design took into consideration subsurface soil conditions, deterioration history, traffic volumes, traffic index, and percentage of truck volume. Value engineering was also conducted to validate contractor's pavement structural design proposal vs engineering's value analysis to maximize the design life cycle and cost/benefit ratio. Performed analysis and design of concrete bus pads which were impacted by construction and are to be restored. Customized bus pad configurations were developed to accommodate high usage, shallow utilities, and coordinate street furniture to meet ADA requirements.
- Third Party coordination with the LA Department of Water and Power (LADWP), LA Bureau of Street Services (LABSS) LA Bureau of Street Lighting (LABSL), LA Department of Transportation (LADOT), and LA Bureau of Engineering (LABOE).
- Site inspections, research, and desktop studies for evaluating construction risks.
- Review and attendance of pre-construction reports and meetings to define existing conditions and limits of construction impact for restoration.
- Develop project design and constructability studies for project alternatives.
- Work with a multi-disciplinary project team to coordinate and resolve technical design challenges on an accelerated project schedule.
- Supervise and mentor junior engineers and cad technicians.

**Section 1** (3 cut and cover stations with 3.92 miles of twin-bore tunnels) **and Section 3** (2 cut and cover stations with 2.56 miles of twin-bore tunnels)

- Responsibilities included construction phasing of storm drain relocation, design alternatives for tunnel access shaft, design alternatives for Veteran's Affairs parking relocation and restoration, interdisciplinary coordination, and QAQC. Aided in design services during construction, reporting on construction progress, and supporting real estate research tasks.
- Developed IFS Project Definition Drawings with Amendment incorporation during RFP, CAD Standards and File Management, CAD software conversion from MicroStation to Civil 3D, drainage design drawings for Caltrans detention basin, finalizing of SEIS documents, and quantity take-offs for large design models.
- Performed pre-construction right-of-way and constructability research for proposed tunneling alignment and adjacent developments.

**OCTA SR-55 Improvement Project (I-5 to SR-91)**, PS&E, \$150 Million, sub-contract \$780 Thousand

Caltrans, Orange County, Santa Ana, Tustin, Orange

*ADVANTEC Consulting Engineers*, Sub-consultant to HDR, Oct 2022 - Present

- Leading design team for roadside signs, overhead signs, lighting, fiber optic (FO) backbone with new connections for system infrastructure, traffic monitoring systems (TMS), changeable message sign (CMS) systems, CCTV, and MAP Coordination with 35% concept plans, 65% and 95% PS&E preparation.

**LACMTA I-105 Express Lanes Project Segment 1**, PS&, \$634 Million, sub-contract \$1.3 Million

Caltrans, City of Los Angeles, Los Angeles County

*ADVANTEC Consulting Engineers*, Sub-consultant to WSP, July 2022 – July 2023

- Assisted with the freeway and express lanes electrical design consisting of temporary and permanent FO systems, lighting, TMS, ramp metering systems (RMS), CMS Systems, CCTV, and SCE service coordination.

**OCTA I-5 Improvement Project Segment 1 (Yale Ave to SR-55)**, PS&E, \$200.4 Million, sub-contract \$640 Thousand

Caltrans, Orange County, Santa Ana, Tustin, Irvine

*ADVANTEC Consulting Engineers*, Sub-consultant to Transystems, July 2022 - Present

- Assisting with the design, quantities, estimate, Caltrans specifications, and coordination for pavement delineation and overhead signs, as well as Multi-Asset Project (MAP) Coordination.

**Los Angeles County of Public Works On-Call Projects**

**Las Tunas Dr-Live Oak Ave-Arrow Highway Traffic Signal Synchronization Project (Baldwin Ave to Valley Center Ave)**, 34 intersections, PS&E, \$3.9 Million, sub-contract \$496 Thousand

Los Angeles County, Arcadia, Monrovia, Irwindale, Azusa, Covina, Glendora, San Dimas

*ADVANTEC Consulting Engineers, Aug 2022 – Nov 2023*

- Led team in developing and addressing County and City comments for base, utility, and improvement plans which include 16 intersections with new traffic signal poles, vehicle heads, video and radar detection, ADA curb ramps, signing, striping, and field inspections for developing recommendation reports.
- Tracked project progress/schedule, invoicing, and change in scope of work.

**Avalon Boulevard Traffic Signal Synchronization Project (126th St to Sepulveda Blvd)**, 28 intersections

Plans, \$3.7 Million, sub-contract \$660 Thousand, Los Angeles County, Carson

*ADVANTEC Consulting Engineers, Aug 2022 - Present*

- Led team in developing and addressing County and City comments for base, utility, and improvement plans which include 12 intersections with new traffic signal poles, vehicle heads, video and radar detection, ADA curb ramps, signing, striping, and field inspections for developing recommendation reports.
- Tracked project progress/schedule, invoicing, and change in scope of work.

**City of Carson Traffic Signal Intersection Upgrades PS&E (Avalon Blvd at Victoria, Main St at Sepulveda, Main St at 223rd St, and Figueroa St at Torrance Blvd) PW1649**, \$3 Million, sub-contract \$170 Thousand

*ADVANTEC Consulting Engineers, Sept 2023 - Present*

- Took over project coordination and brought the project to Final design closeout. The design included 4 intersections with new ADA curb ramps, traffic signal poles, vehicle heads, signing, striping, and utility pothole coordination.

**Costa Mesa, Newport Boulevard Widening**, Design \$458 Thousand, sub-contract \$80 Thousand, Caltrans, Costa Mesa

*ADVANTEC Consulting Engineers, Sub-consultant to Onward Engineering, Apr 2023 - Present*

- Assisted in the design and coordination of signing, striping, and the traffic signal improvement design.

#### **Design Support During Construction**

- Assisted with RFI responses and design revisions due to differing site conditions. Revisions include adjusting signal poles or striping due to utilities, adjacent project development, or revisions from agencies.

**City of Redondo Beach, Inglewood Avenue at Manhattan Beach Boulevard Intersection Improvement MR312.42**

\$3.48 Million, sub-contract \$68 Thousand, Los Angeles County, Redondo Beach, Lawndale

*ADVANTEC Consulting Engineers, Sub-consultant to Onward Engineering, Jan 2023 - Present*

**Barstow, North First Avenue Bridge Over BNSF Railroad Project**, PS&E, \$85 Million, sub-contract \$157 Thousand

San Bernardino County, City of Barstow, Burlington Northern Santa Fe (BNSF) Railroad

*ADVANTEC Consulting Engineers, Sub-consultant to Kleinfelder, Jan 2023 – Present*

**OCTA I-5 Widening Project Segment 3 (El Toro Road to Alicia Pkwy)**

PS&E, \$580 Million, sub-contract \$600 Thousand, Caltrans, Orange County, Lake Forest, Laguna Woods

*ADVANTEC Consulting Engineers, Sub-consultant to TRC, Oct 2023 – Present*

**City of Anaheim, Ball Road at Disneyland Drive Traffic Signal Modification Project**

\$250 Thousand, sub-contract \$27 Thousand

*ADVANTEC Consulting Engineers, Feb 2023 - Present*

- Assisted with project history research and transfer of knowledge, as well as the design of traffic signal intersection improvements and revisions of two advanced approaches. Improvements include signing, including the use of Blank-Out signs for dynamic lanes, vehicle head improvements, and signal phase revisions.

**City of Rosemead, Rosemead Boulevard & at I-10 Freeway Ramp Improvements**, \$6 Million, sub-contract \$661

Thousand, Metro, Caltrans, City of Rosemead

*ADVANTEC Consulting Engineers, Feb 2023 - Present*

- Conducted research for Caltrans' as-builts, surveys and ROW documents, as well as preliminary design iterations.

**WOW Media, Inc., Inglewood Preliminary Accident Data Research for Existing Digital Billboards**, \$24 Thousand

WOW Media, City of Inglewood

*ADVANTEC Consulting Engineers, Feb 2023 - Present*

- Led team in data collection and data analysis of accidents and field information around overhead digital dynamic billboards to determine if there was any relation to the installation and operation of the billboards and accidents.