

## Curriculum Vitae

Robert J. McCarthy P.E., G.E.  
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## Summary of Experience

Rob McCarthy is a Registered Civil and Geotechnical Engineer with over 30 years of experience. He works with clients as an expert in the engineering design and development of all types of construction including commercial, industrial, residential, public works and infrastructure projects. He has a comprehensive command of virtually all aspects of geotechnical services. Mr. McCarthy additionally applies his practice to the geotechnical analysis of seismic ground vibrations that result from construction activities and earthquakes as well as landslide assessment and remediation.

## Professional Employment History

2013-Current	R McCarthy Consulting, Inc., Newport Beach, CA, President, Principal Engineer Responsibilities include corporate management, geotechnical engineering, seismic vibration consulting, litigation support and expert testimony.
1988 – 2013	Stoney-Miller Consultants, Inc., Irvine, CA, Owner-Partner/Principal/ Associate Engineer/ Senior Engineer, Responsible for construction site evaluations, management of professional project teams on large mass grading projects, infrastructure projects, coordination of complex geotechnical projects, instrumentation and monitoring for construction, litigation support and expert testimony.
1981 – 1988	Irvine Consulting Group/ Irvine Soils Engineering, Irvine, CA, Project Engineer Responsible for geotechnical engineering on large mass grading projects, infrastructure, field instrumentation measurements, landslide instrumentation, ground water studies and settlement monitoring.
1979 – 1981	Student Intern/Laboratory Technician, Irvine Soils Engineering, Irvine, CA Responsible for geotechnical and materials laboratories including tests on soil, concrete and steel.

## Education

BS	University of California, Irvine, June 1981, Civil Engineering
BA	University of California, Riverside, June 1977, Biological Science

## Current Licenses and Certifications

Registered Geotechnical Engineer, State of California, G.E. No. 2490 (2000)  
Registered Civil Engineer, State of California, R.C.E. No. 42552 (1987)  
(Renewal date for licenses: 3/31/2020)

## **Professional Affiliations**

Member American Society of Civil Engineers (ASCE)  
Member Structural Engineers Association of California (SEAOC)

## **Engineering Awards**

California Geoprofessionals Association (CGA) Outstanding Project Award, Portola Hills II  
Landslide Repair (2010)

American Council of Engineering Companies (ACEC) Small Firm Merit Award, Portola Hills II  
Landslide Repair (2010)

## **Professional Presentations and Lectures**

American Council of Engineering Companies (ACEC) Conference presentation on landslide repair,  
Sacramento, CA, January 2010.

California Geotechnical Engineers Association Annual Conference Presentation, Invited Speaker, Portola  
Hills II Landslide Repair, La Jolla, CA, May 1, 2010.

## **Summary**

Robert McCarthy has over 30 years of experience in geotechnical engineering practice and is a Registered Civil and Geotechnical Engineer in California. He has managed projects in the field of geotechnical engineering and the related disciplines of foundation engineering, earthquake and vibration engineering, materials engineering, environmental engineering, and groundwater hydrology. He is highly qualified in the engineering design and development of all types of construction including large mass grading developments, commercial, industrial, residential, public works and infrastructure projects. Mr. McCarthy has directed numerous studies and investigations relating to design of high rise office buildings, parking structures, podium structures, tilt-up warehouse/office facilities, high end apartments and residential homes. Complex repairs (including tie-back walls, compaction grout injection, underpinning, segmental retaining walls and geogrid reinforced slopes), defense installations (including airfields and support facilities), highways and highway bridges, major infrastructure pipeline alignments, and regional water treatment plants. He has extensive experience in the design and construction of major earth retaining structures, including work with soldier pile shoring, concrete piers and caissons, geo-jet piers, secant walls, tie-backs and all types of retaining walls. He has also supervised studies for stream channels, groundwater, landslides, bluff erosion, and earthquake and vibration effects.

## Selected Project Experience

- Coastal Bluff Developments, California (1990-Present)  
Mr. McCarthy serves and has served as geotechnical engineer for a number of coastal bluff developments in Laguna Beach, Newport Beach, Dana Point, Carlsbad, La Jolla, Palos Verdes, Malibu, Oxnard/Ventura, Santa Barbara and other coastal communities. These projects involved a variety of geotechnical issues including caissons, hard and soft rock conditions, basement and multi-level construction, shoring, vibration monitoring, sound level monitoring, adverse groundwater conditions, and slope stability.
- Hotel Developments (2016-Present)  
Mr. McCarthy has served as the geotechnical engineer for a number of hotel projects including recent projects with Hilton and Marriott.
- US FDA Facility, Irvine, CA (2010-2017)  
Mr. McCarthy is retained by the federal Food and Drug Administration to investigate and monitor on-going geotechnical conditions at a high security facility. Mr. McCarthy developed a program of investigation and monitoring to determine the cause of the settlement and provide recommendations for repair, which included compaction grouting within the underlying soil.
- Ocean Boulevard Project, Newport Beach, California (2015-2016)  
Mr. McCarthy managed the vibration monitoring system for this bluff top SFR development overlooking the Pacific in Corona del Mar. Project specifications required continuous 24-hour remote monitoring of seismic vibration at two separate site locations during installation of shoring and construction. On-site monitoring was also conducted using portable instruments. Client: Pinnacle Custom Homes
- Correia Middle School Burn Ash Remediation, Point Loma, San Diego, CA (2015)  
Mr. McCarthy performed vibration and noise studies during Sheet Pile installations on this project. He evaluated equipment noise and vibration effects due to construction activities that included installation of sheet pile shoring, pre-drilling and earthmoving activities. Vibration and noise level testing was performed at various distances and locations along approximately 2500 feet of wall along the base of a slope. Client: Reyes Construction
- Aerie Project, Newport Beach, California (2014-2015)  
Mr. McCarthy managed the vibration monitoring system for this 7-unit bluff top development overlooking Newport Harbor in Corona del Mar. Project specifications required continuous 24-hour remote monitoring of sound and vibration at three separate off-site locations for a period of about 9-months during installation of shoring. On-site monitoring was also conducted using portable instruments. Client: G3SoilWorks, Inc.
- East Garden Grove-Wintersburg Channel, Huntington Beach, CA (2013-2014)  
Mr. McCarthy performed vibration and noise studies during the \$46 Million channel improvement project. He evaluated equipment noise and vibration effects due to construction activities that included installation of sheet pile shoring, soil-cement mixing operations and earthmoving activities. Vibration testing was performed at various distances and locations along several miles of the flood control channel.

### **Selected Project Experience (Continued)**

- Apartment Project, Beverly Hills, CA (2012-2013)  
This high end apartment project in Beverly Hills required a basement excavation with pile and tie-back shoring. Mr. McCarthy coordinated the geotechnical earthwork, testing and monitoring during the construction, which included H-beam shoring with lagging, tie-back testing, ground water issues and protection of adjoining properties.
- Waterfront Projects, Newport Beach, CA (2011-2018)  
Mr. McCarthy set up and coordinated the geotechnical engineering, instrumentation and monitoring programs during reinforcement and fortification of 200 feet of seawall along Newport Bay for various waterfront project. The program included continuous vibration monitoring at various distances using an 8-channel Instatel Instrument equipped with 2 geophones over a 4-month period and periodically during the remainder of the construction.
- Metro Gold Line, Los Angeles, South Pasadena, Pasadena, CA (2009-10)  
Mr. McCarthy evaluated surface drainage, vibration effects and performed assessments of a series of underpass retaining walls along the Gold Line and CalTrans right of way.
- Portola Hills II Landslide Investigation and Repair, Lake Forest, CA (2005-2009)  
When it was determined that a landslide complex had undesirable factors of safety, Mr. McCarthy was retained to provide detailed slope analyses and options for an improvement repair. The repair that was selected included installation of piles and tie-backs immediately below a number of existing residences. Construction geotechnical testing included pile inspection, tie-back testing and vibration monitoring. Mr. McCarthy received awards from both the California Geoprosessionals Association (CGA) and the American Council of Engineering Companies (ACEC) for the project in 2010.
- Fountainwood Landslide Repair, Agoura Hills, CA (1998-2002)  
Active movements and on-going damage within the back yards along the toe of this complex of four large landslides in Agoura Hills prompted the HOA to retain Mr. McCarthy to investigate and provide recommendations for repair. The repairs involved grading with geotechnical instrumentation, installation of an array of large diameter piles, and rebuilding of the back yards of the damaged homes. Assessments for slope movements and vibration were made and analyzed by Mr. McCarthy during the repair operations.
- Talega, Master Planned Community, San Clemente, CA (1995-99)  
Mr. McCarthy provided geotechnical coordination and expertise for water channel improvements, pipelines, slope grading, landslide stabilization and expansive soils on this 3500-acre mass grading project.
- Debris Flow Analysis, Mt. Baldy Ski Resort, CA (1990)  
Mr. McCarthy worked with the Resort Owner and the US Forest Service to analyze the debris flow hazard potential and design a flow reduction wall and detention facility on the slopes of the Mt. Baldy ski area.

### **Selected Project Experience (Continued)**

- US Naval Base and Airfield, San Nicolas Island, CA (1984)  
Cavernous voids below the airfield runway on San Nicolas Island prompted the US Navy to seek engineering assistance. Mr. McCarthy investigated the conditions and provided repair recommendations.
- Rancho San Clemente Master Planned Community, San Clemente, CA (1983-1987)  
Mr. McCarthy coordinated both office and field operations during mass grading. With earthwork quantities of over 50 million cubic yards, he provided stabilization recommendations for dozens of landslides that were mapped and identified during the grading.
- Hilton Dual Brand Hotel, Anaheim, CA (2018-Present) – Six story hotel with two levels of underground parking
- Cal Poly, Pomona, CA (2017-Present) – New Student Center and campus infrastructure construction
- VA Hospital, Loma Linda, CA (2017-Present) – New Sheriff's Emergency Facility
- VA Hospital, Loma Linda, CA (2018-Present) – New Eye Clinic Building
- Wondries Toyota, Alhambra, CA (2018-Present)
- US Postal Service, Various Locations, CA (2018-Present)
- Vanguard University, Costa Mesa, CA (2018-Present) – New Student Center Building
- The Sporting Club, Irvine, CA (1993-1994)
- The Doubletree, Carson, CA (1991)
- The Marriott Tower Addition, Newport Beach, CA (1985)
- The Atrium Building, Irvine, CA (1984)
- Two North Lake Tower, Pasadena, CA (1983)  
Mr. McCarthy investigated and provided geotechnical parameters for design of a number of mid to high rise buildings with spread footings and pile foundations, including those listed above.
- Chiquita Canyon Plant, Santa Margarita Water District, Coto de Caza, CA (1985-1986)  
Mr. McCarthy conducted the geotechnical investigation along with geologist Dr. John Foster for the Phase 1 and II construction of this regional water treatment plant and provided geotechnical observation, testing and monitoring during the construction.

### **Monitoring and Instrumentation Experience**

Robert McCarthy has set up of systems for data collection, presentation and reporting of monitoring results, and the attendant software applications and engineering analyses. Geotechnical monitoring and instrumentation experience includes: