



CIVIL SOLUTION CONSULTANTS LTD.
Engineering Solutions for Design and Construction



COMPANY TECHNICAL PROFILE

REVISED EDITION
AS OF August 2020



This document is true and correct copy.

Win Nye Ue



Operation Office

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THE CIVIL SOLUTION CONSULTANTS LTD.

COMPANY PROFILE

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ကုမ္ပဏီမှတ်ပုံတင်လက်မှတ်
Certificate of Incorporation

မြို့ပြအဖြေ အတိုင်ပင်ခံများ လီမိတက်
CIVIL SOLUTION CONSULTANTS LIMITED
Company Registration No. 103981883

မြန်မာနိုင်ငံကုမ္ပဏီများအက်ဥပဒေ ၁၉၁၄ ခုနှစ် အရ
မြို့ပြအဖြေ အတိုင်ပင်ခံများ လီမိတက်
အား ၁၉၉၉ ခုနှစ် စက်တင်ဘာလ ၁ ရက်နေ့တွင်
အစုရှယ်ယာအားဖြင့် တာဝန်ကန့်သတ်ထား သည့် အများနှင့်မသက်ဆိုင်သောကုမ္ပဏီ
အဖြစ် ဖွဲ့စည်းမှတ်ပုံတင်ခွင့် ပြုလိုက်သည်။

This is to certify that
CIVIL SOLUTION CONSULTANTS LIMITED
was incorporated under the Myanmar Companies Act 1914 on 1
September 1999 as a Private Company Limited by Shares.



ကုမ္ပဏီမှတ်ပုံတင်အရာရှိ
Registrar of Companies

ရင်းနှီးမြှုပ်နှံမှုနှင့်ကုမ္ပဏီများညွှန်ကြားမှုဦးစီးဌာန
Directorate of Investment and Company Administration

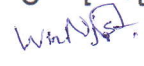
Former Registration No. 709/1999-2000

ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်အစိုးရ
ဆောက်လုပ်ရေးဝန်ကြီးဌာန
ကုမ္ပဏီများကန်ထရိုက်မှတ်ပုံတင်ရေးလုပ်ငန်းကော်မတီ
နေပြည်တော်



ကန်ထရိုက်မှတ်ပုံတင်လက်မှတ်

.....မြို့ပြအခြေအတိုင်ပင်ခံများလိမိတက်.....ကုမ္ပဏီ၊ကုမ္ပဏီမှတ်ပုံတင်အမှတ်
.....103981883.....အား ကန်ထရိုက်မှတ်ပုံတင်လက်မှတ်ကို ထုတ်ပေးလိုက်သည်။

ကန်ထရိုက်မှတ်ပုံတင်လက်မှတ်အမှတ်	- 0913
ခွင့်ပြုထောက်ခံသည့် လုပ်ငန်းနယ်ပယ်	- Consultants
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မှတ်ပုံတင်လက်မှတ်သက်တမ်းကုန်သည့်ရက်	- ၁၀.၉.၂၀၂၀
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တာဝန်ခံပုဂ္ဂိုလ်၏ရာထူး	- အုပ်ချုပ်မှုဒါရိုက်တာ
တာဝန်ခံပုဂ္ဂိုလ်၏နိုင်ငံသားစိစစ်ရေးကဒ်အမှတ်	- ၁၂/မရက(နိုင်)၀၉၆၉၂၁
တာဝန်ခံပုဂ္ဂိုလ်၏လက်မှတ်	- 



ဝင်းတင့်
ဥက္ကဋ္ဌ



Certificate of Registration

Civil Solution Consultants Ltd.

No. (413/414), U-10 Avenue, Aung Thitsar Street, (48) Quarter, North Dagon Myothit Township, Yangon, Myanmar.

Operate a management system that complies with the requirements of

ISO 9001:2015

With the scope:

Design, Construction Supervision, Testing and Calibration

EA Code: 28

Certificate No. QS 4625

Originally Registered: 26th May 2016

Registered by WQA: 26th May 2016

Re-Certification: 26th May 2021

Latest Issue: 12th August 2020


Signed on behalf of WQA

Validity of this certificate can be checked by contacting:
Worldwide Quality Assurance Ltd
Severn House,
Mandale Business Park,
Durham,
DH1 1TH
www.worldwideqa.com



This certificate remains the property of Worldwide Quality Assurance Ltd and must be returned on request.



CIVIL SOLUTION CONSULTANTS LTD.
Engineering Solutions for Design and Construction

Quality Policy

Civil Solution Consultants Ltd. (CSC) is a consulting engineering firm. The firm is based on the Full-scale Civil Engineering Field; in addition to that there are associated works for MEP, Foundation Engineering, Concrete Design and Repair, Construction Chemicals, Soil Investigation, Pile Load Tests, Instrumentation and Calibration. CSC's main tasks are (1) Engineering Design (2) Construction Supervision (3) Testing and Calibration.

The company purposed to development of management for supply special products and services by continually improvement for our quality management system.

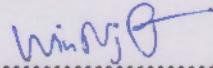
"Engineering Solutions for Design and Construction"

To achieve the quality policy, the organization shall;

1. Implement the quality management system to pursuit the ISO 9001:2015 (QMS) system.
2. Satisfy the requirement of the customers.
3. To focus Design, Drawing, Testing and Calibration accuracy and improvement as per legal requirement, international standards and customer's specifications.
4. Meet the requirement of interested parties needs, expectations and our social, environmental and legislative responsibilities.
5. Develop the employee's skill and competence to achieve the customer's satisfaction and company's objectives.

Revision No. : 01

Issued Date : 01-04-2018

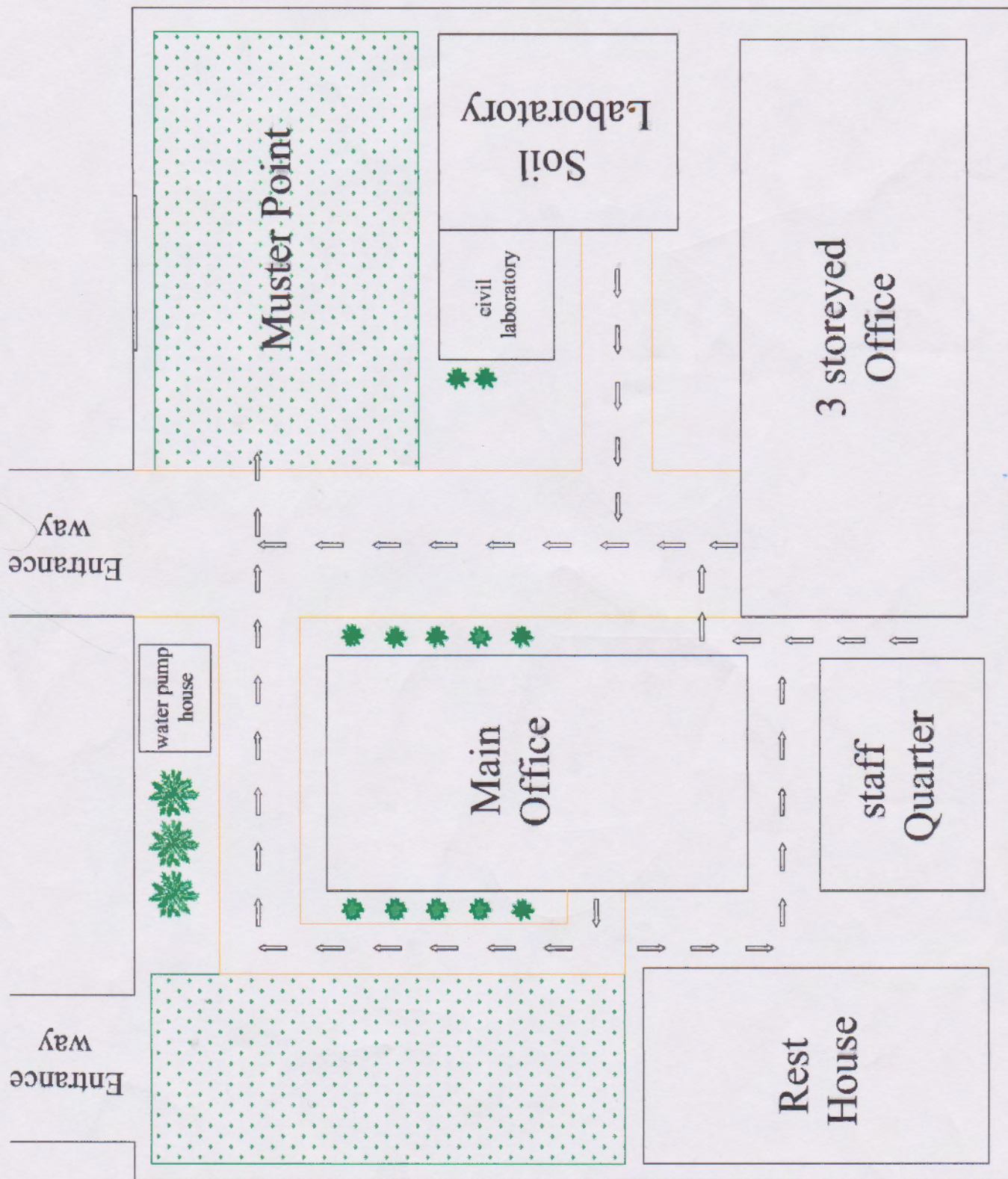
Sign.....

WIN NAING HTUN

Managing Director

Announced as of April 01, 2018

ORIGINAL
DOCUMENT



ORIGINAL
DOCUMENT

(1) The Firm

Civil Solution Consultants Ltd. is a consulting engineering firm established in 1999 at Yangon, Union of Myanmar. Founding members of Myanmar civil engineers having in depth understanding for local situation with extensive regional and international perspectives, i.e. engineering experiences in design + construction fields. CSC has recruited young, energetic and technically sound group of local engineers as main assets of the firm. In line with core dynamic work force, CSC main office is well equipped with modern office automation equipment, professional software, surveying instrument and international quality standard references.

Area of Interest: CSC is able to provide the wide range of technical services, i.e. design, supervision and construction of civil and infrastructure development projects not only in Myanmar but also in Asian region. Apart from compact and strong founder team, CSC has extensive professional network through associations and software link as mentioned in item (8) and (9) respectively.

Operation Office is opened from Monday to Friday (8:00 a.m. to 5:00 p.m.) and Saturday (08:00 a.m. to 12:00 noon) at No.413-414, U-10 Avenue, Aung Thitsar Street, 48 Quarter, North Dagon Myothit, Yangon, Myanmar to serve customers with easy accessibility.

CSC contact numbers and e-mail address are +95-1-581562, +95-9-5003281, +95-9-5077153, +95-9-798476843 & csc1999@gmail.com, Web: <http://www.csc1999.com>.

The firm is based on the Full-scale Civil Engineering Field; in addition to that there are affiliated firms for MEP Works, Foundation Engineering Works, Concrete Design and Repair Works, Construction Chemicals, Site Investigation and Pile Load Tests.

(2) The Main Tasks

CSC is engaging with four main tasks as follows:

- 1) Engineering Design
- 2) Construction Supervision
- 3) Testing and Calibration
- *** Technical Consultancy (if any)

1) ENGINEERING DESIGN

Civil and Infrastructure works such as:

- **Roads** (alignment, profile, interchange, highway, expressway)
- **Pavement** (laterite, gravel, asphalt, concrete, paving blocks)
- **Drainage** (surface, open channel, culvert, detention & retention pond)
- **Master Plan** (industrial estate, real estate, site plan, city & town plan)
- **Earthwork** (site preparation, cut & fill volume, leveling & landscaping)
- **Surveying** (topographic survey, construction survey)
- **Transportation** (system, planning, management, development)
- **Irrigation** (dam design & operation, hydrology & hydraulic, canal)

Structural, Building and Bridge works such as:

- **Structural Analysis and Design**
- **Reinforced Concrete Design**
- **Pre-stressed Concrete Design & Post-tensioning System**
- **Composite Structure Design**
- **Steel Design**
- **Timber Design**
- **Bridge Planning and Design**
- **Building and Warehouse Design**
- **Factory (non-processing) Design**

Geo-technical and Materials Engineering works such as:

- **Slope Stability Analysis**
- **Embankment and Compaction Design**
- **Retaining Structure Design**
- **Engineering Geology and Soil Engineering Design**
- **Foundation Design and Piling Design**
- **Geo-synthetics Design**
- **High Strength Concrete Design and Repair Works**

Technical document works such as:

- **BOQ and Quantity Survey**
- **Design Calculations**
- **Feasibility Studies**
- **Terms of References (TOR) and Specifications**
- **Tender Documents**
- **Method Statements**

2) CONSTRUCTION SUPERVISION

Site supervision and construction management works shall be provided in accordance with item 1) Engineering Design.

- **Planning and Project Management**
- **Contracting and Sub-contracting**
- **Site Investigation and Supervision**
- **Design and Standards Control**
- **Geotechnical and Material Engineering**
- **Cost Control**
- **Material Control and Quality Control**
- **Design Clarification and Modification**
- **As-built Drawing Development**

3) TESTING and CALIBRATION

CSC is working for Laboratory Soil Testing, Concrete Compressive Strength Testing, on-site Rebound Hammer Testing and Compaction Tests.

A subsidiary firm, Geolab (Myanmar) Co., Ltd. is doing, Static and Dynamic Load Test (SLT and PDA), Sonic Integrity Test (SIT) for Pile Foundation and Instrumentation such as Inclinator, Tilt meter, Strain Gauge, Crack meter and Settlement marker for Deep Excavation Work.

CSC has a new establishment of Calibrating Services for Load Cells, Linear Variation Displacement Transducer, Linear Displacement Dial Gauge, Pressure Gauge, etc.

As per market requirement, CSC is doing calibrating service for Jack Down Pile Driven Machines too.

Where necessary for the project development, CSC performs the Topographic Survey, Map Development, Land Leveling and Site Preparation.

*** **TECHNICAL CONSULTANCY (if any)**

This is the special consulting service to professional and non-professional customers such as practicing engineers, architects, technical experts, students, companies and agencies to get local and international information regarding civil engineering fields.

If you are a practicing engineer, you may request codes, standards, specifications and professional software assistance for your projects.

If you are a foreign firm, you may ask local codes, rules & regulations, sub-contracting practices, licensing service, government agency relations and facilitation services.

If you are a student, you may need to gather reference books, software and engineering practices, etc. for your assignments and course projects.

CSC is providing following technical information on:

- **Design Calculations and Assistance**
- **Specifications and Manuals**
- **Architectural Design Data**
- **Architectural Graphic Standards**
- **Timesaver Standards for Engineering and Architecture**
- **Survey Techniques and Data Conversions**
- **Local and International Codes and Standards**
- **Laboratory Test Methods**
- **Material Properties and Parameter Values**
- **International Unit Conversions**
- **Building Plan and Estimated Cost**
- **Geo-synthetics and Geo-textile Data**
- **Professional References and Software**
- **Quality Assurance and Quality Control Plan and**
- *Many solutions of the questions may have arisen by customers.*

Mode of Inquiries: Customers can ask questions by phone, e-mail, mail or in person to the CSC main office and operation office during working hours, 08:00 – 17:00hr. CSC will deal with all queries for free evaluation and reply to the

customer with particular quotations, which include very reasonable material cost plus consultation fee. CSC will consider special discount rate or free consultation fee for students.

Document Preparation Services

- Word Processing (Myanmar and English)
- Legal and Official Documents Preparation
- Presentation Documents Preparation
- Drawings and Graphic Preparation
- Customer Support Documentation

Professional Office Automation Services

- Printing (Color or Monochrome up to A2 size)
- Photocopying (up to A3 size)
- Binding (normal, file cover, presentation binding system)
- Lamination (up to A4 size)
- Drawing Plotting (Color or Monochrome up to A2 size)

Technical Reference, Materials and Specialized Software Services

- Engineering, Architecture and Management References
- Codes, Standards and Specifications Documents
- Professional Software for Civil/ Infrastructure/ Structural Engineers

(3) The Codes and Standards

CSC is applying following local and international codes and standards:

ACI	American Concrete Institute
ASTM	American Society for Testing Materials
ASCE	American Society for Civil Engineers
AASHTO	American Association of State Highway & Transportation Officials
AI	Asphalt Institute
AISC	American Institute of Steel Construction
AUSTROADS	The Association of State, Territory and Federal Road and Traffic Authorities in Australia (formerly named as NAASRA)
BS	British Standard
DOH	Department of Highways, Thailand (based on AASHTO std.)
IEAT	Industrial Estate Authority of Thailand (based on AASHTO std.)
JIS	Japanese Industrial Standards
JSTE	Japan Society of Traffic Engineers
JSCE	Japan Society of Civil Engineers
MES	Myanmar Engineering Society
PTI	Post-tensioning Institute
PCA	Portland Cement Association
TRB	Transportation Research Board

TRRL	Transportation and Road Research Laboratory
UBC	Uniform Building Codes
USBR	States Bureau of Reclamation
UN	United Nations Standards for Developing Countries
YCDC	Rules and Regulations of Yangon City Development Committee
CQHP	Committee for Quality of High-rise Building Construction Project
MNBC	Myanmar National Building Code (2016 Provision)

(4) The Software, Office Automation, Surveying and In-house Laboratory

Civil and Infrastructure Design Software

- CSC's Road Alignment and Profile Program, *APP Package*
- CSC's Survey Coordinate Conversion Program, *CCP Package*
- CSC's Survey Setting-out Programs, *SSP Package*
- CSC's Pavement Design Program, *PDP Package*
- CSC's Drainage Structure Design Program, *DDP Package*
- CSC's Traffic Engineering Program, *VMI Package*
- SB-Slope, Slope Stability Analysis
- Geo-structural Analysis Package
- Auto-Desk Land Development, Land Desktop with Survey

Structural Design Software

- Graphical Rapid Analysis of Structures Program, ACECOMS, AIT
- Gear Series, ACECOMS, AIT
- SYS-Designer, Structural Steel Design, ACECOMS, AIT
- STADD Pro 3-Dimensional Structural Analysis and Design, RE, USA
- ADAPT Post-tensioning System Software, USA

Computer Aided Design and Drafting Software

- Auto-CADD 2018; Auto Desk Land Desktop

Office Automation

- Intel high profile Work Station and Mini Server
- Compaq, Acer, Dell, MSI and Apple Note Books
- Konica color laser printers and Epson photo quality color desk jets
- Genius *1212HR//* digitizer for Auto-CADD
- Epson large format color bubble jet for CADD
- Cannon and Konica high resolution scanners
- Kodak overhead projector
- Professional external CD-R/RW writer, DVD writer
- Canon and Konica Photo-copiers and A3 Laser Printer

Surveying Instrument

- TOPCON GTS236N Total Station and accessories
- GOWIN Total Station and accessories
- TOPCON Auto Level G series for construction

In-house Soil and Concrete Laboratory

- UU and CU Tests, Direct Shear Test, Consolidation Tests
- Particle Size Analysis and Hydro-meter Tests
- Atterberg, Unit Wt., Specific Gravity, LL and PL Test
- Compaction Tests (Sand Cone, Core Cutter, DCP, CBR and EDG)
- Compressive Test of Concrete, Rebound Hammer Test

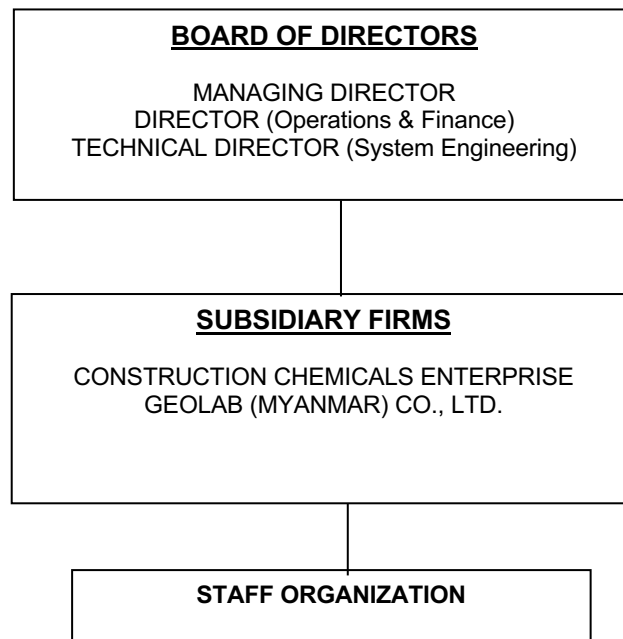
(5) The Customer Benefit

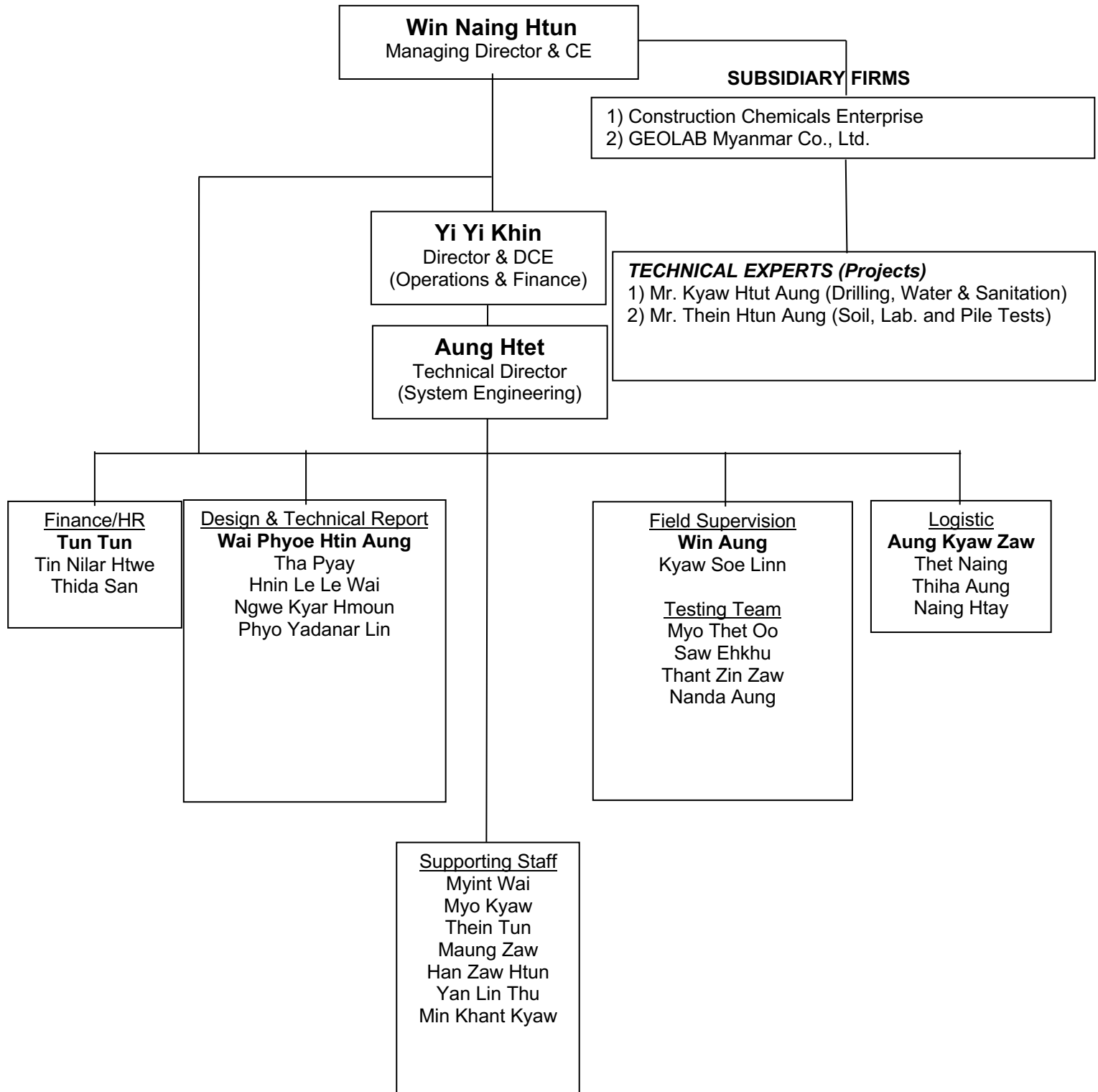
***CSC DESIGN STANDARD, PROFESSIONAL SOFTWARE
OFFICE AUTOMATION and SURVEYING QUALITY ARE FULLY COMPATIBLE and
COMPARABLE WITH INTERNATIONAL CODES & STANDARDS;***

HOWEVER,

***CSC DESIGN FEE, CONSULTATION FEE AND OPERATION COST ARE
VERY REASONABLE AS WE AIM TO MEET
CUSTOMER NEEDS WITH SATISFACTION.***

(6) The Management System



(7) The Organization Chart**CIVIL SOLUTION CONSULTANTS LTD.**
ORGANIZATION CHART

(8) The Associations

CSC has obtained mutual understanding for technical co-operation and international business development with following firms:

SUBSIDIARY Firms:

1) Construction Chemicals Enterprise

A Firm, Supplying Admixtures for High Strength Concrete, Concrete Repairs and Grouting Materials, Myanmar Base

2) Geolab (M) Sdn. Bhd.; Geolab (Myanmar) Co., Ltd.

Full-scale Soil and Engineering Testing Firm, Malaysia and Myanmar Base

Firms to be Associated:

1) Pyae Sone Engineering Group

Drilling, Water Well Development and Mini Bore Piles Firm, Myanmar Base

(9) The Software Link

CSC is getting continuous support for professional engineering software from the Asian Center for Engineering Computations and Software, **ACECOMS**, School of Civil Engineering, Asian Institute of Technology (AIT), Thailand and **ADAPT** Software System, A member of Post-tensioning Institute, PI, USA.

(10) The Experiences

Design projects:

- 1) Single Storeyed School Building, Thanlyin Township (December, 1999)
- 2) Road, Drainage & Bridge Works, Mong Pawk – Mong Ka Road, WADP, United Nations Drug Control Program UNDCP (January, 2000)
- 3) Double Storeyed R.C. Shopping Arcade, Preliminary Design (February, 2000)
- 4) 6-Storeyed R.C. Condominium Building, South Oakalarpa Mayflower Group (March, 2000)
- 5) Site Preparation Design & Feasibility Study, Myanmar Seafood Co.,Ltd. (May,2000)
- 6) Two Storeyed R.C. Monastery Building, Single Storeyed R.C. Building, Single Storeyed Brick nogged Building, EASE Co.,Ltd. (July, August, 2000)
- 7) Ground Tank Design, Waste Treatment Plant, Hlaing Thaya Industrial Estate (August, 2000)
- 8) 30 ft. & 80 ft.span Warehouses, Hlaing Thaya Industrial Estate (Sept., 2000)
- 9) Reservoir Modification Project, Moegote (September, 2000)
- 10) 80 ft span Warehouse Roof Truss, Hlaing Thaya Inds. Estate (Sept., 2000)
- 11) Launching Gantry Design, Myanma Railways (Sept., 2000)
- 12) Masonry Building Failure Technical Report, Myanma Railways (Sept., 2000)

- 13) Retaining Wall and Composite Structure, Aung Zedi Monastery (Sept., 2000)
- 14) Post- tensioning Girder Bridge, Myanma Railways, (Sept., 2000)
- 15) Financial Feasibility Study, Multi-Buildings and Factories Project, Myanma Agricultural Enterprise (Oct., Nov., 2000)
- 16) Underpinning Structure Design, Cement Factory (1), MEC (Dec., 2000)
- 17) Company profile and organization chart, SMI projects, (Jan., 2001)
- 18) 2-Double storeyed RCC building Design, Bayintnaung & Thuwana (Feb., 2001)
- 19) 3-Storeyed RC Meditation Center Design, Hanthawadi Monastery (Feb., 2001)
- 20) Three Storeyed RC Meditation Hall, Aung Min Galar (March, 2001)
- 21) Steel Structure Design, 2400 Gallons Water Tank, (March, 2001)
- 22) Two-Double Deck RC Buddhist Temple Design, R & T Manufacturing Co., Ltd., (March, 2001)
- 23) Double Storeyed RC School Building Design, 1000 Pagoda School, Moegot (April, 2001)
- 24) Single Storeyed Bricks Nogged Building, Kha Yang Tsp., (April, 2001)
- 25) Double Storeyed Bricks Nogged Building, Yangon (April, 2001)
- 26) Single Storeyed Bricks Nogged Hall Building, Zaung Tu Thein, (April,2001)
- 27) Double Storeyed RC Meditation Center, Aung Zedi (May, 2001)
- 28) Double Storeyed RC Guest House Building, Sawbwargyigone, (Jun., 2001)
- 29) Quantity Survey for Double Storeyed RC Hall Building, ICT Park (Jul., 2001)
- 30) Standard Pre-cast Girders Design, Myanma Railways (Aug., 2001)
- 31) RC Repairs Works & Structural Design, 2-Storeyed RC Building, (Aug., 2001)
- 32) 80 ft Span RC Arch Bridge, Bridge Asia Japan, (Aug., 2001)
- 33) Double Storeyed R.C Building, Insein (Sept., 2001)
- 34) 30m. Span Steel Ware-house Building, Hlaing Thaya Industrial E. (Oct., 2001)
- 35) 35 ft. Span Steel Truss Building for Buddha Teaching, Insein (Nov., 2001)
- 36) Two Storeyed RC Building, Thaton City, Mon State (Nov., 2001)
- 37) Three Storeyed RC Pent House, Inyamyine, Yangon (Dec., 2001)
- 38) 40m. Span Steel Building for Garment Factory, Mingalardon I.E. (Dec., 2001)
- 39) 50ft. Span Circular Steel Truss Bldg., Aung Zadi Pagoda, Insein (Jan., 2002)
- 40) Three Storeyed RC Pent House, Pun Hlaing Country Club (Jan., 2002)
- 41) 40m. Span Steel Building for Horse Stable, Dagon Myothit (Jan., 2002)
- 42) Co-design for 3-Three Storeyed RC Pent House, Yankin (Feb., 2002)
- 43) 8-storeyed RC Restaurant Building, Bahan (April, 2002)
- 44) 3-Storeyed RC Residential Building, Bahan (April, 2002)
- 45) 3-Storeyed RC Pent House, (100ftx200ft), Yankin (May, 2002)
- 46) Sittaung Rail-Cum Bridge Re-analysis, (6-360 ft span), Myanma Railways (June, 2002)
- 47) 2-Storeyed Wide-span RC Monastery Building, Indagaw, (June,2002)
- 48) 24mx102mx9m Steel Factory with 15 Ton Crane, Mingalardon Industrial Park, Myitmakha Group (July, 2002)
- 49) 3-Storeyed Wide-span RC Monastery Building with Cantilever Retaining Wall, Yadana Sin Phyu Monastery, Bahan (July,2002)
- 50) 3-m, 5-m, 7-m and 10-m Span Bridges for Flood Protection, UNDP, Cambodia (August 2002)
- 51) Concrete Dome Sturcture for Museum, Aung Zedi Monastery (Sept. 2002)

- 52) Warehouse and Road Design, Premier Petroleum Myanmar Ltd. (Dec. 2002)
- 53) Steel Structure Factory Warehouse Design, U Kyaw Win Aung (Jan. 2003)
- 54) High-rise Building Development Projects Design Works, Shwe Than Lwin Co.,Ltd. (Feb. 2003 to Present)
- 55) High-rise Building Development Project, Doh Pyi Thar Co.,Ltd. (May 2003)
- 56) Two Storeyed RC Pent House Project, Mr. Tach, (June 2003)
- 57) Infrastructure Design, Mingalardone Industry Park Co., Ltd. (June 2003)
- 58) Fish Ball Factory Civil/Structural Design (Aug., 2003)
- 59) Factory and Ware House Building Project, Ministry of Industry (1) Pyinmana, Max myanmar Co., Ltd. (May 2004)
- 60) Chitosan Factory Construction Project, ATG Group Co., Ltd. (June 2004 to August 2004)
- 61) High Strength Concrete Mix Design for Pre-cast Concrete Pile Production Project, Ywa Ma Steel Mill Project, Directorate of Military Engineer (April 2004 to Present)
- 62) Wood Products Factory Project, Shwe Zalatt Co., Ltd (June 2004)
- 63) Design Checking for Four Storeyed R.C.C Building (August, 2004)
- 64) Main Reservoir Construction Project, Myanmar Towards Co., Ltd. (Sept.2004)
- 65) 2-Storeyed Brick Nogging Building Construction Project, Mogyoke (Dec, 2004)
- 66) Factory Construction Project, Monywa (January, 2005)
- 67) Three Storeyed R.C.C Building Construction Project, Yangon (February, 2005)
- 68) Cantilever Balcony Strengthening Work, Yangon (March, 2005)
- 69) Three Storeyed R.C.C Monastery Building, Yangon (April, 2005)
- 70) Four Storeyed School Building, Pyin Nya Wadi International School, STL Group, Yangon (May, 2005)
- 71) Pipe Line Operating Center Up-grading Project, Kanbauk, Petronas of Malaysia (June, 2005)
- 72) 8th Storeyed residential buildings, Opal Construction Co., Ltd., Spine Architect (July, 2005)
- 73) 2 and 3 Storeyed residential buildings, Spine Architect (August, 2005)
- 74) Special Guyed Tower for IT, UE Group (Sept., 2005)
- 75) Special Clamp for pipe lifting, Off Shore Oil Field, TOTAL & UE (Oct., 2005)
- 76) KZ Residence, Spine Architect (Jan., 06)
- 77) American Center Renovation Project, Mandalay, US Embassy, Spine Architect (Feb., 06)
- 78) RCC Clock Tower Construction Project, Moegoat, R&T Co., Ltd. (Mar., 06)
- 79) Australian Embassy New Building Project, Yangon, Govt. of Australia, Spine Architect (May, 06)
- 80) Telecom Tower Off Shore, PCML (Petronas of Malaysia) Yetagun Field, UE Co., Ltd. (July, 06)
- 81) 8-storeyed RCC Residential and Office Building, Opal Construction Co., Ltd., Spine Architect (August, 06)
- 82) Feasibility and Conceptual Design, Property Line Fencing, POC, PCML (Petronas of Malaysia, Kanbauk), (August, 2006)
- 83) 3-storeyed RCC Pent House, Spine Architect (Sept, 2006)
- 84) Cold Storage and Office, UNICEF (Oct., 2006)

- 85) POC Landslide Repair Project, PCML (Nov., 2006)
- 86) Chemical Storage Warehouse, PCML/POC, (January, 2007)
- 87) Two storeyed RC residential building, CEC Group (March, 2007)
- 88) Two storeyed RC mansion, Spine Architect (April, 2007)
- 89) 30,000 Gallons Water Tanks Project, UNICEF (May, 2007)
- 90) 400,000 Liters Water Storage Tank Project, PCML/POC (July, 2007)
- 91) Offshore Helicopter Waiting Shelter, PCML Platform (August, 2007)
- 92) Broadband Teleport Antenna Installation Project, UE & Myanmar Teleport (September, 2007)
- 93) POC New Landslide Repair Project, PCML (Oct., 2007 to Nov. 2007)
- 94) On shore maintenance design, Bridge-Landslides-Sanitary-Landfill-Infrastructure-Protection Structure-Shore Protection, Total Exploration & Production Myanmar, TEPM (Nov. 2007 to June 2008)
- 95) Two storeyed RC Residential Compound Development Project (Feb. 2008)
- 96) Reservoir upgrading project, Pipeline Operating Center, PCML (Mar.-April, 08)
- 97) Cyclone Resistance Building Design Project, UNICEF (May. 2008)
- 98) Temporary Safe Learning Shelters Project, UNICEF (May. 2008)
- 99) Landslide Repair Project Design, Total E&P Myanmar, (Oct. 2008)
- 100) Bridge Construction Design, Eindayazar, Total E&P (Oct., 2008)
- 101) Two Storeyed R.C. Building Design, Daw Hla Myint (Oct., 2008)
- 102) Furnace Structure Design, Total E&P Myanmar, (Nov., 2008)
- 103) Community School Building Design, Pease Wind Japan, (Nov., 2008)
- 104) School Building Design, International Rescue Committee, (Nov., 2008)
- 105) Telecom Guyed Tower Design, Total E&P Myanmar, (Dec., 2008)
- 106) Survey & Layout Plan Design, PC Myanmar (HK), Petronas (Dec., 2008)
- 107) Small Jetty Design, IRC (The International Rescue Committee), Jan., 2009)
- 108) 60x30 School Building Design, Muslim Aid Programme for Delta Recovery PJ. (Jan., 2009)
- 109) Railway Alignment, Plan and Profile Design for Dawel-Yangon Link, GeoComp (Myanma Railways), Jan., 2009)
- 110) 8 storeyed RCC Commercial Building Design, Grand Pharmaceuticals Co., Ltd. (Feb., 2009)
- 111) Boat Landing Ladder Design, Total E&P Myanmar (May-June 2009)
- 112) Light Weight Timber Cyclone Resistance Buildings Design, UNICEF Health Center Pj., Ayeyarwaddy Division (July 2009)
- 113) Two Storeyed (60x30) RCC Cyclone Resistance Buildings Design, MBE, Dedaye 6 Schools Pj., Ayeyarwaddy Division (August 2009)
- 114) Detailed Revised Design for POC Fence and Perimeter Road Project, Kanbauk PCML (Sept. 2009)
- 115) EPRS Shelter Relocation Design, Total E&P Myanmar, (October 2009)
- 116) Two Storeyed Steel Cyclone Resistance Building Design, International Organization for Migration (UN), (November 2009)
- 117) Two Storeyed (70x30) RCC Cyclone Resistance Buildings Design, MBE, 10 Schools Pj., Ayeyarwaddy Division (Dec. 2009)
- 118) One Storeyed (70x30) Elevated RCC Cyclone Resistance Buildings Design, MBE, Dedaye & Phyarpon 10 Schools Pj., Ayeyarwaddy Division (Jan., 2010)

- 119) Cantilever Shelter Design for Side Boom Machine, Total E&P Myanmar, (February, 2010)
- 120) Three Storeyed RCC Residential Building, Thukhathida Family, Yangon, (March 2010)
- 121) Storage Shelter Design for Metering Station, Total E&P Myanmar, (April 2010)
- 122) Telecom Tower Working Platform Design, UE-TEPM, (May 2010)
- 123) 8-60',70',90'x30' RCC School Cyclone Resistant Building Design, MBE-Caritas (Switzerland), (June 2010)
- 124) Sport Hall Building Design, CVT (Myanmar) and Ministry of RHS, (July 2010)
- 125) Design Checking for 4 Storeyed RCC Office Building, Myanmar Computer Federation, (August 2010)
- 126) Air Circulation System Design for PCML Gen. House (Conceptual), PCML, (September 2010)
- 127) POC Guard House and Associated Facilities Design, PC Myanmar (Hong Kong) Ltd., (November 2011)
- 128) 8-60',70'x30' Elevated RCC School Cyclone Resistant Building Design, MBE-Caritas (Switzerland), Ministry of Education, (December 2011)
- 129) Container Lifting Pad-eyes Design, UE-TEPM Logistics (January 2011)
- 130) Naphtha Buoy Lifting Pad-eyes Design, UE-TEPM, PLC (February 2011)
- 131) Landslide Repair Design, Gabion Placement Method, Aung Myin Bar Hu Pagoda Mountain, (February 2011)
- 132) 2-Storeyed RCC Office Building, CP Myanmar Naypyidaw, (March 2011)
- 133) Oxygen Tank Container Design, UE-TEPM Logistics (March 2011)
- 134) 2-Storeyed RCC Office Building, The International Committee of Red Cross, ICRC Kyaingtong, Shan State, April (2011)
- 135) Fish Collection Center Design, Rural Development Agency, Ayeyarwaddy Delta Region, May 2011
- 136) 2-Storeyed RCC School Building, Development Project, **SUDAN**, May 2011
- 137) Feasibility Study of the Hydropower Project, JV-MAY & GL, Myitsone Plant Building and Access Road, Myitkyina, June 2011
- 138) Container Lifting Pad Design, UE-MYINT, TEPM PLC, July 2011
- 139) Potable Gantry (5-Ton Capacity) Design, TEPM EPRS System Development Project, UE-TEPM, August 2011
- 140) Gantry Extension (5-Ton Capacity) Design, TEPM PLC Warehouse, TEPM-UE, September 2011
- 141) CO2 Container Weighing System Design, UE-TEPM, Offshore Safety System, TEPM, October 2011
- 142) Conceptual Design for Yangon City Expansion Program, Government of The Republic of The Union of Myanmar (October 2011)
- 143) PDA Test Steel Box Hammer and Guide Frame Design, CSC-GeoLab (Malaysia) JV, KBZI Cement Factory Construction Project, A1 Construction Co., Ltd. (Oct. 2011)
- 144) Function Hall Steel Structure (75'x100') Design, FFSS Yangon, (Nov. 2011)
- 145) Geo-technical Slope Protection Design, Taungoo Gas Station, Grand Lotus Co., Ltd. (Dec. 2011)

- 146) Container Lifting Hook Design, United Engineering and Smart Co., Ltd, TEPM, Kanbaw (Jan. 2012)
- 147) Box-culvert Bridge Design Project, Taungoo Gas Station, Grand Lotus Co., Ltd. (Feb. 2012)
- 148) Spansion Flood Protection Sump Design Project, TEAM Co., Ltd., Bangkok Thailand (Mar. 2012)
- 149) CITIZEN Industries Flood Protection Project, TEAM Co., Ltd., Bangkok Thailand (April 2012)
- 150) Satellite Dish Mounted Frame Design Project, TEPM (Total HQ.), May 2012
- 151) 2-4 Storeyed Govt. Residential Building for Medical Institute, Diamond Mercury Co., Ltd., June 2012
- 152) 3 Storeyed Govt. Residential Building for Medical Institute, Diamond Mercury Co., Ltd., July 2012
- 153) 3-4 Storeyed Govt. Residential Building for Nursing Institute, Diamond Mercury Co., Ltd., August 2012
- 154) Ywar-ma Gas Generator Foundation, Road and Drainage Design, PEMCO, Barclay and Caterpillar JV with Myanma Electrical Power Enterprise, September 2012
- 155) Thaketa Gas Generator Foundation, Road and Drainage Design, CEC & NAVIGAT of Indonesia JV with Myanma Electrical Power Enterprise, Oct., 2012
- 156) Hlaw-Gar Gas Generator Project, Civil Work Design, NAVIGAT Energy of Indonesia and MEPE, November 2012
- 157) Two Storeyed Residential Building, Dagon Myothit Tsp., Daw Pwint Pwint, December 2012
- 158) Three Storeyed Residential Building, Bahan Tsp., Thukha Thida, Dec., 2012
- 159) Two Storeyed Office Steel Building, Thaketa Power Plant, NAVIGAT Energy of Indonesia, Jan., 2013
- 160) 100x160 ft Steel Warehouse and Canning Factory, Myanmar Makro, Jan. 2013
- 161) Thaketa Phase 2 Gas Generator Project, Civil Work Design, NAVIGAT Energy of Indonesia and MEPE, February 2013
- 162) 2 Storeyed School Building, FFSS Yangon, March 2013
- 163) 700 Ton Static Load Test Beams' Design, Geo-lab Myanmar Co., Ltd., April, 13
- 164) 3 Storeyed RCC Luxury Building, Mya Yadana (Chaw-dwin-gone), April 2013
- 165) 1000 Ton Static Load Test Beams' Design, Geo-lab Myanmar Co., Ltd., May 2013
- 166) 3 Storeyed Nurse University Design, Naypyitaw, Demco Co., Ltd., June 2013
- 167) 3 Pharmaceutical University Design, Naypyitaw, Demco Co., Ltd. July 2013
- 168) 2 Storeyed Veterinary University Design, Function Hall, Theater & Lectures Rooms, Naypyitaw, Demco Co., Ltd., July 2013
- 169) 2 Storeyed FFSS Magway School, FFSS, August 2013
- 170) 2 Storeyed Bago University Library Design, Demco Co., Ltd., August 2013
- 171) 500 Ton Static Load Test (Kentledge) Frame Design, Geolab (Myanmar) Co., Ltd., September 2013
- 172) Telecom Tower Design, United Engineering Group, October 2013
- 173) 10m Guyed Mast1 Design, United Engineering Co., Ltd., November 2013

- 174) Satellite Dish Design for Yadanabon Cybertech Co., Ltd., United Engineering Co., Ltd., December 2013
- 175) 2 Storeyed Monastery Building Design, U Khin Maung Toe, January 2014
- 176) 100x400 ft Steel Warehouse Building Design, U Ko Ko Htwe, February 2014
- 177) Gate Post Design for Shwe Field Pipe Line Center, Daewoo International Co., Ltd. Kyaukphyu, United Engineering Co., Ltd., March 2014
- 178) 2 Storeyed Steel+RCC Residential Building Design, Daw Aye Aye Sein, April 2014
- 179) 3 Storeyed RCC+Steel Office Building, CSC Group, April 2014
- 180) 3 Storeyed Steel Tea and Snack Shop House Building Design, Taunggyi, U Sai Yan Naing, May 2014
- 181) 2 Storeyed Veterinary Steel+RCC University Building Design, Diamond Mercury Co., Ltd., June 2014
- 182) 3 Storeyed Hotel Building, Thipaw City, Mr. Thomas Devan, July 2014
- 183) Single Storeyed School Building, FFSS Magaway City, August 2014
- 184) QP Antenna Foundation Design, Total E&P, United Engineering Group Co., Ltd., September 2014
- 185) Guard Shed Design for Onshore Facility, Daewoo International Co., Ltd., United Engineering Group Co., Ltd., October 2014
- 186) 2 Storeyed Residential Building and Garden Lake Design, U Kyaw Thaya Myint, November 2014
- 187) 15m Tall New Guyed Tower Design, United Engineering Co., Ltd., December 2014
- 188) Road and Drainage Design, Star City Thanlyin Zone C-1, BYMA (Myanmar) Co., Ltd., January 2015
- 189) Building Drainage and Detention Pond Design, Star City Thanlyin Zone C-1, BYMA (Myanmar) Co., Ltd., February 2015
- 190) Specifications and Design Modification for Landscaping and Car Parking Pavement Design, Star City Thanlyin Zone C-1, BYMA (Myanmar) Co., Ltd., March 2015
- 191) Teleport Dish Foundation Design, United Engineering Group, April 2015
- 192) Pavement Design for Thaketa Power Plant, NAVIGET Energy Co., May 2014
- 193) Temporary Retention Pond Design, Star City Thanlyin Zone C-1 Project, BYMA (Myanmar) Co., Ltd., June 2015
- 194) 3600 Ton Capacity Inverted Frame Design, Geolab (Myanmar) Co., July 2015
- 195) 650 Ton Capacity Kentledge Frame Design, Geolab (Myanmar) Co., Ltd., August 2015
- 196) 20m Tall Guyed Tower Design, United Engineering Group, September 2015
- 197) 3 Storey Chemical Storage and Office Building Design, MCM Co., Ltd., Oct., 15
- 198) Tokyo City Inn, 12 Storey+1 Basement, Yangon International Hotel, Nov. 2015
- 199) 3 Storeyed Monastery RCC+Steel Truss Building Design, Yangyiaung Monastery, December 2015
- 200) Single Storeyed Masonry Staff Building Design, CSC Camp, December 2015
- 201) Single Storeyed Reinforced Brick Building Design, CSC Camp, December 2015
- 202) Integrated Design for Golden Theparerg Myanmar Garment Factory Project SEAFCO (Myanmar) Co., Ltd. (February, 2016)

- 203) 2 Storeyed RCC Pyin-nyar-parami Monastery Design, Hmaw-bi (April, 2016)
- 204) Drainage Design for Buddhist University, Taunggyi (May-June, 2016)
- 205) 1-Storeyed RCC Pyin-nyar-parami Monastery Design, Hmaw-bi (July 2016)
- 206) Design of UNICEF 39 Schools Construction Project, Rakhine State (August 2016 – April 2017)**
- 207) Design of Slope Stability Analysis and Earth Filling, Falan Airport Project, Chin State, Depart of Civil Aviation (May – August 2017)
- 208) Design of Masonry Bangalow Project, Kyawy Chai, Gwa Township, Rakhine State (June – July 2017)
- 209) Feasibility Study of Ponnagyun Industrial Estate Project, Mottama Holding Ltd., prepared for Rakhine State Government (May –August 2017)
- 210) Design of RCC Bridge Project, Sagaing-Myinmu-Monywar Project, Bridge No. 1/75, 1/76, 2/74, Shwetaung Construction Co., Ltd. (July – August 2017)
- 211) Feasibility Study of Outer Ring Road Project, Mottama Holding Ltd., prepared for Yangon Region Government, (July 2017 to June 2018)
- 212) Design (Checking) and Technical Supervision of Public Buildings for Bago Region Construction Control Authority, BRCCA (June 2017 to June 2018)
- 213) Design of Waste Water Treatment Plant, Monywa Industrial Estate, HOS Co., Ltd. (May 2018 to October 2018)
- 214) Topographic + Geotechnical Survey and Design of 33 UNICEF Extension Schools + Warehouse Construction Project in Various Townships of Rakhine State (September 2018 to March 2019)**
- 215) Foundation Design for City Loft 8th Storeyed RCC Buildings Construction Project, Thanlyin Star City, Thanlyin (October 2018 to April 2019)
- 216) New Construction Low Cost Building for Bago (November 2018)
- 217) Kamakura Pagoda, Hmawbi (Mat Footing Design) (December 2019)
- 218) 1 Storeyed RC+Steel Building, Ye Mon (January -2019)
- 219) Ko Yin Gyi- 1 - Storeyed RCC Residential Building, Lashio (February,2019)
- 220) MRTV-4 Pindaya 500 Acres Development Project Design (March-May, 2019)
- 221) MRTV-4, 54x108m Car Parking and Food Center, MEP, Yangon (June- 2019)
- 222) 80x108m Theatre 3, Forever Group-MRTV4, MEP, Yangon (June- 2019)
- 223) 2 Storey Phaung Taw Thi School Design, GGP Japan Embassy (July, 19)**
- 224) 2 Storey Ka Zun Ma School Design, GGP Japan Embassy, (July, 2019)**
- 225) 2 Storey Chaung Kuu School Design, GGP Japan Embassy, (July, 2019)**
- 226) Steel Roof Structure Design, Forever Group, South Okkalapa (July, 2019)
- 227) Cover-Walk Way Design, Forever Group, South Okkalapa (July 2019)
- 228) 5 Storey RCC Office Building Design, North Dagon (July-August, 2019)
- 229) New Ring Road Design Project, University of Yangon. (July-August, 2019)
- 230) 36x100m Tatmataw Hall Design, Forever Group-MRTV4, (July-August 2019)

- 231) **160 ft Shauk Kone Bridge Design, GGP Japan Embassy, (August- 2019)**
- 232) Tatmataw Hall RDW Project, Forever Group (August-September, 2019)
- 233) **Ma Laung -Be Lin Road Design, GP Japan Embassy (August, 2019)**
- 234) **Rockfall Protection Design, Mount Popa Conservation Project** (Sept., 19)
- 235) ZOC Entrance, Pipe culvert, Fence & FOC Protection Str., PTTEPI (Nov., 19)
- 236) Hatchery Buildings & Infrastructure Design Project at IRAN, AGE Co. (Jan., 20)
- 237) Chili Processing Plant and Storage Building Design, Forever Group (Feb., 20)
- 238) Warehouse & Crane Structure Building, May Modern Steel Co., Ltd. (Mar., 20)
- 239) Out Door Studio & Infrastructure Design Project, Pindaya, MRTV-4 (April., 20)
- 240) Studio Modules Projects (9-Studio), Pindaya, Forever Group (May., 20)
- 241) Artists and Film Dormitories Design Project, Pindaya, Forever Group (Jun., 20)
- 242) Lake View Residence Extension Project, MRTV-4, Pindaya (July, 20)
- 243) Earth Retaining Structure Design, Mr. Goenka Meditation Center (Aug., 20)

Construction Supervision Projects:

- i) Double Storeyed R.C. Shop House, Mayangone Tsp. (May, 2000)
- ii) Double Storeyed R.C. Res. Building, Bayintnaung (June, 2000)
- iii) 100 ft. Post-tensioning Girders Production, Donthami Bridge Project, Myanma Railways, Ministry of Rails Transportation (April-Nov., 2001)
- iv) Double Storeyed R.C Pent House, Thakata, (Jul., 2001)
- v) Launching of 100 ft Span Bridge, Myanma Railways (July-Nov., 2001)
- vi) Production of Standard Pre-cast Girders, Myanma Railways (Nov., 2001 to Present)
- vii) 100 ft Post-tensioning Girders Production, Irrawaddy Bridge (Magawe) Project, Public Works, Ministry of Construction (Feb., 2002)
- viii) High Strength Concrete Repair Works, Irrawaddy Bridge (Magawe) Project, Public Works, Ministry of Construction (Mar., 2002)
- ix) **23 - Pre-Kg school Buildings Construction and Renovation Project, Yangon, UNICEF (August-March, 2002)**
- x) **10 – Pre-Kg school Buildings Construction and Renovation Project, Mandalay, UNICEF (August, 2002 to May 2003)**
- xi) High-rise Building Development Projects, Shwe Than Lwin Co.,Ltd. (Feb. 2003)

- xii) [9- Pre-Kg School Buildings Construction Project, Mandalay, UNICEF \(June, 2003 to March 2004\)](#)
- xiii) Fish Ball Factory Construction Project (November 2003)
- xiv) High-strength Concrete Design & Repairs (CC Ltd.), April 2004 to Present
- xv) Pre-cast Concrete Pile Production Project, Ywa Ma Steel Mill Project, Directorate of Military Engineer (April 2004)
- xvi) Steel Mill Renovation Project. Ywa Ma Steel Mill, Directorate of Military Engineer (April 2004)
- xvii) Chitosan Factory Construction Project, ATG Group Co., Ltd. (June 2004 to August 2004)
- xviii) Concrete Mix Design Work, Nga Light Chaung Bridge, Myanma Railways, Pyinmana (December, 2004)
- xix) Concrete Repairing Work for Airfield runway, Pyin Oo Lwin Airport, GE (March, 2005)
- xx) Pipe Line Operation Center Up-grading Project, POC Kanbaw, Petronas of Malaysia PCML (Nov., 2005)
- xxi) Cold Storage and Office Construction, NRH, UNICEF (Nov., 2006)
- xxii) POC Landslide Repair Project, POC Kanbaw, Petronas of Malaysia PCML (Dec., 2006 to May 2007)
- xxiii) POC Scheduled Wasted Chemical Warehouse Project, Kanbaw, Petronas of Malaysia PCML (September, 2007)
- xxiv) POC Raw Water Storage Tank Project, Kanbaw, Petronas of Malaysia PCML (September, 2007 to January 2008)
- xxv) [UNICEF 5 Schools Construction Project, Tsunami Related Programme, UNICEF Yangon \(November 2007 to June 2008\)](#)
- xxvi) On shore maintenance works, Total Exploration & Production Myanmar (November 2007 to May 2008)
- xxvii) POC New Landslide Repair Project, POC Kanbaw, PCML (January 2008 to May 2008)
- xxviii) [Cyclone Resistance School Building Project Phase-I, 9-CFS, Yangon and Ayeyarwaddy Div., UNICEF \(May 2008 to October 2009\)](#)
- xxix) [Temporary Safe Learning Shelters Projects, 423 Buildings in Yangon and Ayeyarwaddy Div., UNICEF \(May-July, 2008\)](#)
- xxx) Landslide Repair Project, Total E&P Myanmar (Sept. 08 to May 09)
- xxxi) Two Storeyed R.C. Building Construction P.J., Daw Myint Myint (Oct., 08)
- xxxii) [4-Community Health Building Construction P.J., World Vision Myanmar, \(Dec. 08 to Mar. 09\)](#)
- xxxiii) Chemical Storage Warehouse Construction, PCML/POC, (Dec, 08 to October 09)
- xxxiv) [2 School Building Construction P.J., International Rescue Committee, IRC, \(Dec., 08 to Oct., 09\)](#)
- xxxv) [7 School Building Construction P.J., World Vision Myanmar \(Dec. 08 to Jun. 09\)](#)
- xxxvi) Reservoir Upgrading Project, Pipeline Operation Center, PCML (Petronas), Kanbaw, (Jan. 09 to May 2009)

- xxxvii) Bridge Construction Project, Eindaya Bridge, Total E&P Myanmar (Jan. 09 to June 09)
- xxxviii) Cyclone Resistance School Building Project Phase-II, 10-CFS, Yangon and Ayeyarwaddy Div., UNICEF (May 2009 to Nov. 2009)
- xxxix) 5 Rural Health Center Construction P.J., Ayeyarwaddy Div. UNICEF (May. 09 to Nov. 2009)
- xxxx) Community Development Project, Schools, RHC and Shelters, Yangon Division, World Vision Myanmar (June 09 to Mar. 2010)
- 41) POC Fence and Perimeter Road Construction Project, PCML (Petronas), Kanbauk Oil and Gas Industries, Taninthayi Division, (July 09 to Dec. 10)
- 42) 16 Bed Hospital Project, Dawnyeik Village, Phyarpon Tsp., Royal Thai Embassy Project (September 09 to November 09)
- 43) 16 Rural Health Center Construction Pj., UNICEF (Dec. 2009 to Mar. 2010)
- 44) Cyclone Resistance School Building Project, Phase-IIIB, 9-CFS, Ayeyarwaddy Division., UNICEF (November 2009 to April 2011)
- 45) 8-Two Storeyed (60x30) RCC Cyclone Resistance Buildings Project-P2, MBE, Dedaye 6 Schools Pj., Ayeyarwaddy Div. (Sept. 2009 to Apr. 2010)
- 46) 6 Schools and 5 Clinic Nargis Recovery Project, Hainggyi, Bogalay and Phyarpon, World Vision Myanmar, (Dec. 2009 to June 2010)
- 47) 10-(70x30) Elevated RCC Cyclone Resistance Buildings Construction P-3, MBE, Dedaye and Phyarpon 10 Schools Pj., Ayeyarwaddy Division (January 2010 to August 2010)
- 48) Rural Health Center, Taman Village, Phyarpon Tsp., Royal Thai Embassy Project (January 2010 to March 2010)
- 49) 2-One Storeyed Elevated Schools Construction Project, World Vision, Hainggyi Tsp., Nargis Recovery Project (April 2010 to Dec. 2010)
- 50) 8-Two Storeyed RCC School Building Project P-4A, MBE-Caritas (Switzerland), Ayeyarwaddy Nargis Recovery Pj. (Dec. 2010 to Oct. 2011)
- 51) Railway Alignment and Survey Project, Rakhine State, Aungzabu Thiha Co., Ltd. and Myanma Railways (December 2010 to March 2011)
- 52) Sport Hall Construction Project, CVT Myanmar and Ministry of RHS, Kyaikwaing Youth Training Center (January to March 2011)
- 53) Two storeyed RCC Residential Building Pj., Daw Myint Myint, Yangon (Feb. 2011 to July 2011)
- 54) Landslide Repair Project, Aung Myin Bar Hu Pagoda Mountain (Feb. 2011 to August 2011)
- 55) 8-Elevated RCC Schools Building Project P-4B, MBE-Caritas (Switzerland), Ayeyarwaddy Nargis Recovery Pj. (March 2011 to November 2011)
- 56) 5 RCC School Buildings Construction Project, World Vision Myanmar (May 2011 to November 2011)
- 57) POC Guard House Construction Project, PCML POC (September 2011 to December 2011)
- 58) 100x200 ft. RCC Factory Warehouse Construction Project, U Win Htut, No.54, Ngwepinlal Industrial Estate, Hlaingthaya (October 2011 to July 2012)
- 59) PDA and SIT Test for Bore Piles, KBZI Cement Factory Construction Project, A1 Construction Co., Ltd., (October 2011 to January 2012)

- 60) Gas Station Construction Project, Taungoo, Grand Lotus Co., Ltd., (Feb. – April 2012)
- 61) ANITA (Germany) Factory Canteen Construction Project, Grand Lotus Co., Ltd. (Feb. 2012 to May 2012)
- 62) Renovation of Japanese Restaurant Project, Grand Lotus Co., Ltd., (Mar. – June 2012)
- 63) [School Renovation Project, World Vision Dagon Seikkan Area, \(July to August 2012\)](#)
- 64) 8-Storeyed Broadcasting Service Building Construction Project, MRTV-4, Mandalay FM, Forever Group Co., Ltd., (September 2012)
- 65) Site Investigation, Testing and Minor Project, FMI Center, Mindhardt (Thailand), SPA Management, Yangon (October 2012 to December 2013)
- 66) Ywar-ma Gas Generator Foundation, Road and Drainage Design, PEMCO, Barclay (Australia) and Caterpillar (USA) JV with Myanmar Electrical Power Enterprise (October 2012 to May 2013)
- 67) Thaketa Gas Generator Foundation, Road and Drainage Design, CEC and NAVIGAT of Indonesia JV with Myanmar Electrical Power Enterprise (October 2012 to May 2013)
- 68) 8-Storeyed RCC Luxury Condominium Construction Project, Royal Maylikha Co., Ltd., Parami Road (November 2012 to May 2013)
- 69) Dam Maintenance and Debris Control Project, PCML/POC, Oil and Gas Industry, Kanbauk (January 2013 to May 2013)
- 70) Design and Construction of RCC Meditation Building, Shwe Oo Min Taw Ya, (March 2013 to June 2013)
- 71) 2 Storeyed RCC Residential Building Construction Project, Pwint Pwint – North Dagon Myothit, (April 2013 to June 2013)
- 72) Glass Tempering Factory Pj., Ayeyar Hinth Group (May 2013)
- 73) Thaketa Oil and Gas Industry Supply Base Construction Project, PTTEPI of Thailand, (May 2013 to December 2013)
- 74) [World Vision School Construction Project, World Vision Dagon Seikkan, \(June 2013 to August 2013\)](#)
- 75) (80m x 100m) Exhibition Hall and associated facilities Construction Project, Forever Group, MRTV-4, Shin Saw Pu Road, Yangon (Sept.-Dec. 2013)
- 76) Single Storeyed Masonry Staff Building, Fence and Gate CSC Camp (January – March 2014)
- 77) Single Storeyed Reinforced Brick Building, CSC Camp (April-July 2014)
- 78) 3 Storeyed RCC Office Building Construction, CSC Group (August-Nov. 2014)
- 79) Gate and Fence Project, Hmawbi, CSC Group (January-March 2015)
- 80) 3 Storey Chemical Storage and Office Building, MCM Co., Ltd., (August-December 2015)
- 81) 3 Storeyed Monastery RCC+Steel Truss Building Design, Yangyiaung Monastery, (November 2015 to April 2016)
- 82) Transformer Foundation Installation, Hantharwaddy Monastery (February-March 2016)
- 83) [UNICEF 39 Schools Construction Project, Rakhine State \(April 2016 to Present\)](#)

- 84) **CSC Office Building Project, Ponnagyun Township, Rakhine State (May 2017 to Present)**
- 85) **Camp CSC Bungalow Project, Kyway Chai, Gwa Township, Rakhine State (June to November 2017)**
- 86) Technical Supervision for Slope Stability of Falan Airport Project, Chin State, Department of Civil Aviation (May 2017 to **Present**)
- 87) Design Check and Technical Supervision of Onshore Drilling Campaign, IOR-7 Project, PCMI Myan Aung (Shwe Pyi Thar Well Field), (Mar. to Sept. 2018)
- 88) **33 UNICEF Extension Schools + Warehouse Construction Project in Various Townships of Rakhine State (October 2018 to Present)**
- 89) **Rockfall Protection, Mount Popa Conservation Project (September 2019)**
- 90) Outdoor Studio and Infrastructure Development Project, Pindaya, MRTV-4 (Oct., 19 to **Present**)
- 91) **9-Studio Module Development Project, Pindaya, Forever Group (Nov. 2019 to Present)**
- 92) **Slope Protection at Layaungdaw Horticulture Development Project, Daw Khin Kyi Foundation (April 2019 to Present)**
- 93) **Slope Protection at Mr. Goenka Meditation Center, (Aug., 20 to Present)**

(11) The Resource Persons

MANAGEMENT TEAM

1) Mr. Win Naing Htun, Managing Director

B.E. (Civil), M. Eng. AIT, M.MES, PE-M.ASCE, M.SEI, M.Geo-institute, ASEAN Engineer Register (AER) and ASEAN Charter Professional Engineer (ACPE);

PE-0036(Structural), PE-0124(Geotechnical) of Myanmar Engineering Council

More than 30 years of regional and international professional experiences in engineering design, construction projects and project management.

He has involved *more than 45 overseas design projects* for infrastructure development such as highways, expressways, power sub-stations, industrial plants, drainage systems, reservoir operations, industrial estates, real estates, country clubs, stadiums, airports and ship docks.

He was also involved in *3 major-overseas construction-projects* for expressways and airport development.

He has successfully managed to complete *several projects for design and construction* as mentioned in item 10, The Experiences.

Mr. Win is also Chief Consulting Engineer of the company.

2) **Ms. Yi Yi Khin**, Director (Design & Operations)

B.E. (Civil), CERT (Computer Application); **PE-0554 (Construction)** of MEngC (Myanmar Engineering Council)

More than 30 years of regional and international professional experiences in engineering design, technical works, management and cost control.

She has involved *more than 40 design projects* (Oversea) for land grading, roads, drainage systems, reservoirs, factories, industrial estates, real estates, communication centers, golf courses, stadiums, airports and dockyards.

She was also involved in *5 major projects* (Oversea) for cost control and technical works.

She has completed several local projects as mentioned in item 10.

Ms. Yi Yi is also Senior Design Engineer of the company.

3) **Mr. Aung Htet**, Technical Director (System Engineering)

B.E. (Civil), CERT (Computer Application), CERT (Pile Load Tests)

More than 3 years of regional and international professional experiences in civil work programming and system engineering, technical management and cost control.

He has involved *more than 30 projects* for real time monitoring, programming of pile load tests and instrumentation with cost control and technical management.

He is now as a Candidate for M. Eng. Program of Geotechnical and Earth Science Engineering, Asian Institute of Technology (AIT), Bangkok, Thailand

TECHNICAL EXPERTS

1) **Mr. Kyaw Htut Aung** (Drilling, Water and Sanitation)

B.Sc. (Geology), DAG (Hydro-Geology)

Team Leader of Pyae Soan Engineering Group

More than 27 years of Government Staff in Mines, Professional experience in mineral exploration, Water exploration, water well drilling.

He has completed more than 200 water wells development and maintenance projects in Myanmar.

2) **Mr. Thein Htun Aung** (Geotechnical Design, SI and Testing)

B.E. (Civil), CERT (Geotechnical Engineering & Pile Load Testing)

Managing Director, Geolab (Myanmar) Co., Ltd.

More than 23 years of experiences in Geotechnical design, SI and Testing, PDA, SIT, **Stanamic** and **StadRapid** of Bore Piles, Monitoring, Instrumentation and Management of several local and international projects.

Attached, Presentation Document

Civil Solution Consultants Ltd.
Engineering Solutions for Design and Construction

Design, Construction Supervision, Testing and Calibration

A Presentation to Visitors

April 2016, Yangon, Myanmar



Win Naing Htun, Managing Director
E(Civil), MEng AIT, PE-MEngC, PE-M. ASCE, M. SEI, M. MES, ASEAN Eng., SEC, ACPE
CSC Group of Companies, 413-414, Aung-thit-sar Street, Ward 48, U-10 Avenue
Dagon Mydhit (North) Township, Yangon, Myanmar
Tel.: 09-5077153, 8625068, E-mail: csc1999@gmail.com, csc1999@csc-group.org

CSC GROUP

- Civil Solution Consultants Ltd. (Design, Supervision, *Leading Firm*)
- Construction Chemicals Ltd. (Manufacturer of Concrete Admixtures)
- Geolab (Myanmar) Co., Ltd. (SIT, PDA, SLT, I-SLT) Pile Load Tests, SI
- MEGENG Co., Ltd. (M&E Services and Design)

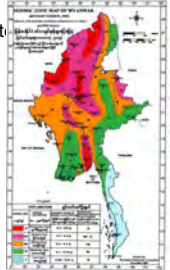
Design Works

- (1) International Codes and Standards, **ACI, ASTM, ASCE, AASHTO** etc.
- (2) Local Codes, **YCDC and CQHP**
- (3) Structural Software, **Staad Pro, Adapt** etc.
- (4) Geotechnical, **SB Slope, Geo slope**
- (5) **AutoCADD, GeoSystem (Log Draft)**

Deliverables:

- (1) Drawings
- (2) Bill of Quantities
- (3) Technical Specifications
- (4) Design Calculations

Project for:
Building, Roads and Drainage
Bridges and Infrastructures Projects



Seismic Map

Obtaining Soil Results and Updated Design Data in real time basis



School Building for Sudan



CVT Child Sport Building



Nargis Recovery UNCEF School



8-Storeyed RC Building, Opal Pj.

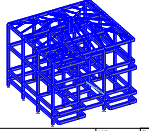
Phase – 1 – CFS, UNCEF
Kyaiklat, Thitkyargone CFS
RCC Building, 3-(27' x 40')
18 Jan. 2009 to 13 Aug. 2009
Soil Parameter- r , c , ϕ , Bearing Capacity
Shallow Foundation Design

MBE Phase-2 & 3 Model Schools
Caritas Switzerland
RCC Buildings (2-30'x60, 1-30'x70')
Janary to August 2010
Soil Parameter- r , c , ϕ , Bearing Capacity

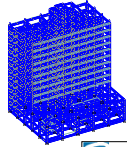




2 Storeyed Building Design
Daw Htay Htay Building

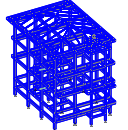


12.5 Storeyed Building Design
Static and Dynamic Analysis
Yangon International Hotel
MCG Corporation, Japan

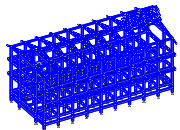


ISO 9001-2008 Projects

3 Storeyed Building Design
South Dagon Myothit Monastery



3 Storeyed Building Design
Yan-gyi-aung Monastery



CSC CONSULTING ENGINEERS

Eindayazar Bridge Project, TEPM

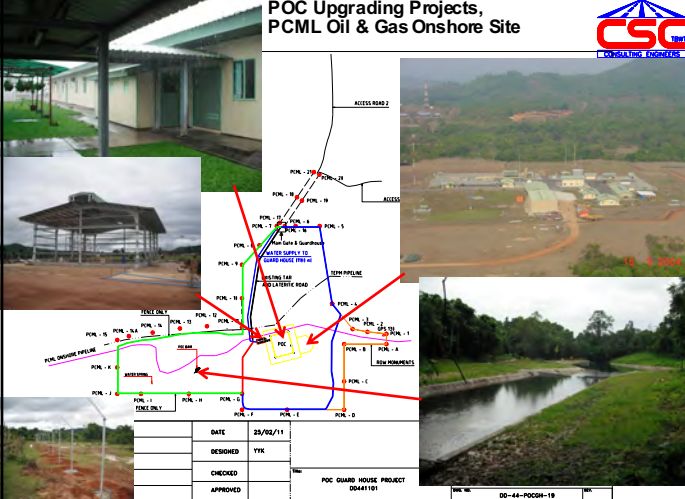



Helipad Land Slide Protection Project, TEPM



CSC CONSULTING ENGINEERS

POC Upgrading Projects,
PCML Oil & Gas Onshore Site



CSC CONSULTING ENGINEERS

Site Supervision REPORTING SYSTEM & TRAINING

Field Engineer or Technician shall report:

- (1) Weekly Progress Report
- (2) Test Results Verification for Water, Concrete and Steel Strength
- (3) Accident and Incident Report (if any)
- (4) Shop Drawings (when necessary)
- (5) Clarification Report (when necessary)

Based on
TQM (Total Quality Management System)
EPRS (Emergency Personal Response System)
Available Field Data/Information

Head Qr. TRAINING:
Intensive Personal Training on:
Field Data Clarification
HSE (Health, Safety and Environment)
Error Monitoring and Risk Assessment
Social Skill on Site



CSC CONSULTING ENGINEERS

General Discussion on Working Nature:

(A) WORKING NATURE:

A-1 Project Management (Client)

A-2 Technical Responsibilities

- Drawings, Spec., BoQ (Design Firm)
- Technical Supervision (Supervision Firm)
- Construction Activities (Contractor Firm)

(B) PRIORITY Order:

1st Drawings, 2nd Spec., 3rd BoQ, Arbitration?

(C) PROJECT Example:

- (1) Project Management & Technical Supervision
- (2) Testing Projects
- (3) Regional and International Projects



(1) Project Management and Technical Supervision Package

- 1- Site visit and data collection (existing situation and available facilities)
- 2- Find out the cause of Failure (Heavy Rainfall 500mm / night)
- 3- Presentation to Management (Repair Method, Schedule, Budget Limit)
- 4- Design and Build Contractor Selection (including third party test)
- 5- Design checking and approval (project schedule, mobilization)
- 6- Site management (Man-Machine-Material availability)
- 7- Permit to Work, PPE, HSE, etc.

Soil Parameter – c , ϕ , γ , P_i , $USCS$, Visual Analysis
 Analysis – Slope Stability, Failure Plane, Soil Nailing
 Construction – Scaffolding, Drilling, Anchoring, Netting



**Landslide Repair LSMS1, TEPM,
 Contractor Teroka-Java**
 Soil Nail + Netting + Guniting (500 sq-m)
 20 Dec. 2009 to 20 Mar. 2009
 (including pull out test period)
30 Days earlier than schedule



Landslide Repair Pi LSMS-3 TEPM (Teroka-Java)
 Soil Nailing, Enkamat, Bio-mat & Steel Net app.
 01 March to 02 May 2008 (including pull out test)
30 Days earlier than schedule

Thaketa Supply Base Construction Project MOGE – PTTEPI, Zaw-ti-ka Oil and Gas Field Development Construction Supervision Activities in Detailed Project Implementation

- Warehouse, Office and Cold Room
- Roof Shed for Chemical Stuff
- IT Room, Power House, Chemical Room
- Guard House, Fence and Gate
- Drainage and Pavement
- Water Supply and Sanitation
- Car Port, etc.

Responsibilities:

- Field Monitoring in Daily Basic
- Shop Drawing Development
- Materials Specifications Control
- Daily Progress Report
- Project Management and
- Daily Response to Client's project in charge

• **SSHE of PTTEPI**



Tool Box Talk

**Over View of Thaketa Supply Base Project
MOGE-PTTEPI**

**Looking to Gate, Thaketa Supply Base Project
MOGE-PTTEPI**

**Warehouse Under Construction
Thaketa Supply Base Project, MOGE-PTTEPI**


Car Port Under Erection
Thaketa Supply Base Project, MOGE-PTTEPI



Compaction in front of Roof Shed for Chemical Stuff
Thaketa Supply Base Project, MOGE-PTTEPI



3rd Party Production Factory Site Visit
Thaketa Supply Base Project, MOGE-PTTEPI



Technical Clarification with Foreign Expertise
Thaketa Supply Base Project, MOGE-PTTEPI





Ware Side View in Finishing Stage
Thaketa Supply Base Project, MOGE-PTTEPI



Chemical Storage Yard & Warehouse Entrance
Thaketa Supply Base Project, MOGE-PTTEPI



Telecom Building and Chemical Warehouse
Thaketa Supply Base Project, MOGE-PTTEPI



Looking to Gate from Chemical Storage Yard
Thaketa Supply Base Project, MOGE-PTTEPI



Storage Shed inside Warehouse Building
Thaketa Supply Base Project, MOGE-PTTEPI



Transformer and Generator Room
Thaketa Supply Base Project, MOGE-PTTEPI

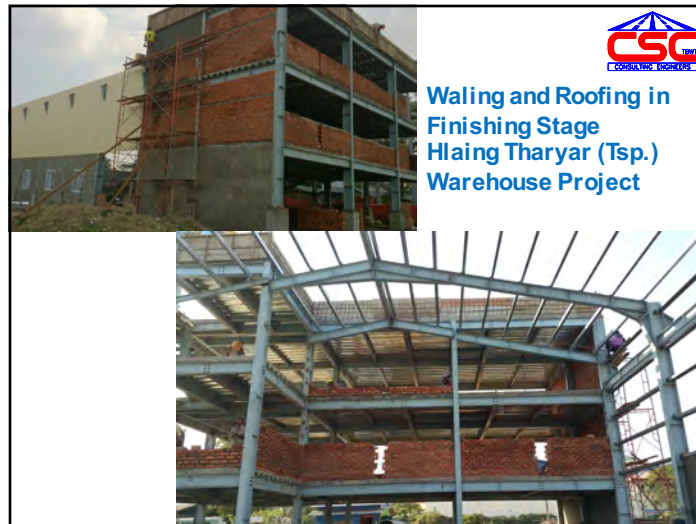


Site Inspection by Sr. Project Response Engineer
Thaketa Supply Base Project, MOGE-PTTEPI



3 Storeyed RCC+Steel Warehouse Building Project
Hlaing Tharyar (Tsp.), ISO 9001-2008





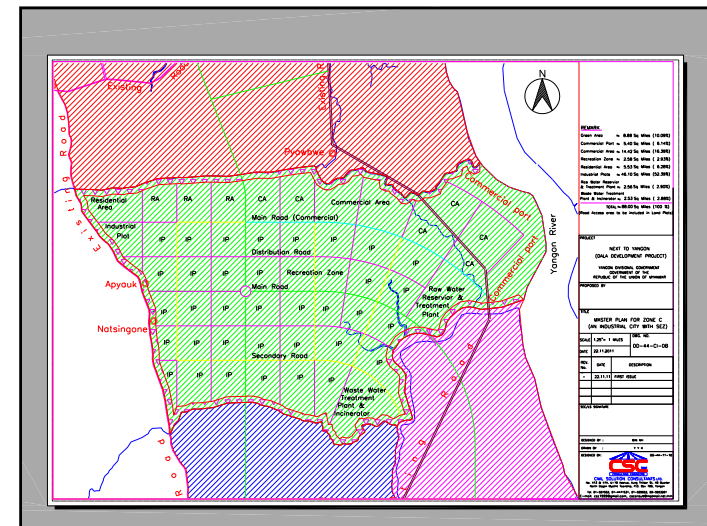
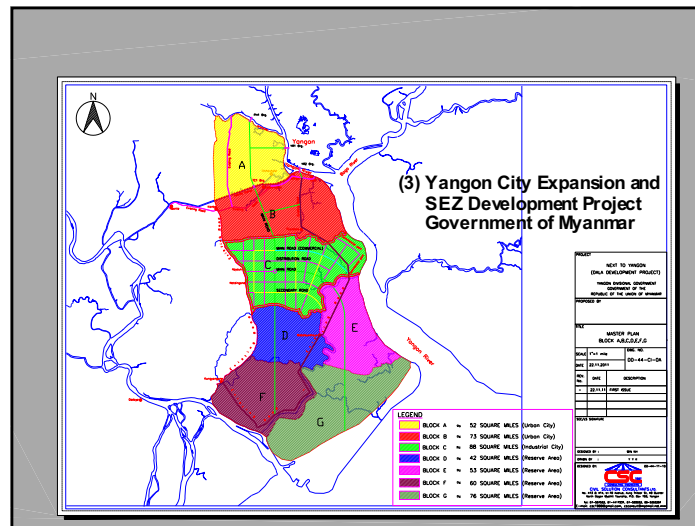












Conclusion:

- (1) How Deep Understanding in SI & Load Test?
Bore Logs, Theory, Lab. Test, SLT, PDA, SIT, etc.
- (2) What is your Intension in do ?
Working Pile, Ultimate Pile, Safety Factor, etc.
- (3) Follow YCDC, CQHP Guidelines for Design?
Static and Dynamic Analysis, Seismic Design.
- (4) PE Representation?
Structural PE, Geo-technical PE, etc.
- (5) Intl. Practice in Design & Supervision?
Codes and Standards (BS, ASTM, MNC, etc.)
Technical Report (Factual, Interpretative)
Follow ISO Standard, IS 9001-2008?

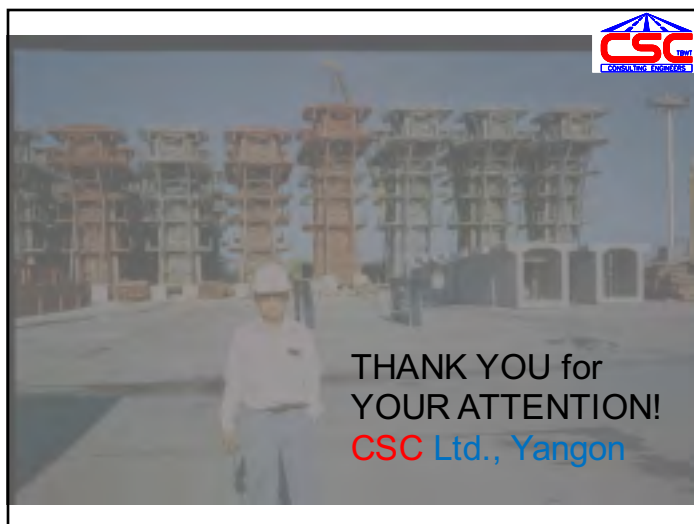
ISO 9001-2015 Training CSC Group, 2016-2018



ISO 9001-2015 Training
CSC Group, 2016-2018



ISO 9001-2015 Training
CSC Group, 2016-2018





UNICEF 39 SCHOOLS CONSTRUCTION PROJECT, Rakhine State
(2016 until NOW)



CSC-UNICEF 39 Schools Project,
Rakhine State
Year 2016 until NOW



SLOPE-1 COMPLETION, Falam Airport Project Chin State, Department of Civil Aviation







Slope-2 Under Construction Falam Airport Project, Chin State Department of Civil Aviation



Aerial View of Slope-2 from Left

