


CURRICULUM VITAE

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| Name | : Mr.Sikarn Mani |  |
| Year of Birth | : 1978 (43 years old) | |
| Nationality | : Thai | |
| Email/Telephone | : sikarn@hotmail.com/ Tel. 086-322-3640 | |
| Education, (year) | : M.Eng., Structural Engineering, Jun 2004 Chulalongkorn University, Thailand B.Eng., Civil Engineer, May 1998 Mahidol University, Bangkok, Thailand High School, Suankularb Wittayalai School, 1994 | |
| Languages | : English: Writing –Good / Reading-Good / Speaking-Good Thai: Mother Tongue | |
| Professional Licenses | : Registered Professional Engineer, Council of Engineers, Thailand, Sor Yor 8395, (2007) | |
| Key Qualifications | : He has over eleven (23) years of civil and structural engineering experience. He has been working as Structural Engineer for various types of engineering and construction projects namely, MRT Underground station, Leamchabang Port Phase 2, Nam Ngum2 Hydro Power Plant in Laos, High-rise and low-rise buildings in Thailand, Highway Bridge, Interchange and underpass. Also, sound understanding of Code of Practices published by many Design Codes especially ACI, AASHTO and BS Code. | |
| Employment Records | | |
| Period of Employment | Employer | |
| 2011 – 2021 | AECOM (Thailand) Limited | |
| 2008 – 2011 | International Engineering Consultant Co., Ltd. (IEC) | |
| 2007 – 2008 | TEAM Consulting Engineers Co., Ltd. | |
| 2006 – 2007 | Arun Chaiseri Consulting Engineers. Co.,Ltd, Thailand (ACS) | |
| 1999 – 2006 | Pyramid Development International Corp., Ltd. (PDI) | |
| 1998 – 1999 | Faculty of Engineering, Mahidol University. | |
| Other Training | : - Design of Reinforced Concrete by USD, The Engineering Institute of Thailand and American Concrete Institute - Structural Steel Design by LRFD Method, The Engineering Institute of Thailand - Behavior of Reinforced Concrete, The Engineering Institute of Thailand - Structural Design to Resist Earthquake, The Engineering Institute of Thailand | |

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Work Experiences

- Employer** : **AECOM (Thailand) Limited**
- Period of Assignment : Feb 2020
- Project Title/ Country : **Terminal D1, D2 and D3 Laemchabang Port, Thailand Phase 2-Civil Works. Location: Chonburi, Thailand**
- Project Description : AECOM(Thailand) Limited has been appointed by Hutchison Laemchabang Terminal Limited to provide engineering consultancy services for the development of Laemchabang Terminal D1, D2 and D3, Thailand. The scope of services to be provided by AECOM (Thailand) includes the detailed design and production of tender document. The project involves the remaining construction a container yard with associated facilities. The project also includes an administration building, container yard, workshop, gatehouses, quay offices, substations, reefer facilities, fuel station, water tanks and pump room, yard lighting, CCTV and communications system, fire services, water reticulation, ducting, car parking, fencing and gates
- Position/ Title Held : Associate Director
- Job Description : Responsible for managing the structural design teams to prepare the detailed design drawings, calculation and specification and communicate with the client.
- Period of Assignment : 2017 - 2021
- Project Title/ Country : **MRT Orange Line Detailed Design (East Section) Project Location: Bangkok, Thailand**
- Project Description : AGATE Consortium was commissioned by CKST Joint Venture to carry out the detailed design and render construction support services for Architectural, Geotechnical, Structural, and E&M designs for E1 & E2 contract reach. E1 & E2 contracts involve design and construction of a fully underground section consisting of seven underground stations, 6 km. long twin bored tunnels and 2km. long Cut & Cover tunnels.
- Position/ Title Held : Associate Director
- Job Description : Manage and control the schedule of structural design teams to produce the drawings and calculation to support CKST Joint Venture. I also worked as Station Leader for OR13 and OR14 for Detailed Design Services on MRT Orange Line Detailed Design (East Section) Project
- Period of Assignment : 2016
- Project Title/ Country : **Tender Design Services for MRT Orange Line (East Section) Project Location: Bangkok, Thailand**
- Project Description : The services include design of Civil Works, Architectural Works and E&M Works (including Building Services, Tunnel Ventilation, ECS and Lifts &

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Escalators) for a total underground route length of approximately 13.77Km with 10 underground stations and associated Bored tunnels and Cut & Cover tunnels including transition structure

Position/ Title Held : Associate

Job Description : Working on Tender Design Services for three Underground Civil Works Contracts Namely Contract E1, E2 and E3 being procured on Design and Construction basis.

Period of Assignment : 2015

Project Title/ Country : **Terminal D1, D2 and D3 Laemchabang Port, Thailand Phase 1-Civil Works. Location: Chonburi, THAILAND.**

Project Description : AECOM(Thailand) Limited has been appointed by Hutchison Laemchabang Terminal Limited to provide engineering consultancy services for the development of Laemchabang Terminal D1, D2 and D3, Thailand. The scope of services to be provided by AECOM (Thailand) includes the detailed design and production of tender document. The project involves the construction of 1000 metres of quay deck and a container yard with a gross area of 85 hectares with associated facilities. The project also includes an administration building, container, container freight station, workshop, gatehouses, canteen, quay offices, substations, reefer facilities, fuel station, water tanks and pump room, yard lighting, CCTV and communications system, fire services, water reticulation, ducting, car parking, fencing and gates.

Position/ Title Held : Associate

Job Description : Responsible for preparing the detailed design drawings, calculation and specification. Also need to communicate with the client and design team at Hongkong.

Period of Assignment : 2011-2014

Project Title/ Country : **The MRT Blue Line Extension Project – Contract 2 : Underground Civil Works Location: Bangkok, THAILAND.**

Project Description : AECOM(Thailand) Limited has been appointed by CH.Karnchang to provide engineering consultancy services for the MRT Blue line extension project. comprises design of the underground structures of blue line extension - Sanam Chai to Tha Phra section.

AECOM(Thailand) Limited was commissioned by CH.Karnchang to carry out the detailed design and render construction support services for Architectural, Geotechnical, Structural, and E&M designs for C2 contract reach. C2 contracts involve design and construction of a fully underground section consisting of two underground stations, bored tunnels across Chao Praya River and Cut & Cover tunnels.

Position/ Title Held : Senior Structural Engineer

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Job Description : Responsible for the design of internal structure of BS12 Sanam Chai station and BS13 Itsaraphap station. Analysis and design of diaphragm wall, skeleton and internal structure of intervention shaft no.3 and 2 footbridges near Sanam Chai station.

Employer : **International Engineering Consultant Co., Ltd.**

Period of Assignment : Feb 2010

Project Title/ Country : **Road Tunnel Underneath Railway**

Project Description : The design for standard road tunnel underneath railway of Thailand. The work includes tunnel design and temporary steel bridge design.

Position/ Title Held : Structural Engineer

Job Description : Responsible for the design of deck slab and temporary steel bridge design. The design using AREMA specification

Project Title/ Country : **Rectification of IKEA Piled Foundation subjected to ground movement**

Project Description : The design modification of pile foundation of IKEA waste water treatment subjected to ground movement.

Position/ Title Held : Structural Engineer

Job Description : Responsible for structural analysis and design of modified combined foundation.

Project Title/ Country : **Highway No. 4006 - Ratchkood -Lungsuan**

Project Description : The design of 4-lane national highway at Chum porn Province. The work includes road design, bridge design.

Position/ Title Held : Structural Engineer

Job Description : Responsible for the detailed design of 6 bridges with span 10 – 30 m. prestressed concrete girder. The design using LRFD-AASHTO Specification.

Period of Assignment : Apr 2010

Project Title/ Country : **Remedial Measure Design of Pipe and Structural Damage**

Client : PTT Chemical PCL - HDPE Plant

Project Description : Regarding to leakage problem because cracked at pipe support in Jan 2008. An initial investigation by PTT. It was found that there are many crack in concrete slab and beam. There for PTT Chemical PCL requests International

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Engineering Consultants Co., Ltd. (IEC), one of engineering firm specialized in engineering design as well as forensic investigation and strengthening design of civil engineering works, was engaged to be a third party for such verification and certification.

- Position/ Title Held : Structural Engineer
- Job Description : Perform the independent design check to ensure that structural capacity and integrity of concrete works and piping in the project meets the project requirements. Prepare the investigation and verification report. Recommendations for further investigation and rectifications of the structure not meet the project requirements
- Period of Assignment : Mar 2010
- Project Title/ Country : **Bridge Condition Assessment, Don Muang Tollway**
- Project Description : The prestressed concrete girder bridge was tested to investigate the structure's condition and loading response behavior.
- Position/ Title Held : Structural Engineer
- Job Description : Responsible for analysis of the tested bridge by using field test data and finite element model software to evaluate the load rating and load response of the bridge, including dynamic analysis of bridge girder to determine natural frequency, impact factor, and damping ratio of structure.
- Period of Assignment : Feb 2010
- Project Title/ Country : **Bridge Loading Test of Krung Thon Bridge, Bangkok, Thailand**
- Project Description : The 55 years old steel plate I-girder bridge was tested to investigate the structure's condition and loading response behavior.
- Position/ Title Held : Bridge Loading Test Specialist
- Job Description : Responsible for field load testing of Krung Thon Bridge, Traffic management and prepare data for bridge analysis
- Period of Assignment : May 2009 – Mar 2010
- Project Title/ Country : **Slab Type Bridge Condition Assessment and Loading Test for the Department of Highways Zone 1 (Chiangmai), Zone 4 (Pitsanulok), and Zone 6 (Petchabun), Thailand**
- Client : Department of Highway (DOH), Thailand
- Project Description : The condition assessment and loading test of slab type bridges in Zone 1 (Chiangmai), Zone 4 (Pitsanulok), and Zone 6 (Petchabun) Area. The work includes bridge detailed assessment, classification, condition grouping, loading test, analysis of bridge loading capacity and service life.
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- Position/ Title Held : Structural Engineer
- Job Description : Responsible for condition evaluation of highway bridge works from deck slab, bearing, and pier column. Works also the analysis of field load test of bridge carrying capacity.
- Period of Assignment : May 2009 – Mar 2010
- Project Title/ Country : **Slab Type Bridge Condition Assessment and Loading Test for the Department of Highways Zone 3 (Sakolnakorn), Zone 7 (Ubonratchathani), and Zone 8 (Nakornratchasrima), Thailand**
- Client : Department of Highway (DOH), Thailand
- Project Description : The condition assessment and loading test of slab type bridges in Sakolnakorn, Ubonratchathani, and Nakornratchasrima Area. The work includes bridge detailed assessment, classification, condition grouping, loading test, analysis of bridge loading capacity and service life.
- Position/ Title Held : Structural Engineer
- Job Description : Responsible for condition evaluation of highway bridge works from deck slab, bearing, and pier column. Works also the analysis of field load test of bridge carrying capacity.
- Period of Assignment : Apr 2009 – May 2009
- Project Title/ Country : **PTTPE LDPE Plant –Hyper compressor foundation**
- Client : Toyo-Thai Corporation Public Company Limited (TTCL)
- Project Description : Cracks on sides and top of the hyper compressor foundation of the PTTPE LDPE Plant located in Rayong, Map Ta Phut were found after removal of formworks after casting about 3 days. The hyper compressor slab is the on-pile structure with 1.20 meter diameter bored pile totally 30 piles beneath. The size of slab is 18 x 22.5 x 1.6 m. with lean concrete 1 m. thick beneath the bottom of slab. This foundation is an important one due to the hyper compressor is a reciprocal type that will create high force during operation. Defect of the foundation may degrade the compressor capacity. There fore, PTTPE (Project Client) and Bechtel (Project Management Consultant, PMC) therefore made a request to Toyothai PCL for getting a third party to investigate the damage and verify its impact. International Engineering Consultants Co.,Ltd (IEC) is therefore awarded to perform the investigation and verification.
- Position/ Title Held : Structural Engineer
- Job Description : Inspection the structural conditions and site constraints.Perform the independent design check by professional engineer team to ensure that structural capacity and integrity of concrete works in the project meets the project requirements.Provide the investigation and verification report

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- Period of Assignment : Dec 2008 – Apr 2009
- Project Title/ Country : **PTTPE Ethane Cracker Plant**
- Client : Toyo-Thai Corporation Public Company Limited (TTCL)
- Capital Cost : 5,000,000 BAHT
- Project Description : PTTPE Ethane Cracker Project is one of major projects of PTT Polyethylene Company Limited. It locates in Pha Deang Industrial Estate in Map Ta Phut, Rayong. The construction has been carried out by Toyo Engineering Corporation (TEC) and Toyo-Thai Corporation PCL since year 2007. A lot of concrete volume (48,000 m³ in approximate) has been used in this project. In late of year 2008, it was found that concrete strength of many structures in the project is somewhat lower than the design requirements as specified in the project specifications. Therefore, PTT Polyethylene Company Limited (PTTPE) requests that the concrete works as constructed shall be reviewed, verified and certified by a third party. International Engineering Consultants Co., Ltd. (IEC), one of engineering firm specialized in engineering design as well as forensic investigation and strengthening design of civil engineering works, was engaged to be a third party for such verification an certification.
- Position/ Title Held : Structural Engineer
- Job Description : Perform the independent design check to ensure that structural capacity and integrity of concrete works in the project meets the project requirements. Prepare the investigation and verification report. Recommendations for further investigation and rectifications of the structure not meet the project requirements
- Period of Assignment : May 2008 – Jan 2009
- Project Title/ Country : **Bridge Condition Survey, Evaluation, and Testing of Load Carrying Capacities for Department of Highway Zone 9**
- Client : Department of Highway (DOH), Thailand
- Capital Cost : 3,000,000 BAHT
- Project Description : Due to the enhance of truck load limited to 25 tons, it is possibly effect to the bridge structural. Thus, department of highway objected to carried out the bridge condition rating assessment and performed the bridge load test to determine the capacity of the slab type bridges.
- Position/ Title Held : Bridge Engineer
- Job Description : Responsible for condition evaluation of highway bridge works from deck slab, bearing, and pier column. Works also the analysis of field load test of bridge carrying capacity for the department of highway zone 9 covering Singhaburi, Saraburi, and Nakorn Sawan

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- Period of Assignment : Apr 2008 – May 2008
- Project Title/ Country : **Andara Resort Residences / Phuket, Thailand.**
- Client : Andamandara Residences Co. Ltd.
- Capital Cost : 4,000,000 BAHT
- Project Description : Andamandara Residences Co., Ltd. Appointed IEC as their designer for the project. ANDARA RESORT is located at Kamara beach, Phuket. The project has a eight greatest residential buildings and restaurants, hotel, spa and swimming pools.
- Position/ Title Held : Structural Engineer
- Job Description : Analysis and engineering design of the residential building and swimming pool.
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- Period of Assignment : May 2008 – Jul 2008
- Project Title/ Country : **Bangkok Mass Transit System. Red Line Railing Mass Transit – Missing Link Section, Thailand**
- Project Description : The 9 km extension of Red Line Mass Transit System from Bangsue to Phayathai , with 5 stations from Yod-say to Rajaviti. The project consists of detailed design of station, open trench structure for train operation, track alignment.
- Position/ Title Held : Structural Engineer
- Job Description : Responsible for the structural design of deck slab, diaphragm wall, substructure supporting elevated railway (15m to 20m span of two lane railway),
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- Period of Assignment : Jan 2008 – Apr 2008
- Project Title/ Country : **Bangkok Mass Transit System, Mo Chit Sapan Mai Section, Bangkok, Thailand**
- Project Description : The extension of the Bangkok Transit System on Mo Chit – Sapan Mai Section. The project consists of structural detailed design of various building and sub station.
- Position/ Title Held : Structural Engineer
- Job Description : Responsible for structural detailed designs of infrastructure building, stabling yard and approach structure.

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Employer : **TEAM Consulting Engineers Co., Ltd.**

Period of Assignment : 2007 – 2008

Project Title/ Country : **Nam Ngum 2 hydro power plant, Vientiane, Lao**

Project Description : Nam Ngum is a major hydroelectric power development project located 90 km . north of Vientiane province, upstream of Nam Ngum 1 reservoir. The concrete faced rockfill dam of 181 m in height, and 485 m in length will be built in a steep narrow gorge creating a reservoir of 6,774M m3 capacity at the full supply level of 375 asl.
The spillway is of the open chute type controlled by 3 radial gates, each 16.60 m high by 17.00 m wide. With and installed capacity of 615 MW. the project will produce average annual electricity of 2,218 GWh for export to Thailand –a source of foreign exchange income to Lao PDR.

Position/ Title Held : Structural Engineer

Job Description : Responsible for structural analysis and design of spillway and right wing wall.

Employer : **Arun Chaiseri Consulting Engineers. Co.,ltd, Thailand**

Period of Assignment : 2006 – 2007

Project Title/ Country : - **The Ministry of defence office buildings.** (5 storey building)
- **The Chulabhorn Graduate Institute buildings.** (12 storey building)
- **The government lottery office buildings.** (5 storey building)
- **Holiday Inn Hotel, Pattaya** (24 storey building)
- **IBIS hotel, Sathon** (7 storey building)
- **IBIS hotel, Pattaya.** (7 storey building)
- **Faculty of dentistry buildings, Mahidol University** (20 storey building)

Project Description : High-rise and row-rise building

Position/ Title Held : Structural Engineer

Job Description : Responsible for structural analysis and design of high-rise and low-rise building and prepare drawings.

Employer : **Pyramid Development International Corp., Ltd. or Halcrow PDI Limited (Since 2005)**

Period of Assignment : 2004 - 2006

Project Title/ Country : **Pracharatuthit – Ratanakosin 200 Year Highway Bridge and Interchange, Thailand**

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- Project Description : The detailed design of 4-lane national highway approximately length 17 km. at Samutprakarn Province. The work includes one interchange, two overpass bridges, and 8 of minor bridges.
- Position/ Title Held : Senior Structural Engineer
- Job Description : Responsible for structural design of PC. I-girder bridges with 20 m. middle span.
- Period of Assignment : 2005 - 2006
- Project Title/ Country : **Khae Rai Underpass, Route 3002 (Rattanathibeth Road), Thailand**
- Project Description : The 4-lane underpass structures consist of concrete diaphragm wall, concrete base slab, concrete deck slab with span of 18 meter.
- Position/ Title Held : Structural Engineer
- Job Description : Responsible for structural detailed design of diaphragm walls structure, base slab, deck slab, bored pile, and retaining structure.
- Period of Assignment : 2004 - 2005
- Project Title/ Country : **Yala Western Bypass, Yala Province, Thailand**
- Project Description : The survey and design of 4-lane national highway approximately length 19 km. at Yala Province. The work includes road design, intersection design, bridge over railway and two bridges over Pattani River.
- Position/ Title Held : Structural Engineer
- Job Description : Responsible for design of bridge (20 m. middle span)
- Period of Assignment : Jul 2005 – Aug 2005
- Project Title/ Country : **Bridge Loading Test and Load Rating Evaluation of Rama 3 – Naradhiwas Rajanagarindra Flyover Bridge, Bangkok, Thailand**
- Project Description : The steel plate I-girder bridge was tested to investigate the structure's condition and loading response behavior after the construction just completed. The tested structures consisted of 40 m. span length with 8.3 m. wide.
- Position/ Title Held : Bridge Loading Test Specialist
- Job Description : Responsible for analysis of the tested bridge by using field test data and finite element model software to evaluate the load rating and load response of the bridge, including dynamic analysis of bridge girder to determine natural frequency, impact factor, and damping ratio of structure.

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- Period of Assignment : Jul 2005 – Aug 2005
- Project Title/ Country : **Bridge Loading Test and Load Rating Evaluation of Chalhongkrung - Suwinthawong Flyover Bridge, Bangkok, Thailand**
- Project Description : The steel plate I-girder bridge was tested to investigate the structure's condition and loading response behavior after the construction just completed. The tested structures consisted of 35 m. and 25 m. span length with 11.55 m. wide.
- Position/ Title Held : Bridge Loading Test Specialist
- Job Description : Responsible for analysis of the tested bridge by using field test data and finite element model software to evaluate the load rating and load response of the bridge, including dynamic analysis of bridge girder to determine natural frequency, impact factor, and damping ratio of structure.
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- Period of Assignment : 2004
- Project Title/ Country : **Golden Nakara underpass**
- Project Description : The project is an engineering design and construction of roadway underpass underneath three existing railway track. The underpass was designed to be main entrance for Golden Nakhara Village Project located in On-nut area, Bangkok. The works includes detailed design of underpass.
- Position/ Title Held : Structural Engineer
- Job Description : Responsible for engineering design of cut and cover underpass underneath existing railway, road embankment and railway bridge foundation.
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- Period of Assignment : 2004 - 2006
- Project Title/ Country : **Royal Phuket Marina – Resort and Spa, Phuket, Thailand**
- Project Description : The Project Site is located to the east of the existing Boat Lagoon on the east coast of Phuket Island in southern of Thailand with an approximate total area of 180 rais. When complete, it will be the biggest marina in the Southeast Asia. The project comprises more than 300 berths, maintenance facilities, shopping mall, waterfront villas, waterfront townhouses, waterfront shop houses, condominiums and marine village resort. The services provided for the Project included the design tasks of earthworks, stability of side slopes along the marina basin and lagoon together with revetment systems, road and bridge works, lock structure for boat and yacht navigation between outer and inner basin, hardstand pavement for travel boat lift, various types of housing, condominiums, villas, water supply and drainage system, mechanical and electrical works.
- Position/ Title Held : Structural Engineer
- Job Description : Design of civil and structural works of luxury villa
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Period of Assignment : 2001 - 2002
Project Title/ Country : **DTAC 859, Thailand**
Project Description : Construction and erection of 859 transmission towers of DTAC
Position/ Title Held : Civil Engineer
Job Description : Responsible for planning, construction control and prepare document for 21 guy mast towers in east region of Thailand

Period of Assignment : 1999 - 2000
Project Title/ Country : **M.R.T. Chaloem Ratchamongkhon Line, Contract 3 – The Design and Construction of the Depot, Thailand**
Project Description : The approximately 270 rai (about 45 hectares) was allocated for the site of the depot. The depot platform is pseudo-trapezoidal in plan with a total area of 238,340 sq.m will provide facilities for all railway operator activities of the first underground Mass Rapid Transit System in Thailand. The elevated depot platform consisted of a composite concrete slab founded on approximately 17,000 of 500 mm diameter by 30 –35 long spun concrete driven piles. The depot platform extended over the canals by way of composite concrete bridges founded on approximately 400 of 1000 mm diameter. The retention structures along the canals and ancillary works were also designed. These included water supply and fire hydrants, surface and foul water drainage systems, perimeter fencing, roadworks, two road bridges, utility diversion and provision of new utilities.
Position/ Title Held : Civil Engineer
Job Description : Responsible for dynamic load test of platform spun concrete driven piles.

Employer : **Faculty of Engineering, Mahidol University.**
Period of Assignment : 1998 – 1999
Project Title/ Country : **Samrid Project,**
Project Description : Development of Nakornratchasrima and Burirum province for agriculture.
Position/ Title Held : Civil Engineer
Job Description : Responsible for surveying and collecting data for making contour map of Nakornratchasrima and Burirum province by using GPS