المؤسسة العامة القطرية للكهرباء والماء
Qatar General Electricity & Water Corporation

CONTRACT No GTC 626/2014A

CONSTRUCTION OF MEGA RESERVOIR PRPSs
(PACKAGE A - UMM BIRKA)

CONTRACT DOCUMENTS
(VOLUME 8 OF 19)

CONSOLIDATED CONTRACTORS GROUP S.A.L. (OFFSHORE) (CCC) &
TEYSEER CONTRACTING COMPANY W.L.L.
JOINT VENTURE

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SECTION 13: APPENDIX E
CONTRACTOR'S RESOURCES

APPENDIX E

CONTRACTOR'S RESOURCES

APPENDIX E

CONTRACTOR'S RESOURCES

Annexure (1) Contractor's Personnel

Annexure (2) Facilities, Plant and Equipments Owned by the Contractor

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Annexure (11) List of Customers and Projects.

Annexure (12) List of Current Commitment

Annexure (13) Outline Health, Safety and Environment (HSE) Plan

APPENDIX - E

CONTRACTOR RESOURCES

GENERAL NOTE

In this Appendix, CONTRACTOR shall provide all details as required by the Annexure. The information contained in these Annexure shall be the basis on which KAHRAMAA will evaluate CONTRACTOR technical competence and ability to carry out the CONTRACT. Where the TENDER is submitted by a Joint Venture (JV), the information is to be provided by all JV parties.

Submission of all specified details as sought under these Annexure is mandatory and any Tenderer not complying with this requirement (i.e. submissions with "to be advised later", "to be submitted on award" etc.) may be rejected.

The Annexure shall form a part of the Appendix E - CONTRACTOR RESOURCES and these shall be based upon those submitted with CONTRACTOR'S Tender. The final Annexure shall be those as selected by KAHRAMAA. Where Tenderers are offering to carry out more than one of the five PRPS Packages then it is incumbent on the Tenderer to demonstrate that he has sufficient resources to fulfil this commitment.

This Appendix consists of the following main Annexes:

Annexure (1)	Contractor's Personnel
Annexure (2)	Facilities, Plant and Equipment Owned By the Contractor
Annexure (3)	Facilities, Plant and Equipment Proposed For the Project
Annexure (4)	Subcontractors
Annexure (5)	Suppliers
Annexure (6)	Contractor's Company Organization Chart
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Annexure (11)	List of Customers and Projects
Annexure (12)	List of Current Commitment
Annexure (13)	Outline Health, Safety and Environment (HSE) Plan

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) / TCYSEER CONTRACTING CO. W.L.L. - JV

SECTION 13: APPENDIX E
CONTRACTOR'S RESOURCES
Annexure 1: Contractor's Personnel

ANNEXURE (1) CONTRACTOR PERSONNEL

CONTRACTOR'S PERSONNEL

The following key positions shall be included on the Project Organization Chart Annexure no. (7) of this Appendix and the Contractor is required to include their CVs/Resume in his Technical submittal detailing their qualification, experience and the period the personnel have been employed by the Contractor shall be given for Kahramaa evaluation and approval. All Contractor's key Personnel must have the prior approval of KAHRAMAA before being engaged in the WORK. None of the Contractor's key Personnel listed here shall be removed or relocated from the positions indicated or replaced without the prior written approval of KAHRAMAA. Personnel removed shall be immediately replaced with new personnel who, in the sole opinion of KAHRAMAA are of, at least, an equivalent standard as the personnel removed.

A) CONTRACTOR'S REPRESENTATIVE

Shall have B.Sc./BEng degree in Engineering with experience in the design, construction and operation of similar works and shall have been in the permanent payroll of CONTRACTOR for at least the last three years and have a minimum of **Ten (10)** years relevant experience

CONTRACTOR REPRESENTATIVE shall be

Name: Ihab Sharif.....

Signature.....

The above nominated **REPRESENTATIVE** is authorized to act on behalf of CONTRACTOR on the following matters under the CONTRACT:-

a) .....

b) .....

B) CONTRACTOR'S PROJECT MANAGER

Shall have B.Sc./BEng degree in Engineering with experience in the management of similar projects and shall have been in the permanent payroll of the CONTRACTOR for at least the last three years and have a minimum of **Fifteen (15)** years relevant experience

CONTRACTOR'S PROJECT MANAGER shall be

Name: Ihab Sharif.....

Signature.....

The above nominated **PROJECT MANAGER** is authorized to act on behalf of CONTRACTOR on the following matters under the CONTRACT:-

a) .....

b) .....

C) **CONTRACTOR'S PROJECT ENGINEERS** shall have a B.Sc./BEng in Engineering and will be in the permanent payroll of CONTRACTOR, for at least last three years, with a minimum of **ten (10)** years relevant experience. As a minimum the Contractor will propose a suitably qualified engineer in each of civil, mechanical, electrical and instrumentation disciplines

Name : Wael Munzer
(Civil engineer)

Nationality: Lebanese

Qualifications : for details, please refer to the CV under Attachment 1.

Name : Ayman Naser
(Mechanical engineer)

Nationality: Jordanian

Qualifications : for details, please refer to the CV under Attachment 1.

Name : Rabi' Sa'd
(Electrical engineer)

Nationality: Lebanese

Qualifications : for details, please refer to the CV under Attachment 1.

Name : Subin Jose
(ICA engineer)

Nationality: Indian

Qualifications : for details, please refer to the CV under Attachment 1.

D) **CONTRACTOR'S SITE Engineer(s)** shall have a B.Sc./BEng in Engineering and will be in permanent payroll of Contractor, with a minimum of **eight (8)** years relevant experience.

Name : Wissam Salman

Nationality: Lebanese

Qualifications: for details, please refer to the CV under Attachment 1.

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) / TEYSLER CONTRACTING S.A.L. W.L.L. JV

E) CONTRACTOR'S SAFETY Engineer.

The person responsible for safety related matters shall have a BSc/BEng in Engineering and will be in permanent payroll of Contractor, with a minimum **eight (8)** years relevant experience, shall be

Name : Fadi Watfa

Nationality: Palestinian

Qualifications: for details, please refer to the CV under Attachment 1.

F) CONTRACTOR'S QA/QC Engineer

The person responsible for Quality Assurances & Quality Control related matters shall have a B.Sc. in Engineering or equivalent and will be in permanent payroll of Contractor, with a minimum **ten (10)** years experience as QA/QC or QC Engineer, capable to follow inspection monitoring works to implement the Quality Plan related to handling materials and construction activities, preferable with knowledge of mechanical installation, commissioning of the required works, shall be

Name : Nabil Shabasy

Nationality: Egyptian

Qualifications: for details, please refer to the CV under Attachment 1.

G) CONTRACTOR'S Cost and Planning Engineer

The person responsible for Cost and Planning related matters shall have a B.Sc. in Engineering and will be in permanent payroll of Contractor, with a minimum **ten (10)** years' experience as Planning Engineer, good experience with Primavera Project Planner Software shall be

Name : Ahmed Sedky

Nationality: Egyptian

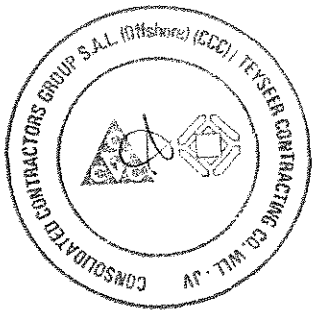
Qualifications: for details, please refer to the CV under Attachment 1.

Please find enclosed under Attachment 1 the CVs of CONTRACTOR's Key Personnel.

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) / TEYSEER CONTRACTING CO. W.L.L. - JV

APPENDIX E – ANNEXURE 1

ATTACHMENT 1 - CVs OF CONTRACTOR's KEY PERSONNEL



LIST OF KEY PERSONNEL

Please find below the List of Key Personnel:

#	Position	Proposed Candidate
1	Contractor's Representative – Project Manager	Ihab Sharif
2	Contractor's Project Engineer - Civil	Wael Munzer
3	Contractor's Project Engineer - Mechanical	Ayman Naser
4	Contractor's Project Engineer - Electrical	Rabi' Sa'd
5	Contractor's Project Engineer - ICA	Subin Jose
6	Contractor's Site Engineer(s)	Wissam Salman
7	Contractor's Safety Engineer	Fadi Watfa
8	Contractor's QA/QC Engineer	Nabil Shabasy
9	Contractor's Cost and Planning Engineering	Ahmed Sedky

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCCI) / TEYSEER CONTRACTING CO. W.L.L. - JV

CONTRACTOR'S REPRESENTATIVE – PROJECT MANAGER

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

CURRICULUM VITAE

NAME:	IHAB Z. SHARIF	STAFF NO. 123442
NATIONALITY:	JORDANIAN	
DATE OF BIRTH:	1959	
MARITAL STATUS:	MARRIED	
LANGUAGES:	ARABIC & ENGLISH	

QUALIFICATIONS

- B.Sc. In Civil Engineering, 1984, Nebraska State University, Omaha, Nebraska, USA.

MEMBERSHIP IN PROFESSIONAL ASSOCIATIONS

- Member, Jordanian Association of Civil Engineers, Jordanian.
- Member, American Society of Civil Engineers, U.S.A.

COURSES & SEMINARS

- Construction Management, March 2007, UT, UAE.
- Empowerment, March 2002, CCC, Qatar.
- Delegation, March 2002, CCC, Qatar.
- Motivation, October 2001, CCC, UAE.
- Communication, October 2001, CCC, UAE.
- Leadership & Management Traits, Competencies & Processes, May 2001, CCC, UAE.
- Safety Leadership, February 1998, CCC, Jordan.

CCC GROUP EXPERIENCE

State of Qatar

October 2011 – To date

Project	**MPAC** - Epic for Multipurpose Administration Complex at Ras Laffan - Phase 1 Scope: Engineering, Procurement, Installation, Testing and commissioning of Phase 1 of the Multi-purpose Administration Complex at Ras Laffan which comprises of: Buildings total Area 34,820 M2, consisting of Office and Canteen Building (over eleven floors), Medical Centre, Helicopter Landing Pad and Helipad Pump House, Central Plant and 33kV Substation with all adjoining external works and services. Client: Qatar Petroleum Contract Value: US$ 208,079,392
Title	Project Manager – Civil Construction
Duties	Manage, direct and coordinates all project activity with responsibility for delivering the project to the client in compliance with all contractual

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. WLL - JV

IHAB Z. SHARIF (...continued)

requirements, ensuring that resource usage is optimized to achieve, or exceed projected profit margins.
Review contract/tendering documentation, to ensure a thorough understanding of the contract requirements, participating and/or directing the preliminary planning and budgeting stages as necessary.
Coordinate the activities of the mobilization team to ensure that all necessary activities are reviewed with actions properly assigned, timescales agreed and relevant parties properly briefed with new communication channels established where necessary.
Establish along with relevant managers, the resourcing requirements for relevant parts of the project, including staffing, PMV etc. To ensure that these are accurate and realistic and that any necessary steps needed to supply resource have been arranged with reference to the critical path.
Direct the coordination team to assess and influence content of client /partner construction drawings and procedures, prior to issue, in order that construction execution is optimized in the most cost effective and timely manner.
Coordinate in conjunction with relevant managers, the development and establishment of the construction schedule together with the mechanisms for monitoring subsequent progress against that schedule. Ensure that corrective action is agreed and implemented at the appropriate level where variations from plans occur.
Liaise with relevant managers to ensure that the project monitoring system is implemented properly and that output on financial performance is reviewed at the appropriate level and frequency to ensure effective control of the project finances.
Provide adequate resource and expertise on site to ensure the effective supervision, monitoring and control of the work being undertaken to ensure full compliance with all relevant standards e.g. contract documents, specifications, method statements, CCC policy and procedures
Resolve any contractual/legal matters or complications and ensure that appropriate action is taken which does not compromise or expose CCC to unnecessary risk.

October 2008 – October 2011

Project

RLP - Ras Laffan Port Expansion Project
Scope: Engineering, Procurement, Installation and Commissioning of berths and port infrastructure. Scope includes construction of block work quay walls for liquid products, container terminal, tugs &

IHAB Z. SHARIF (...continued)

navy berths as well as infrastructure for the newly dredged and reclaimed prot. The infrastructure works ˜includes road works, networks, buildings, telecommunication and security systems.
Client: Qatar Petroleum
Contract Value: US$ 1,800,832,581

Title — Project Manager – Civil, Construction (**As of January 2011**)
Construction Manager – Civil

Duties — Participated with the Project Manager and his staff in the finalization of the Methods Statement and with the Head of Project Budgets during subsequent elaboration and development of work breakdown structure into tasks, sub-tasks, and work packages. Investigated the availability of needed materials and plant for the project, and initiated the purchase of critical materials expeditiously as deemed necessary. Assisted in determining the organization, manning, and the equipment of the project. Participated in discussions leading to the preparation and approval of the Project Budget, and ensured that the allocated budget matched the project organization and that it provided a suitable basis for monitoring the operations of the project.

December 2005 – October 2008

Project — **QGX II** - QGX II LNG Onshore Facilities
Construction of new large LNG facilities (train-4 & train-5) located adjacent to the existing three LNG trains at Qatar gas plant site in Ras Laffan industrial city. The annual capacity of each train is expected to be 7.8 MTA fob Ras Laffan. CCC scope of work consists of all construction activities (temporary facilities, civil, buildings on EPC basis, piping, equipment installation, steel work, painting, insulation, fireproofing, electrical and instrumentation), pre-commissioning and commissioning assistance for this project.
Client: Chiyoda/Technip JV
Contract Value: US$ 605,000,000

Title — Construction Manager - Civil

Duties — Same as above

October 2003 – December 2005

Project — **KSH** - Khalifa Sports Hall
The Works comprise of the Construction, Commissioning & Maintenance of a Sports Hall & associated Sports & Leisure Facility Areas NW of the

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

IHAB Z. SHARIF (...continued)

Existing Khalifa Stadium within the proposed Khalifa Sports City.
The Sports Hall is a multi-disciplinary fully covered Facility that encompasses an Athletic Track, Football Field, Swimming & Diving Pools & a number of other small Arenas for Minority Sports, In Addition to Spectator Facilities, Changing Rooms, Parking & General Circulation Areas. The Sports Hall Comprises: Basement, Ground, First, Second, Third Floors in an approximate overall area of 112,000 M2. The Dome covering the Sports Hall, comprises 2 No Segments, each with an approximate surface area of 27,000 M2, with an additional Flat Roof of Approximately 7,000 M2 connecting both Segments of the Dome.
Client: Khalifa Sports City Development Committee under Auspices of: Doha Asian Games Organizing Committee
Contract Value: US$ 149,096,008

Title: Project Engineer

Duties: In charge of the construction works on a sizable section of the project. Supervised the work of subordinate Section/Site Engineers, General Foremen, and Foremen. Deployed manpower, equipment, and materials resources within his scope of work to best meet schedules and budgets within the terms and specifications of the contract. Ensured that all variances and additional works were properly documented for subsequent charge to Client. Coordinated all aspects of Quality Control matters, including material sourcing for earthworks, concrete and asphalt, soils compacting and testing, asphalt and concrete mix design and control of its quality.

January 2002 - July 2003

Project: **CCWP** - Ras Laffan Common Cooling Water Project
Engineering, procurement, construction, commissioning & start up of a Common Cooling Seawater System with a capacity of 296,000 m³/hr.
Scope include the following:

- Seawater intake.
- Seawater pumphouse & pumps.
- Distribution & collection piping system.
- Discharge system.
- Auxiliary facilities.

Client: Qatar Petroleum
Contract Value: US$ 343 Million.

Title: Project Engineer

Duties: Same as above

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCCI) / TEYSEER CONTRACTING CO. WLL - JV

IHAB Z. SHARIF (...continued)

Greece

August 2001 - December 2001

Location	Managing Office, Athens
Title	Project Engineer
Duties	On special assignment

Palestine

August 1999 - August 2001

Project	Conference Hall Center – Bethlehem Civil works, electromechanical works, telecommunication systems, high quality finishing works, stone cladding and landscaping Client: Solomon Pools Convention Palace Co. Contract Value: US$ 14,000,000
Title	Project Engineer (**As of July 2000**) Section Engineer
Duties	Principal responsibilities include, but were not limited to, directing and controlling the activities of engineers and other staff who were actively involved in the engineering, planning and the mobilization of all manpower, plant and materials as needed to execute the works on schedule and as required by the client. Studied all construction drawings and specifications, and discussed with his Project Engineer the assigned scope of works, particularly identifying contractual details which required particular preparation on his part. Planned the intended work schedule for camp accommodation units and facilities as directed by the project mobilization team. Prepared layouts for sewage, drainage, water and electricity supply networks, etc. Prepared weekly and bi-weekly programs of daily activities showing detailed manpower and equipment allocation, and discussed with the project planning team construction priorities and established his own program accordingly.

Jordan

July 1995 - August 1999

Project	**APS** - Aqaba Thermal Power Station Units 3 & 4 Stage 2 Construction of the Turbine House extension, 2 additional boiler foundations, a cooling water intake and discharge system, 3 fuel tank foundations, a slip

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IHAB Z. SHARIF (...continued)

formed concrete chimney 125 meters high, auxiliary building and site works.
Client: Jordan Electricity Authority.
Contract Value: US$ 35 Millions.

Title: Section Engineer

Duties: Same as above

NON-CCC EXPERIENCE

Jordan

May 1994 - June 1995

Employer: Bouygues International

Project: Revamping of The Sulfuric Acid Plant Project and related Facilities at JPMC's Fertilizer complex
J.V. Partner: SOFRESID
Contract Value: US$ 15 Million

Title: Section Engineer

Duties: Preparation of tender document for civil and steel structure contracts, planning, coast analysis.
Supervising the civil works and steel structure.
Supervising the insulation of mist eliminators and catalyst.
Follow up of the Preliminary Punch list.

August 1993 - May 1994

Employer: Bouygues International

Project: Rehabilitation of the Phosphoric Acid Plant at JPMC's Fertilizer Complex.
J.V. Partner: COPPEE LAVALIN
Contract Value: J.D. 45 Million

Title: Site Engineer

Duties: Execution Civil work modification of existing structures during the Shut Down of Plant.
Execution of steel structure, handrails and Industrial Paint.
Support to the commissioning team and maintenance after commissioning.

January 1993 - July 1993

Employer: MID Contracting Company (MID)

Project: Rehabilitation of the Phosphoric Acid Plant

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC)

IHAB Z. SHARIF (...continued)

	Main Contractor: Bouygues Coppee Lavalin Consultant: Davy Mckee
Title	Construction Manager
Duties	In-charge of site Management for the Civil Work for the a/mentioned project.

May 1992 - December 1992

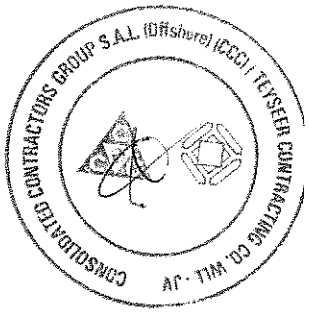
Employer	MID Contracting Company (MID)
Project	New Karak Hospital In Karak Contract Value: J.D. 1.5 Million
Title	Project Manager
Duties	In-charge of the construction of the Infrastructure for the a/mentioned project.

April 1991 - April 1992

Employer	Mobarak Contracting Company
Project	Syrian-Jordan Border Contract Value: J.D. 8 Million
Title	Section Engineer
Duties	In-charge of the mobilization for the a/mentioned project and in charge of the Passenger and Housing sections.

April 1990 - April 1991

Employer	Lebanese Construction Company (SOLICO)
Project	Faculty of Medical Science at the Jordan University of Science & Technology Contract Value: J.D. 55 Million
Title	Site Engineer
Duties	Supervision of Construction Planter Walls, Fountains, Bed Slabs, Installation of Pre-cast Manholes, in addition to being heavily involved in external works duties were also, designing of irregular shaped molds (Shutter & steel) and coordination with Mechanical & Electrical Subcontractors.



IHAB Z. SHARIF (...continued)

July 1989 - October 1990

Employer	Allied Planning & Engineering Corporation
Project	Faculty of Medical Science at the Jordan University of Science & Technology Contract Value: J.D. 55 Million
Title	Site Planning Engineer
Duties	Site Supervision Monitoring and following up progress of work. Resources and Time Control Analysis. Production of weekly and monthly reports and schedules. Extensive PC usage. Familiar with PMS Qiknet, Lotus 1-2-3, excel, as well as word processing software.

April 1988 - July 1989

Employer	Soboh Engineering Office
Project	Jordan Cooperative Organization Building Contract Value: J.D. 800,000.
Title	Structural Design Engineer
Duties	Scope of work included the design and supervising of actual construction of Multistory Commercial Buildings and Condominiums. Preparation of Tender documents. Extensive PC utilization. Worked with ACAD, STRAD III, Beams, Columns, & Foundation design software.

January 1986 - March 1988

Employer	Omar Hamdan Engineering Office
Project	Multistory Buildings & Villas
Title	Structural Design Engineer
Duties	Scope of work included the design of the a/mentioned projects.

December 1985 - December 1987

Employer	Royal Engineering Force
Project	Engineering Equipment Hangers and Accommodation Quarters at the Zerka Camp Contract Value: US$ 1.5 Million.

CONSOLIDATED CONTRACTORS GROUP S.A. (Offshore) (CCO) / TEYSEER CONTRACTING CO. W.L.L. - JV

IHAB Z. SHARIF (...continued)

Title	Site Engineer
Duties	Solely designed, helped plan and supervised the construction of the a/mentioned project.

State of Kuwait

February 1985 - August 1985

Employer	Arab Country Contracting Company
Project	Commercial Building of Al Sultan Center Contract Value: US$ 2 Million.
Title	Site Engineer
Duties	Supervised the construction of the a/mentioned project.

United States of America

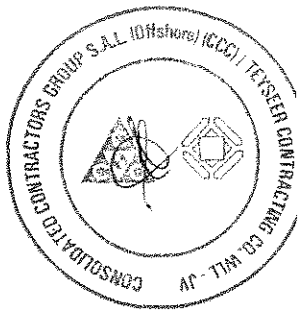
April 1984 - September 1984

Employer	Omaha Traffic Department
Title	Intern
Duties	Was involved in developing a computer program for timing traffic signals inside the city as well as calculating volume of cars and highway designs.

July 2014

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L.

CONTRACTOR'S PROJECT ENGINEER
CIVIL



CURRICULUM VITAE

NAME: WAEL A. MUNZER STAFF NO.111445

NATIONALITY: LEBANESE

DATE OF BIRTH: 1964

MARITAL STATUS: MARRIED

LANGUAGES: ARABIC, ENGLISH & FRENCH

QUALIFICATIONS

- B.E. In Civil Engineering, 1988, American University of Beirut, Lebanon.

COURSES / SEMINARS

- Certificate of Completion, CCC JV Quality System and Site Procedure, February 1995, Lebanon
- Certificate of Completion, CCC, Safety Leadership, February 1998, Lebanon
- Certificate of Completion, CCC, Cost Control Awareness, June 2006, Qatar.
- Certificate of Completion, CCC, Negotiation, March 2008, Qatar.
- Certificate of Completion, CCC, Induction to QC for Newcomers, February 2009, Qatar.
- ICOMAS Project Management Seminar, ICOMAS, June 2011, Qatar.
- Certificate of Completion, CCC, Contracts Change Management & Impact, November 2012, Lebanon.
- Certificate of Completion, CCC, Risk Management, November 2012, Qatar.
- HAY Group Leadership Workshop, HAY, June 2013, UAE.

CCC GROUP EXPERIENCE

State of Qatar

September 2011 – To date

Project: **MPAC** - Epic for Multipurpose Administration Complex at Ras Laffan - Phase 1
Scope: Engineering, Procurement, Installation, Testing and commissioning of Phase 1 of the Multi-purpose Administration Complex at Ras Laffan which comprises of:
Buildings total Area 34,820 M2, consisting of Office and Canteen Building (over eleven floors), Medical Centre, Helicopter Landing Pad and Helipad Pump House, Central Plant and 33kV Substation with all adjoining external works and services.
Client: Qatar Petroleum
Contract Value: US$ 208,079,392

Title: Construction Manager – Civil ***(As of January 2012)***
Project Engineer – Civil

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. JV

WAEL A. MUNZER (continued)

Duties

Manage, direct and coordinates allocated site activity with responsibility for execution in compliance with all contractual requirements, ensuring that resource usage is optimized to achieve, or exceed projected profit margins.

Review contract/tendering documentation, to ensure a thorough understanding of the contract requirements, participating in the preliminary planning and budgeting stages as necessary.

Coordinate/support the activities of the mobilization team to ensure that all necessary activities are reviewed with actions properly assigned, timescales agreed and relevant parties properly briefed with new communication channels established where necessary. Coordinate effective links with moa as required

Establish along with relevant site staff, the resourcing requirements for relevant parts of the site, including staffing, PMV etc. To ensure that these are accurate and realistic and that any necessary steps needed to supply resource have been arranged with reference to the critical path.

Participate in the review of the content of client /partner construction drawings and procedures, prior to issue, in order that construction execution is optimized in the most cost effective and timely manner.

Participate with relevant site staff, in the development and establishment of the construction schedule together with the mechanisms for monitoring subsequent progress against that schedule. Ensure that corrective action is agreed and implemented at the appropriate level where variations from plans occur.

Liaise with relevant staff to ensure that the output on financial performance is reviewed at the appropriate level and frequency to ensure effective control of the project finances.

Provide adequate resource and expertise on site to ensure the effective supervision, monitoring and control of the work being undertaken to ensure full compliance with all relevant standards e.g. contract documents, specifications, method statements, CCC policy and procedures

Seek relevant technical advice and guidance in the event of any contractual/legal matters or complications to ensure that appropriate action is taken which does not compromise or expose ccc to unnecessary risk.

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC)

WAEL A. MUNZER (continued)

January 2009 – September 2011

Project	**RLP** - Ras Laffan Port Expansion Project Scope: Engineering, Procurement, Installation and Commissioning of berths and port infrastructure. Scope includes construction of block work quay walls for liquid products, container terminal, tugs & navy berths as well as infrastructure for the newly dredged and reclaimed prot. The infrastructure works includes road works, networks, buildings, telecommunication and security systems. Client: Qatar Petroleum Contract Value: US$ 1,800,832,581
Title	Project Engineer – Civil
Duties	Controlling and coordinating the execution of the work packages which included excavation, back filling, foundation of concrete structure, roads, building, and masonry works, using a large construction crew of craftsmen of various trades and laborers, etc. headed by one foreman. Exercising professional and technical competence to avoid delays in the execution of construction work under his control. Organizing and allocating workforce and equipment under my control as necessary according to established work priorities. Involved in design mixes (concrete and bituminous). Supervising the conduct of prescribed testing to ensure that required strengths and densities conformed to contract specifications.

February 2006 – January 2009

Project	**RGX** - Rasgas Onshore Expansion - Trains 6&7 Scope: The objective is to develop an integrated project to produce, export, and market LNG derived from the Qatar North Field. The RGX 2 project includes staged construction of 2 LNG production trains (6&7). The expansion is planned to meet market demand, with train 7 expected to be required about one year after train 6. The work include general civil, steel erection, equipment, piping, electrical, instrumentation painting, insulation and fireproofing for the process area, heavy lift equipment, EPC buildings, and cooling water lines for all areas. Client: Chiyoda Technip Joint Venture Contract Value: US$ 450,000,000
Title	Project Engineer – Civil (**As of July 2006**) Section Engineer – Civil
Duties	Same as above.

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

WAEL A. MUNZER (continued)

November 2002 – January 2006

Project	**RLX** - Ras Laffan LNG Onshore Expansion The scope involves the construction of the Third Gas Liquefaction Train, which includes Condensate LNG & Sulphur Facilities, with their related Utilities, Offsites & Off-plot works as well as EPC Buildings & EPC Seawater Intake. Client: Ras Laffan LNG Company LTD. Contract Value: US$ 120 Million.
Title	Section Engineer – Civil
Duties	Controlling and co-ordinating the execution of the work packages which included excavation, back filling, foundation of concrete structure, roads, building, and masonry works, using a large construction crew of craftsmen of various trades and laborers, etc. headed by one foreman. Exercising professional and technical competence to avoid delays in the execution of construction work under his control. Organizing and allocating workforce and equipment under my control as necessary according to established work priorities. Involved in design mixes (concrete and bituminous). Supervising the conduct of prescribed testing to ensure that required strengths and densities conformed to contract specifications

Lebanon

December 1994 - July 2000

Project	**BIA** - Beirut International Airport Project A Joint Venture Project with JV Partner Hochtief Akitengesellsschaft of Essen, Germany Works includes the construction of a new 3,400 m-runway of which 1,900-m project into the sea. New terminal buildings of 170,000 m2 covered area, which incorporated the aircraft docking structures. Rehabilitation of five existing building, a new control tower, 16 km of new taxiways, an underpass and extensive runway lighting. All buildings include full state-of-the-art electro-mechanical systems. Client: The Council of Development and construction. Contract Value: US $ 398 Millions.
Title	Site Engineer (**As of January 1996**) Civil Engineer (Construction). In charge of the following Constructions works: ▪ Mobilization and Site Installations. ▪ Factory Production:

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore)

WAEL A. MUNZER (continued)

- Concrete batching plants: Production and delivery of 1200 Cu Meters/day (at peak).
- Bar Bending Yard: Cutting and bending of 95 tons of reinforcement/day (at peak).
- Carpentry Shop: Fabrication and assembly of 180 Sq. meters of shutter/day (at peak).

- General Earthworks:
  - Bulk and structural out and fill operations: 300,000 Cu meters in total.
  - Structural fill for runway and taxiways: 250, 000 Cu meters in total
- Road Works including road finishes and landscaping:
  - 12,000 Meters of multi-lane, dual carriageway highways.
  - 8,000 Meters of single carriageway roads.
  - A total of 85,000 tons of bituminous base course and wearing course, and 55,000 Cu meters of crushed aggregate base course.
- Structural Concrete Works:
  - 18,000 Cu meters of reinforced concrete structures: Retaining walls, abutments, piers, decks culverts and boundary walls.
- Building Works:
  - Electrical Substations (2 No.).
  - Guardhouses and checkpoints (4 No.).
- Utilities and Services:
  - 20,000 meters of gravity and pressurized piping networks: GRP, UPVC, DI Pipes for water supply, sewerage, storm water drainage, irrigation and fire fighting. Pipes up to 1,500 mm in diameter.
- Pre-cast Erection:
  - 128 Pre-cast, pre-stressed concrete beams for bridges: span up to 20 Meters.
  - 3,000 sq meters of architectural pre-cast panels for terminal building.
- Transport and Rigging:
  - Transport of materials and equipments including rigging operations.

Duties

Tasks included:

- Day-to day running and supervision of above listed construction works.
- Preparation of work programs and schedules including the arrangement of the required logistics; personnel, materials, equipments, technical support, etc.
- Organization and mobilization of work crews.
- Implementation of design drawings and reporting to the Design Engineer any conflicts.

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) / TEYSEER CONTRACTING CO. W.L.L. - JV

WAEL A. MUNZER (continued)

with site conditions that could not be solved on site.
- Cost and productivity control.
- Quality control.
- Contract management in coordination with the Contract Engineer.
- Anticipation of future problems that might affect the progress and/or cost of works. Suggestion of solutions.
- Handing-over of finished works to the Consultant.
- Coordination with the Consultant regarding the inspection of on going works.
- Supervision of Sub-Contractors.
- Follow up material orders with the Material Engineer.
- Follow up the repair of broken down equipments with the Plant Engineer.
- Coordination with other Site Engineers in order to optimize the use of resources.
- Implementation of standard safety measures.
- Ensuring that all works were carried out in compliance with prevailing laws and regulations, and with minimum adverse effect on the environment.

NON-CCC EXPERIENCE

Australia

May 2001 - July 2002

Employer: Roads and Traffic Authority – N.S.W.
Sydney Road Services - Civil Works Section

Projects:
- Upgrading of Intersections.
- Construction of additional lanes on existing roads both in flexible and rigid pavement.
- Concrete slabs replacement.
- Major asphalt works: Heavy patching plus mill and pave Jobs. Quantities up to 10,000 tons of asphalt per job.
- Construction of turning bays, medians, traffic islands and different types of kerb.
- Road marking and sign posting.
- Landscaping works.

Title: Project Engineer

Duties: Tasks included:
- Managing assigned resources (both internal and external) and projects including planning,

WAEL A. MUNZER (continued)

obtaining and allocating resources, monitoring and reviewing performance to ensure client needs are satisfied and business objectives are met.

- Liaising with public utilities and other external organizations to ensure that the works are delivered efficiently and to client requirements.
- Providing technical input into and overall responsibility for quality plans, traffic control plans, contract documents and estimates in relation to individual projects.
- Managing risk in relation to occupational health and safety, industrial and environmental issues.
- Financial management of works including progress claims, variations and accruals.

Lebanon

October 1991 - November 1994

Employer: Oger - Liban.

Projects:

- City Theater Rehabilitation Project: Building finishing works.
- Hariri Cultural Center Project: Excavation, piling and concrete works.
- CDR Headquarters Renovation Project: Building finishing works and landscaping works.
- Rehabilitation of Beirut Infrastructures Project: Infrastructures works.

Title: Resident Site Engineer

Duties: Responsibilities included:

- Supervision of Contractors works including planning, progress of works, quality control and quantity surveying.
- Coordination among Subcontractors of different trades for the execution of their works.
- Preparation of payment certificates and issuing variation orders.
- Revision of construction/workshop drawings of different disciplines to ensure compatibility (Architectural, Civil, Electrical and Mechanical), and reporting back any discrepancies.

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCCG) / TEYSEER CONTRACTING CO. W.L.L.

WAEL A. MUNZER (continued)

November 1989 - October 1991

Employer	Private Business.
Title	Contractor of Minor Civil Engineering Works.
Duties	Execution of projects: Civil works, renovations, finishing etc... not exceeding $10,000 in value.

September 1988 - March 1989

Employer	Riad Kawwa Engineering & Contracting Office.
Title	Site Engineer.
Duties	Supervisor over concrete works for residential buildings in Beirut.

July 2014

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) / TEYSEER TRADING CO. WLL - JV

CONTRACTOR'S PROJECT ENGINEER
MECHANICAL

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) / TEYSEER CONTRACTING CO. W.L.L. - JV

CURRICULUM VITAE

NAME:	AYMAN F. A. N. NASER	STAFF NO. 259861
NATIONALITY:	JORDANIAN	
DATE OF BIRTH:	1979	
MARITAL STATUS	MARRIED	
LANGUAGES:	ARABIC & ENGLISH	

QUALIFICATIONS

- B.E. in Mechanical Engineering, 2003, Mutah University, Jordan

OTHER QUALIFICATIONS

Courses taken:
- Value Engineering course, 2012, Project Management Institute, State of Qatar
- Green Buildings-Sustainability-LEED course, 2011, CCC, State of Qatar
- Contractual Obligations & Rights, 2010, CCC, State of Qatar
- Quality Management seminar, 2009, Project Management Institute, State of Qatar
- Planning and Scheduling seminar, 2008, Project Management Institute, State of Qatar
- Communication seminar, 2007, CCC, State of Qatar

Computer skills:
- C++ programming language
- Computer Application in HVAC
- AutoCAD 2000

CCC GROUP EXPERIENCE

State of Qatar

July 2011 – To date

Project: **MPAC** - Epic for Multipurpose Administration Complex at Ras Laffan - Phase 1
Scope: Engineering, Procurement, Installation, Testing and commissioning of Phase 1 of the Multi-purpose Administration Complex at Ras Laffan which comprises of:
- Buildings total Area 34,820 M2, consisting of Office and Canteen Building (over eleven floors)
- Medical Centre, Helicopter Landing Pad and Helipad Pump House
- Central Plant and 33kV Substation with all adjoining external works and services.

Client: Qatar Petroleum
Contract Value: US$ 208,079,392

Title: Section Engineer (Mechanical)

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

AYMAN F. A. N. NASER (...continued)

Duties

Review contract/tendering documentation, to ensure a thorough understanding of the relevant contract requirements liaising with planning and budgeting engineers as necessary to establish and implement systems for the section.

Assess and influence content of client /partner construction drawings and procedures, prior to issue, in order that construction execution is optimized in the most cost effective and timely manner.

Ensure that all actions and activities assigned to the section at the mobilization stage are implemented within agreed timescales.

Establish together with relevant managers and engineers, the resourcing requirements for the section, including staffing, PMV etc. To ensure that these are accurate and realistic.

Plan/schedule section priorities and resources in line with the construction schedule monitoring subsequent progress, ensuring that corrective action is agreed and implemented where variation from schedule occurs.

Seek technical advice and guidance in the event of any contractual/legal matters or complications relevant to the section to ensure that appropriate action is taken which does not compromise or expose CCC to unnecessary risk.

Monitor the supervision of the work being undertaken within own section or area (undertaking own checks where necessary) taking any necessary remedial action to ensure full compliance with all relevant standards e.g. contract documents, specifications, method statements, CCC policy and procedures.

Establish and subsequently monitor all work processes and systems within own section/area to ensure that CCC policy and procedures i.e. ISO 9000, local labour laws and safety procedures are consistently implemented taking effective remedial action where non-compliance is identified.

Ensures that standard reporting requirements are met on a timely and accurate basis in order that the that project management has the necessary up to date information and data to effectively manage the project to meet its objectives, providing any required reporting to moa.

Maintain under regular review, the demobilization plans of the workforce and plant as the project progresses in order to facilitate the relocation of the workforce and the utilization of plant elsewhere.

Plan and arrange for the disposal of plant, equipment, materials, buildings and other assets during demobilization. Ensuring that all punch-list items are resolved, client hand over is satisfactorily concluded and that there is no prolongation of project.

Contribute to a formal review of the project with relevant parties on completion, to establish opportunities for learning/development to enhance future CCC contracts.

CONSOLIDATED CONTRACTORS GROUP (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. JV

AYMAN F. A. N. NASER (...continued)

Represent CCC's interests with suppliers, partners and third party contractors etc., negotiating terms and conditions as directed, ensuring that CCC's interests are both optimized and protected.

July 2009 – July 2011

Project

RLP - Ras Laffan Port Expansion Project
Scope: Engineering, Procurement, Installation and Commissioning of berths and port infrastructure. Scope includes construction of block work quay walls for liquid products, container terminal, tugs & navy berths as well as infrastructure for the newly dredged and reclaimed prot. The infrastructure works includes road works, networks, buildings, telecommunication and security systems.
Client: Qatar Petroleum
Contract Value: US$ 1,800,832,581

Title

Section Engineer (Mechanical) (**As of July 2010**)
Site Engineer (Mechanical)

Duties

Responsible for the construction of all wet and dry gas pipe lines inclusive of all welding ,joint coating ,lowering-in, crossing, tie-ins, cleaning gauging, hydro testing, and pre-commissioning. Assisted in commissioning activities. Follow up of Engineering aspects of the Project, arranging material take offs, handled technical queries, and prepared Marked up drawings.

February 2006 – July 2009

Project

RGX - Rasgas Onshore Expansion - Trains 6&7
Scope: The objective is to develop an integrated project to produce, export, and market LNG derived from the Qatar North Field. The RGX 2 project includes staged construction of 2 LNG production trains (6&7). The expansion is planned to meet market demand, with train 7 expected to be required about one year after train 6. The work include general civil, steel erection, equipment, piping, electrical, instrumentation painting, insulation and fireproofing for the process area, heavy lift equipment, EPC buildings, and cooling water lines for all areas.
Client: Chiyoda Technip Joint Venture
Contract Value: US$ 450,000,000

Title

Site Engineer (Mechanical) (**As of July 2007**)
Jr. Engineer (Mechanical)

Duties

Reporting to the Project Engineer Mechanical. Involved in welding and fabrication of pipes and structural steels using weld history record in accordance with applicable codes, procedures, and specifications. Ascertaining

AYMAN F. A. N. NASER (...continued)

that all stages of fabrication, insulation and testing are properly executed.

NON - CCC GROUP EXPERIENCE

Jordan

January 2004 – January 2006

Employer: Dynagraph for Printing Industry SAL

Title: Mechanical Service Engineer

Duties: Act the field of mechanical services for press after press equipment with the aim of carrying out the installation, general repair and overhaul of all equipment sold by Dynagraph.
Maintains the correct and accurate handling of service reports and visit sheets that reflect daily work activities.
Maintains all tools and other used in the function as an engineer.
Develops and maintains a good relationship with customers.
Submits an exact report about the spare parts required for offer or order to the technical supervisor.
Working towards the continuous improvement of quality in every functional area.
Multiplying the employment potential.
Keeps an open hotline in accordance with the company's regulations.
Maintains the machine utilization up to 90%-95% by implementing the machine maintenance schedules.
Follows up regarding customers' satisfaction in order to improve the production and as well as sales targets.
Insures the maintenance of equipment during the warranty period.

January 2003 – January 2004

Employer: Rainbow Co.

Title: Mechanical Design Engineer (Training)

Duties: Plumbing design for the main projects training by new software.
Heating and cooling load calculation, designing for Mecca Mall using new software.
Firefighting system design and calculation.
Supervising on the site for mechanical works.

CONTRACTOR'S PROJECT ENGINEER
ELECTRICAL

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

CURRICULUM VITAE

NAME:	RABI' A. I. SA'D	STAFF NO. 249426
NATIONALITY:	LEBANESE	
DATE OF BIRTH:	1969	
MARITAL STATUS:	MARRIED	
LANGUAGES:	ENGLISH, ARABIC & RUSSIAN	

QUALIFICATIONS

- M.Sc.in Communication & Radio Engineering, 1994, St. Petersburg University, Russia.

CCC GROUP EXPERIENCE

State of Qatar

February 2009 – To date

Project	**RLP** - Ras Laffan Port Expansion Project Scope: Engineering, Procurement, Installation and Commissioning of berths and port infrastructure. Scope includes construction of block work quay walls for liquid products, container terminal, tugs & navy berths as well as infrastructure for the newly dredged and reclaimed prot. The infrastructure works includes road works, networks, buildings, telecommunication and security systems. Client: Qatar Petroleum Contract Value: US$ 1,800,832,581
Title	Project Engineer – E&I
Duties	Directs, supervises and co-ordinates installation of electrical and instrumentation equipment of the project ensuring that work is executed in conformity with approved drawings, specifications, cost and QA/QC procedures as dictated by ISO 9001 requirements

May 2006 – February 2009

Project	**QGX II** - LNG Onshore Facilities Scope of work: Construction of new large LNG facilities (Train-4 & Train-5) located adjacent to the existing three LNG trains at Qatar Gas Plant site in Ras Laffan industrial city. The annual capacity of each train is expected to be 7.8 MTA FOB Ras Laffan. CCC Scope of work consists of all construction activities (Temporary Facilities, Civil, Buildings on EPC basis, Piping, Equipment Installation, Steel Work, Painting, Insulation, Fireproofing, Electrical and Instrumentation)

RABI' A. I. SA'D (...continued)

	Pre-commissioning and commissioning assistance for this project. Client: Chiyoda/Technip JV Contract Value: US$605,000,000
Title	Project Engineer – E&I (**As of January 2009**) Section Engineer – E&I
Duties	Supervised electrical and instrumentation site design coordination, procurement of local materials, construction and pre-commissioning works in accordance with contract and client requirements.

December 2005 – May 2006

Project	**RLX** - Ras Laffan LNG Onshore Expansion Scope: The scope of work involves the construction of the Third Gas Liquefaction Train, which includes Condensate LNG and Sulphur Facilities, with their related Utilities, Offsites and Off-Plot Works as well as EPC Buildings, and EPC Seawater Intake. Client: Ras Laffan LNG Company Ltd. Contract Value: US$199,970,000
Title	Section Engineer – E&I
Duties	Same as above

NON - CCC GROUP EXPERIENCE

Lebanon

June 2000 – December 2005

Employer	Arabian Civil Works Co.
Project	OSP Phase III, IV & Extension
Title	Technical Manager

July 1997 – May 2000

Employer	Arabian Civil Works Co.
Project	Extension for the outside plant (OSP Phase I & II), WLL
Title	Project Engineer
Duties	Supervising all OSP activities on site related to this project & attending PAT (Electrical & Physical) on fiber rings and copper cable.

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. WLL - JV

RABI' A. I. SA'D (...continued)

December 1994 – June 1997

Employer	H/A JV in Conjunction with Ericsson
Project	PSTN, Rehabilitation and Expansion of Telephone Network
Title	Cable Site Engineer
Duties	Monitoring of all cable network installation and controlling activities on site such as cable (copper and fiber) Surveying, Mandrill, Jointing, Termination, pulling, splicing (MTF, Cabinet, DP) installation, electrical testing using OTDR (Optical Time Domain Reflectometer)

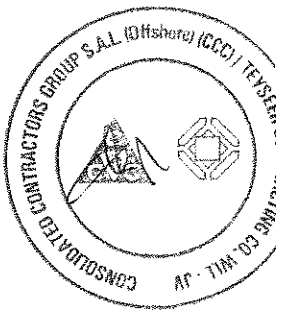
January 1994 – December 1994

Employer	Bouygues Co.
Duties	Rehabilitation and expansion of Lebanese Electrical Posts

July 2014

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. WLL - JV

CONTRACTOR'S PROJECT ENGINEER
ICA



CURRICULUM VITAE

NAME:	SUBIN JOSE	STAFF NO. 421769
NATIONALITY:	INDIAN	
DATE OF BIRTH:	1986	
MARITAL STATUS	MARRIED	
LANGUAGES:	HINDI, MALAYALAM & ENGLISH	

QUALIFICATIONS

- B.E. in Electronics and Communication, 2007, Anna University, Chennai, India

CCC GROUP EXPERIENCE

State of Qatar

September 2012 – To date

Project	**MPAC** - Epic for Multipurpose Administration Complex at Ras Laffan - Phase 1 Scope: Engineering, Procurement, Installation, Testing and commissioning of Phase 1 of the Multi-purpose Administration Complex at Ras Laffan which comprises of: Buildings total Area 34,820 M2, consisting of Office and Canteen Building (over eleven floors), Medical Centre, Helicopter Landing Pad and Helipad Pump House, Central Plant and 33kV Substation with all adjoining external works and services. Client: Qatar Petroleum Contract Value: US$ 208079392
Title	Site Engineer – Instrumentation
Duties	Ensure that any actions and activities assigned at the mobilization stage are implemented within agreed timescales. Plan/schedule own work priorities and activities in line with the section plans and construction schedule referring unresolved conflicts to section engineer. Monitor the supervision of the work being undertaken by subordinates engineers and site production supervisors, taking any necessary remedial action to ensure full compliance with all relevant standards e.g. contract documents, specifications, method statements, CCC policy and procedures. Ensure that own work practices and those of colleagues, are compliant with CCC policy and procedures i.e. ISO 9000, local labour laws and safety procedures taking appropriate corrective action and/or reporting where non-compliance is identified.

SUBIN JOSE (...continued)

Monitor/input into data collection systems, providing standard reports as necessary to ensure that superior has the necessary up to date information and data to effectively manage the project to meet its objectives.
During demobilization, where directed, plan and arrange for the disposal of plant, equipment, materials, buildings and other assets.
Contribute to a formal review of the project with relevant parties on completion, to establish opportunities for learning/development to enhance future CCC contracts.
Represent CCC's interests with suppliers, partners and third party contractors etc., at the appropriate level as directed or authorized, ensuring that CCC's interests are both optimized and protected.

February 2010 – September 2012

Project

RLP – Ras Laffan Port Expansion Project
Scope: Engineering, Procurement, Installation and Commissioning of berths and port infrastructure. Scope includes construction of block work quay walls for liquid products, container terminal, tugs & navy berths as well as infrastructure for the newly dredged and reclaimed port.The infrastructure works includes road works, networks, buildings, telecommunication and security systems.
Client: Qatar Petroleum
Contract Value: US$ 1,800,832,581

Title

Site Engineer – Instrumentation *(**As of July 2011**)*
Jr. Engineer - Instrumentation

Duties

Assisted in setting up the Instrument Progress Monitoring System.
Reviewed Loop checking procedures as well as tailored them to suit project requirements.
Carry out Instrumentation construction works at site, review engineering drawings with engineering partner, prepare proposals for resolving the construction problems at site and provide "As Built" drawings to reflect the changes.
Follow up on material and engineering issues with engineering partners.
Develop the practical skills and hone the technicall knowledge of those who are under my responsibility at site.
Enforce strict safety regulations on my team to minimize chances for incidents occurring as well as giving Toolbox Meetings on how to use tools in a safe and effective manner.
Coordinate and Work with other Disciplines such as Civil, Mechanical, Piping and Painting to have a smooth running site.

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

SUBIN JOSE (...continued)

May 2008 – February 2010

Project	**RGX** - Rasgas Onshore Expansion - Trains 6&7 Scope: The objective is to develop an integrated project to produce, export, and market LNG derived from the Qatar North Field. The RGX 2 project includes staged construction of 2 LNG production trains (6&7). The expansion is planned to meet market demand, with train 7 expected to be required about one year after train 6. The work include general civil, steel erection, equipment, piping, electrical, instrumentation painting, insulation and fireproofing for the process area, heavy lift equipment, EPC buildings, and cooling water lines for all areas. Client: Chiyoda Technip Joint Venture Contract Value: US$ 450,000,000
Title	Jr. Engineer - Instrumentation
Duties	Same as above

NON - CCC GROUP EXPERIENCE

India

November 2007 – January 2008

Employer	Subin Jose National Electronics
Title	Software Developer
Duties	Software development checking

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TE

CONTRACTOR'S SITE ENGINEER

CURRICULUM VITAE

NAME:	WISSAM M. SALMAN	STAFF NO. 109901
NATIONALITY:	LEBANESE	
DATE OF BIRTH:	1972	
MARITAL STATUS:	MARRIED	
LANGUAGES:	RUSSIAN, ENGLISH & ARABIC	

QUALIFICATIONS

- M.Sc. Engineering, 2000, Kiev National University of Construction & Engineering – Ukraine.
- B.Sc. Civil Engineering, 2001, Kiev National University of Construction & Engineering – Ukraine.

COURSES & SEMINARS

- Certificate of Completion, CCC, Motivation, January 2008, Qatar.
- Certificate of Completion, CCC, Construction Planning & Scheduling, May 2008, Qatar.
- Certificate of Completion, CCC, PMP Exam Preparation, June 2008, Qatar.
- Certificate of Completion, CCC, Risk Management, October 2008, Qatar.
- Certificate of Completion, CCC, Induction to QC for Newcomers, February 2009, Qatar.
- Certificate of Completion, CCC, Green Buildings-Sustainability-LEED, June 2010, Qatar.
- Certificate of Completion, CCC, Value Engineering, May 2011, Qatar.
- Certificate of Completion, CCC, Authority, Power & Influence, December 2011, Qatar.

CCC GROUP EXPERIENCE

Qatar

September 2011 – To date

Project	**MPAC** - Epic for Multipurpose Administration Complex at Ras Laffan - Phase 1 Scope: Engineering, Procurement, Installation, Testing and commissioning of Phase 1 of the Multi-purpose Administration Complex at Ras Laffan which comprises of: Buildings total Area 34,820 M2, consisting of Office and Canteen Building (over eleven floors), Medical Centre, Helicopter Landing Pad and Helipad Pump House, Central Plant and 33kV Substation with all adjoining external works and services. Client: Qatar Petroleum Contract Value: US$ 208,079,392
Title	Project Engineer – Civil (**As of July 2012**) Section Engineer – Civil

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

WISSAM M. SALMAN (...continued)

Duties

Review contract/tendering documentation, to ensure a thorough understanding of the contract requirements, participating, directing or coordinating the preliminary planning and budgeting stages as necessary.

Review content of client /partner construction drawings and procedures, prior to issue, in order that construction execution is optimized in the most cost effective and timely manner.

Coordinate/support the activities of the mobilization team to ensure that all necessary activities are reviewed with actions properly assigned, timescales agreed and relevant parties properly briefed with new communication channels established where necessary.

Establish along with relevant staff, the resourcing requirements for relevant part of the project, including staffing, pmv etc. To ensure that these are accurate and realistic with reference to the critical path.

Coordinate/support in conjunction with relevant staff, the development and establishment of the construction schedule together with the mechanisms for monitoring subsequent progress against that schedule. Ensure that corrective action is agreed and implemented at the appropriate level where variations from plans occur.

Liaise with relevant staff to ensure that the project monitoring system is implemented properly and that output on financial performance is reviewed at the appropriate level and frequency to ensure effective control of the project finances.

Seek relevant technical advice and guidance in the event of any contractual/legal matters or complications to ensure that appropriate action is taken which does not compromise or expose CCC to unnecessary risk.

Provide adequate resource and expertise on site to ensure the effective supervision, monitoring and control of the work being undertaken to ensure full compliance with all relevant standards e.g. contract documents, specifications, method statements, CCC policy and procedures.

Implement effective monitoring and reporting systems to ensure that CCC policy and procedures i.e. iso 9000, local labour laws and safety procedures are consistently implemented, taking effective remedial action where non-compliance is identified.

Review and assess the integrity, frequency and value of relevant reporting in respective area or discipline, establishing revised systems where necessary to ensure that project management has the necessary up to date information to effectively manage the project to meet its objectives, providing any required reporting to moa.

Maintain under regular review, the demobilization plans of the workforce and plant as the project progresses in order to facilitate the relocation of the workforce and the utilisation of plant.

CONSOLIDATED CONTRACTORS INTERNATIONAL S.A.L. (Offshore) (CCC) / TEXSEER LAND FRACTING CO. W.L.L. - W.

WISSAM M. SALMAN (...continued)

Ensure that all punch-list items are resolved, client hand over is satisfactorily concluded and that there is no prolongation of project.
Participate in a formal review of the project with relevant parties on completion, to establish opportunities for learning/development ensuring these items are communicated to the relevant staff/sections within CCC where they can be actioned.
Represent CCC's interests with suppliers, partners and third party contractors etc., negotiating terms and conditions where necessary, ensuring that CCC's interest are both optimized and protected.
Responsible for the supervision of multi-discipline activities within a specific area of responsibility, typically, process, utilities and off-site, to ensure optimal resource allocation. (section manager only)

February 2009 – September 2011

Project — **RLP** - Ras Laffan Port Expansion Project
Scope: Engineering, Procurement, Installation and Commissioning of berths and port infrastructure. Scope includes construction of block work quay walls for liquid products, container terminal, tugs & navy berths as well as infrastructure for the newly dredged and reclaimed prot. The infrastructure works includes road works, networks, buildings, telecommunication and security systems.
Client: Qatar Petroleum
Contract Value: US$ 1,800,832,581

Title — Section Engineer – Civil

Duties — Plan, organize, direct & control civil construction activities from start to handing over according to schedule, specifications & budget.
Supervise Sub-Contractor's activities, prepare procurement orders.
Monitor progress to meet schedules & milestones approved by Project Manager & Client.
Negotiate contract revisions with Contract Department, make evaluation for the Sub-Contractors. That will be considered for next Projects in the same area,
Attend weekly coordination meetings with the Client, Quality Control & Safety Departments.
Report progress to Project Manager.

August 2006 –February 2009

Project — **RGX** - Rasgas Onshore Expansion - Trains 6&7
Scope: The objective is to develop an integrated project to produce, export, and market LNG derived from the Qatar North Field. The RGX 2 project includes staged construction of 2 LNG production trains (6&7). The expansion is planned to meet market demand.

WISSAM M. SALMAN (...continued)

with train 7 expected to be required about one year after train 6. The work include general civil, steel erection, equipment, piping, electrical, instrumentation painting, insulation and fireproofing for the process area, heavy lift equipment, EPC buildings, and cooling water lines for all areas.
Client: Chiyoda Technip Joint Venture
Contract Value: US$ 450,000,000

Title — Section Engineer – Civil (**As of January 2009**)
Site Engineer – Civil

Duties — Controlled and coordinated the execution of the work packages which included excavation, back filling, foundation of concrete structure, roads, building, and masonry works, using a large construction crew of craftsmen of various trades and laborers, etc. headed by one foreman. Exercised professional and technical competence to avoid delays in the execution of construction work under his control. Organized and allocated workforce and equipment under his control as necessary according to established work priorities. Involved in design mixes (concrete and bituminous). Supervised the conduct of prescribed testing to ensure that required strengths and densities conformed to contract specifications.

August 2002 – August 2006

Project — **RLX** - Ras Laffan Lng Onshore Expansion
Scope: The scope of work involves the construction of the Third Gas Liquefaction Train, which includes Condensate LNG and Sulphur Facilities, with their related Utilities, Offsites and Off-Plot Works as well as EPC Buildings, and EPC Seawater Intake.
Client: Ras Laffan Lng Company Ltd.
Contract Value: US$ 199,970,000

Title — Site Engineer – Civil **(as of July 2006)**
Jr. Engineer – Civil **(as of June 2004)**
Site Supervisor – Civil, Earthworks

Duties — Supervise concrete works for precast yard mainly for sewer manholes and ppc culverts. Supervise of pipe laying of GRE & GRP pipes with backfilling and testing. In addition, steel yard bending and cutting steel.

United Arab Emirates

August 1994 – October 1995

Project — **TCRI** - Dubai Trade Centre Roundabout
Scope: Construction of 3 underpasses, 4 overbridges max. span 25 m and max. load 400 kn/m, all associated road works, lift stations,

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WISSAM M. SALMAN (...continued)

	relocation of water, sewerage, telecoms and electrical services (including 32 kv cables), and other related electrical and street lighting works. Concrete aggregate - 437,395 ton Asphalt - 80,000 tons Wet mix aggregate and sand - 162,159 ton Reinforcing steel - 13,061 tons subbase - 126,026 ton Excavation - 462,000 m3 Client: Dubai Municipality Contract Value: US$ 49,800,000
Title	Chargehand - Earthworks
Duties	Works under the close supervision of the Foreman with whom he was associated. Ensured that his part of the crew were equipped with all necessary tools, equipment, materials and job instructions in order to execute the assigned work.

NON - CCC GROUP EXPERIENCE

1991 - 1992

Employer	ECCO
Title	Foreman
Duties	Responsible was as foreman on the site when opening new ways in desert with chemical subject in Fahound – Oman.

July 2014

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEKSER CONTRACTING CO. W.L.L. JV

CONTRACTOR'S SAFETY ENGINEER

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) / TEYSEER CONTRACTING CO. W.L. - JV

CURRICULUM VITAE

NAME:	FADI M. WATFA	STAFF NO. 54978
NATIONALITY:	PALESTINIAN	
DATE OF BIRTH:	1964	
MARITAL STATUS:	MARRIED	
LANGUAGES:	ARABIC & ENGLISH	

QUALIFICATIONS:

- Diploma in Accountancy & English typing, 1983 - 1984, Berkley School - Lebanon.

COURSES & SEMINARS

- Contractual Obligations & Rights, April 2008, CCC, UAE.
- Negotiation, June 2007, CCC, UAE.
- Incident / Accident Investigation Program, March 2006, Euromatech, UAE.
- Train the Trainers "OSHA 500 Outreach Program for Construction", March 2005, Safety Projects International Inc. & Emirates American Environmental Science Center, Abu Dhabi, UAE.
- Leadership, January 2004, CCC, UAE.
- HSE Leadership Training, July 1999, CCC, UAE.
- Safety Leadership, February 1998, CCC, Lebanon.
- Maintenance of Safety & Fire Equipment, 1986, ADGAS Co. Das Island, Abu Dhabi.
- Maintenance of Safety & Fire Equipment course & usage of breathing apparatus, 1987, ADMA Co. Das Island, Abu Dhabi.
- Incident/Accident Investigation In-House Programme, March 2006, by Euromatech, Dubai - UAE.

CCC GROUP EXPERIENCE

United Arab Emirates

February 2014 – To date

Project

BHOG - Bab Habshan-1 Development (Phasel)(PE101) & Expansion of Bab Gas Compression (Phase II)(PE102)
Scope: Construction & precommissioning of civil, structural, erection, mechanical, pipeline, piping spool, fabrication, electrical, instrumentation & telecom works and EPC of 28 nos. buildings (total area 4,136m2), temporary facilities (excluding catering, laundry services and housekeeping) of:
-PE101: 12 Oil Wells Producers with associated facilities & 12 Water Injection Wells with associated water injection facilities, transfer lines, flow lines, Brown field work in BCDS, RDS9 & RDS10 and EMPD office.
-PE102: Sustaining ADCO's current production of 2.1 BSCFD by drill and tie-in an additional 32 new wells and to increase compression capacity from 1.8 to 2.4

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCCI / TEYSEER CONTRACTING CO. W.L.L.) AT - UAE

FADI M. WATFE (...continued)

BSCF. A new compression station (CS-4) of 600 MMSCFD capacity will be constructed. Upgrade the gas gathering network to cater for 24 new gas wells, including upgrading 3 existing compression stations.
Client: PETROFAC/ADCO
Contract Value: US$ 180000000

Title HSE Manager

Duties Plans, prioritizes, allocates and supervises duties of subordinates involved in HSE&S activities to ensure that CCC standard and project specifics HSE&S management system, international standards, contract and legislative requirements are implemented and met. Ensures compliance & effectiveness.
Keeps abreast of HSE&S international developments, new legislation, standards & instructions within country of operations and assesses the suitability and viability of implementing or incorporating these into current procedures.
Ensures the review of scope of work completed to identify trends & possible exposure to discrepancies. Issues reports on possible trends and discrepancies, and identifies areas of concern. Recommends mitigation measures & corrective actions.
Ensures the preparation of budget for activities under scope of responsibility and implements HSE&S requirements for personnel and equipment mobilization & demobilization to ensure optimum deployment of resources within budget constraints.
Develops, seeks approval for, and imbeds emergency plans, and ensures operational effectiveness through the conducting of drills and compliance checks.
Set, publishes and communicates clear targets, goals & measurable objectives for the HSE&S performance.
Reviews all relevant contract documentation to establish HSE&S requirements and ensure that adequate provision is made to cover them.

February 2011 – February 2014

Project **BEU3** - Borouge EU III Project
Scope: 1,500 KTA Ethylene Unit (EU3) (Steam Cracker) based on ethane feedstock to produce polymer grade ethylene, propylene and hydrogene.
The plant main sections consists of cracking furnaces, hot section, compression drying, cold train and ethylene recovery, C3 processing, and C4 hydrogenation.
Client: Borouge - Abu Dhabi Polymers Company Limited
Contract Value: US$ 1,075,000,000

Title HSE Manager

CONSOLIDATED CONTRACTORS GROUP S.A.L (Offshore) (CCC) / TEYSEER CONTRACTING CO. WLL - JV

FADI M. WATFE (...continued)

Duties Same as above

August 2010 – February 2011 *(ON SECONDMENT)*

Project **HFGR** - Habshan Flare Gas Recovery
Scope: Plant facilities under the Habshan Flare Gas Recovery (HFGR). Project Package No. 5245, to be designed, engineered, constructed, commissioned and tested at the Habshan Plant
Client: Gasco

Title HSE Manager

Duties Same as above

August 2008 – August 2010

Project **BEC2** - Borouge - EPC Works For The Ethylene Cracker 2 (EU 2) Project-UAE
Scope: An Ethylene Plant using 5100T/D (as 100%) ethane feedstock, operating with a 95% nominal service factor and producing 1.44 mm t/yr of ethylene, propylene & hydrogen.The plant consists mainly of the following:1-The furnaces area compression unit 3. the refrigeration unit.3-The seperation unit.
Client: Borouge-Abu Dhabi Polymers Company Limited
Contract Value: US$ 393,000,000

Title HSE Manager

Duties Same as above.

August 2005 – August 2008

Project **RT3** - Ruwais NGL Train 3 Project
CCC scope comprises of EPC buiding works, construction of civil, mechanical & E/I works for all the project excluding marine works and jetty & cryogenic tanks.
New fractionation/refrigeration unit, stream plant, utilities, new LPG & DEC treating, amine regeneration, sulfur recovery unit, sour water sripper unit, future naphtha hydrotreater,& future hydrogen manufacturing unit. CCC scope comprises of the civil, mechanical & E&I.
Client: GASCO
Contract Value: US$ 1,452,500,000

Title HSE Manager

Duties Same as above.

Sultanate of Oman

June 2003 – July 2005

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEL

FADI M. WATFE (...continued)

Project	**OIF** - Oman-India Fertilizer Project The scope of works involves the construction of a grass roots Fertilizer Complex including: ▪ Ammonia Plant - 2 Trains 1,750 tons/day each. ▪ Urea Plant - 2 Trains 2,530 tons/day each. ▪ All related Utilities. ▪ Offsites. Client: Oman-India Fertilizer Company Contract Value: US$ 170 Million.
Title	Safety Manager
Duties	Tasks included: Preparing and implementing specific safety manual & safety programs by monitoring work sites during construction operation. Conducting weekly safety toolbox talks and induction courses for project personnel including subcontractors. Preparing & issuing permits to work for hot, cold, entry (Vessel & Vehicle), Electrical, Hot tap, Gas Free certificates and excavation notifications. Testing all sites for toxic gases prior to the start of job on daily basis. Preparing, submitting & maintaining the records of safety reports (Weekly & Monthly). Inspection of all tools, equipment including heavy-duty vehicles arriving on sites. Inspection and maintenance of all types of Gas Monitors, SCBA, Air Cascade system, Fire extinguishers and first aid facilities. Investigating and analysis of incidents, accidents and near misses for loss prevention. Studying the project safety needs and preparing PPE material requests. Coordinating with all concerned departments, especially Joint Operations EH&S Department and attending weekly staff meetings & Client meetings.

Kazakhstan

September 2001 - June 2003

Project	**KMWC** - Karachaganak Main Works Contract, North West Kazakhstan The scope of work comprises a Grassroot Gas Processing & Condensate Plant, an Oil & Condensate Processing Plant with Gas Compression/Re-injection Facilities & a Well Production Gathering System & Gas Re-injection Trunkline & Flowline (approximately 300 KMs) as well as an Oil Export Pipeline of approximately 600 KMs. The final output of the plant will be 300,000

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FADI M. WATFE (...continued)

barrels/day of oil & 883 Billion Cubic feet of gas annually.
Client: Karachaganak Petroleum Operating BV.
Contract Value: US$ 800 Million.

Title — Safety Engineer **(As of July 2002)**
Sr. Safety Officer.

Duties — Implemented safety, security and health measures at the project and ensured that all common causes of accidents were properly covered by preventive safety measures and practices; in addition recommended specific safety measures whenever the introduction, use and erection of any new plant, equipment, machinery warranted additional safety requirements. Managed and coordinated the strict implementation of the Company Safety Manual which complies with the International Safety and Health procedures.

United Arab Emirates

June 1998 - September 2001

Project — **OGD II** - Onshore Gas Development Project-
Phase II, Abu Dhabi - United Arab Emirates. The project involves the full construction of civil works, structure steel erection, piping works, product pipelines, mechanical works, electrical and instrumentation works, modification and revamping of OGD I, and pre-commissioning. It also includes the detailed engineering and construction of the necessary buildings.
Contract Value: US$ 1.3 Billion
Client: Abu Dhabi National Oil Co. (ADNOC)

Title — Safety Officer.

Duties — Promoted and implemented safety, security and health measures at the project with a view of preserving both Company personnel and equipment from accident and damage. Formulated and updated Company's Health and Safety measures and procedures in accordance with specific requirements of the project and ensured that all common accidents were properly covered by the preventive safety measures and practices. Also, recommended specific safety measures whenever the introduction, use and erection of any new plant, equipment, machinery warranted additional safety requirements. Managed and coordinated the strict implementation of the Company Safety Manual which complies with the International Safety and Health procedures.

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

FADI M. WATFE (...continued)

Lebanon

July 1996 - June 1998

Project	**SSP** - Sibline Second Production Line - 2400 TPD A consortium Project - including Technip CLE - which involves the complete construction of a cement factory at Sibline (south Beirut), including civil foundations and buildings, silos, structural steel and erection of all mechanical equipment, and all the associated electrical / instrumentation works. Contract Value : US$ 25 Millions. Client : De Sibline SAL, Lebanon.
Title	Safety Officer.
Duties	Duties included the responsibility for safety activities in accordance with Company's and P.D.O.'s regulations; inspected safety implementations, equipments, and fire fighting equipments, in addition to maintaining all proper records and documentation. Managed and coordinated the strict implementation of the Company Safety Manual which complies with the International Safety and Health procedures.

United Arab Emirates

July 1994 - July 1996

Project	Al Taweelah Power & Desalination Plant Extension - Stage "B". Major extension of the existing power and desalination complex at Al Taweelah to cater for an additional power generation of 732 MW. and an additional desalinated water supply of 76 million imperial gallons per day. Client: Water & Electricity Dept., Abu Dhabi. Contract Value: US$ 85.8 Million.
Title	Safety Officer.
Duties	Implemented safety, security and health measures at the project and ensured that all common causes of accidents were properly covered by preventive safety measures and practices; in addition recommended specific safety measures whenever the introduction, use and erection of any new plant, equipment, machinery warranted additional safety requirements. Managed and coordinated the strict implementation of the Company Safety Manual which complies with the International Safety and Health procedures.

May 1994 - June 1994

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

FADI M. WATFE (...continued)

Project	ADNOC Onshore Development, OGD No.545. Construction of gas processing plants, sulfur recovery facilities and off sites/utilities. Client: Abu Dhabi National Oil Co. (ADNOC). Contract Value: US$ 1.25 Billion.
Title	Safety Officer
Duties	Carried out regular site inspections and ensured that working conditions were safe. This included checking the conditions of facilities, plant and equipment; identifying hazardous areas and working conditions; recommending corrective action as deemed necessary Ensured that site and management were properly advised on safety and health measures, as well as equipment. Additionally, ensured that relevant and adequate personnel protective equipment and clothing were provided to all employees who need such protective equipment during the normal course of their duty and were worn at all times.

Republic of Yemen

October 1992 - May 1994

Project	Yemen - Masila Export. Construction of a complete oil field installation including oil gathering system from 3 separate oil fields to a control production facilities (capacity 150,000 BPD), a cross country pipeline (140 kms.) to the sea and Export Terminal with offshore loading facilities. Client: Canadian OXY Offshore Int'l. Ltd. Contract Value: US$ 340 Million.
Title	Safety Officer
Duties	Same as above.

United Arab Emirates

November 1988 - October 1989

Location	Area office, Musaffah.
Title	System Operator
Duties	Worked in the Information System Department in procession of Safety and Accounts related data.

United Arab Emirates

August 1986 - November 1988

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

FADI M. WATFE (...continued)

Project	Concrete Rehabilitation Project (CRP Project), LNG plant, Das Island, Abu Dhabi.
Title	Assistant Safety Officer
Duties	Supervised the implementation of safety and health measures and carried out regular inspection to identify and recommend appropriate corrective actions to the project.

NON - CCC EXPERIENCE

Lebanon

1991 - 1992

Self Employment - General Trading

April 2014

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) | TEYSEER CONTRACTING CO. WLL - JV

CONTRACTOR'S QA/QC ENGINEER

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

CURRICULUM VITAE

NAME:	NABIL ABDEL SHABASY	STAFF NO. 354718
NATIONALITY:	EGYPTIAN	
DATE OF BIRTH:	1967	
MARITAL STATUS:	MARRIED	
LANGUAGES:	ENGLISH & ARABIC	

QUALIFICATIONS

- Ph.D. in Civil Engineering, 2009, Alexandria University, Egypt.
- M.Sc. in Civil Engineering, 2001, Alexandria University, Egypt.
- B.Sc. in Civil Engineering, 1990, Alexandria University, Egypt.

TRAININGS, SEMINARS & CERTIFICATES

- Planning & Scheduling with Primavera Project Planner (P3), Virgi-Tech
- Internal Auditor Training course, 2004, Bureau Veritas "BVQI", Egypt
- Lead Auditor Training course, 2004, BVQI, Egypt
- Certificate of Completion, CCC, Negotiation, October 2007, UAE.
- Certificate of Completion, CCC, Leadership & Management, December 2007, Qatar.
- Certificate of Completion, CCC, Motivation, January 2008, Qatar.
- Certificate of Completion, CCC, Risk Management, November 2012, Qatar.

Computer Skills:

- MATLAB Programming
- AutoCAD
- ANSYS
- Primavera PP3

CCC GROUP EXPERIENCE

State of Qatar

July 2011 – To date

Project	**QFIS** – Islamic Studies Project Scope: Supply, installation, construction, testing and commissioning of main buildings, mosque and car park. All Architectural, civil and structural works including the design, supply and installation of Glass Facade and curtain walls, all building services and utilities. Total built up area 35,270 m2. Client: Qatar Petroleum for Qatar Foundation Contract Value: US$ 212,837,644
Title	Manager - QA/QC - Civil
Duties	Monitors the implementation of the project quality system, including the project quality plan and quality management procedures within specific area of

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

NABIL ADEL SHABASY (...continued)

responsibility to ensure framework is in place for quality system compliance requirements.
Provides quality awareness seminars to various levels of project staff.
Initiates, reviews, approves and maintains, as applicable, quality procedures including quality control procedures, inspection testing procedures and plans.
Acts as liaison between the client, the engineering project team, construction team and the QA/QC team for the establishing and coordination of inspection activities.
Manages all project quality assurance and quality control staff and activities ensuring work is completed in accordance with project specifications, to the required quality standards and within prescribed timeframes. Includes allocation and mobilization
Attends site meetings with client as the CCC representative on all matters relating to quality control.
Performs quality audits on the project, suppliers, sub-contractors to ensure compliance to ensure ISO and contract compliance obligations are met.
Provides input for the development of budget projections at the estimation stage. Monitors project usage against allocated budget to ensure activities are properly supported and to justify variations.
Establishes a non-conformance system for identification, control and rectification of all non-conforming material and work.
Establishes a system for final certification documentation to facilitate confirmation that project construction is completed in accordance with contract requirements.
Identifies development and training needs within the department and make recommendations for appropriate programmes.
Keeps abreast of QA sector developments for the benefit of CCC and the project quality assurance department in particular.

February 2011 – July 2011

Project	**NDAB** - Midfield Telecommunication Building and North and South Telecommunication Interface Buildings
Title	Manager - QA/QC - Civil
Duties	Same as above

June 2007 – September 2009

Project	**MAT** - New Doha International Airport (NDIA) Midfieldd Access Tunnel

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

NABIL ADEL SHABASY (...continued)

Scope: Final design, procurement, construction, start-up and commissioning of all elements of the Midfield Area Access System for the New Doha International Airport (NDIA) including 2 cross-taxiways, portions of the passenger terminal apron and taxilanes, and 2 road tunnels under the taxiways. The works include labor, materials, equipment, transportation, supervision, facilities, environmental, safety and health management, quality control, testing and commissioning, training of operational and maintenance personnel.
Client: Overseas Bechtel, Incorporated (OBI)
Contract Value: US$ 234,500,000

Title: Sr. QC Engineer - Civil

Duties: Responsible for the development of discipline specific Quality Control documentation, assigning and supervising of Quality Control Inspector activities, undertaking the more complex inspections and resolving technical and client issues on quality.

NON - CCC GROUP EXPERIENCE

Kingdom of Saudi Arabia

September 2009 - February 2011

Employer: Advanced Construction Center for Civil Engineering Consultations (ACC)

Title: Technical Manager

Duties: Directing and planning the job responsibilities of technical office staff for
• Perform technical/quality reviews of drawings, product data, material samples, purchase orders, subcontracts, inspection reports, delivery schedules, instruction manuals, contractors' shop drawings, ITP's, Q. Plans, method statements, Welding Procedures, RFI's and technical submittals.
• Provide tech. support and Investigate problems and organize solution alternatives with site team /subcontractors
• Perform structural designs for the site civil shoring & temporary facilities.
• Prepare/review design change requests / notices
• Assist in preparing value engineering studies, contracts' BOQ's, bid documents, Statements of Work "SOW" and projects' specifications.

Egypt

March 1998 - May 2007

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCCI / TEKSEER CONTRACTING CO. INC. - JV

NABIL ADEL SHABASY (...continued)

Employer	Ezz-Dekhiela Steel Co. Alex. (Formerly Ansdk)
Title	Technical Engineer / QA Auditor / Structural/QC Engineer
Duties	Preparing of technical conceptual study, value engineering, BOQ's, bid documents, projects criteria and issuing Statements of Work "SOW" of projects. Technical evaluation of subcontractors' quotations. Cost analysis, maintain prices: costs data-base and preparing annual budget estimations, and periodic cost reports. Monitoring & managing maintenance/ projects budgets QA Auditor Preparing QMS documentation according to ISO 9001:2000 Preparing "Audit Plan & Matrix' and perform internal audits Coordinating external audits 8. Management Review Meetings, issuing audit results, notices of violation and NCR's and tracking of corrective/ preventive actions. Training of company's staff to explain the requirements of the QMS & ISO Standard. Upgrading utilities (storm drainage, sewer, water lines, storage areas, roads, & pipe racks). Civil Maintenance (equipment foundations, industrial & administration buildings, roads & utilities). Design works (new service, admin. & utility buildings and drainage lines). Structural/QC Engineer Manage and coordinate technical interfaces between all disciplines (subcontractors, consultants, designer, company staff) Review civil & Mech. drawings compliance with :he project requirements Respond to contractors' quantities and review their submittals Maintain surveillance for all above project activities to monitor quality and progress of constructed work. Review Structural Calculation Sheets and -- perform structural designs and preparing shop drawings of some buildings, equipment foundations, and storm drainage system.

March 1997 - February 1998

Employer	Arab Contractors Co. (O. A. OSMAN)
Title	QC Engineer
Duties	Prepare of QCP's and ITP's of marine & civil works Coordinate inspection & verifying Elite quality activities in accordance with Specs. / Standards. Control of Concrete/Asphalt batch plants production quality & ensure quality of all supplied materials.

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCCO) / TEYSEER CONTRACTING CO. W.L.L.

NABIL ADEL SHABASY (...continued)

August 1994 - February 1997

Employer	Suez Oil Company SUCO
Title	Project Engineer
Duties	Coordinate and ensure progress of work activities against time schedule Ensuring compliance of works with Specs. / Standards.

February 1991 - July 1994

Employer	Waste Water Consultant Group, WWCG
Title	Quality Engineer
Duties	Coordinating quality inspections and preparing daily QC reports, efficiency notices and hand over punch lists Reviewing contractor's technical submittals and shop drawings.

June 1992 - September 1995

Employer	Al-HODA Consulting Office - Pare lime Job
Project	Residential Multi-Story Buildings in Alexandria
Title	Structural Designer
Duties	Design, analysis, detailing of multistory residential buildings. Estimate costs, prepare tender BOQ and required specifications.

April 2014

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) / TEYSEER CONTRACTING CO. W.L.L. - JV

CONTRACTOR'S COST AND PLANNING ENGINEERING

CURRICULUM VITAE

NAME:	AHMED A. F. SEDKY	STAFF NO. 314522
NATIONALITY:	EGYPTIAN	
DATE OF BIRTH:	1979	
MARITAL STATUS	MARRIED	
LANGUAGES:	ARABIC, FRENCH & ENGLISH	

QUALIFICATIONS

- B.Sc. in Civil Engineering, 2002, Ain Shams University, Egypt

OTHER QUALIFICATIONS

Courses Taken:

- Communication Skills in Meeting, Writing & Conflict, 2013, CCC, State of Qatar
- Value Engineering course, 2012, Project Management Institute, State of Qatar
- PMP Scheduling Professional, 2010, Project Management Institute,, United States of America
- Negotiation seminar, 2009, CCC, State of Qatar
- Risk Management seminar, 2008, Project Management Institute, State of Qatar
- Project Management Professional, 2009, Project Management Institute, United States of America, PMP No.: 296024
- Project Management program, 2005, The American University in Cairo, Egypt
- Project Bids and Contracts course, 2005, The American University in Cairo, Egypt
- Projects Feasibility Studies course, 2005, The American University in Cairo, Egypt
- Project Management Information Systems course, 2005, The American University in Cairo, Egypt
- Project Budgeting and Financial Control course, 2004, The American University in Cairo, Egypt
- Project Planning & Control Techniques course, 2004, The American University in Cairo, Egypt
- Management of Project Resources course, 2004, The American University in Cairo, Egypt
- Cost Control of Engineering Projects course, 2003, The American University in Cairo, Egypt

Memberships:

- Member of PMI (Project Management Institute), Member No. 1335960, Expiration Date: 18 May 2013
- Member of the Egyptian Society of Engineers
- Member of the Egyptian Engineers Syndicate

Computer Skills:

- Primavera Project Planner Software (Levels I & II)
- AutoCAD 2002
- SAP 2000

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L.

AHMED A. F. SEDKY (...continued)

CCC GROUP EXPERIENCE

State of Qatar

October 2011 – To date

Project	**MPAC** – Epic for Multipurpose Administration Complex at Ras Laffan - Phase 1 Scope: Engineering, Procurement, Installation, Testing and commissioning of Phase 1 of the Multi-purpose Administration Complex at Ras Laffan which comprises of: Buildings total Area 34,820 M2, consisting of Office and Canteen Building (over eleven floors), Medical Centre, Helicopter Landing Pad and Helipad Pump House, Central Plant and 33kV Substation with all adjoining external works and services. Client: Qatar Petroleum Contract Value: US$ 208,079,392
Title	Sr. Engineer (Planning)
Duties	Provide technical input and assistance as necessary at the tendering stage to ensure that all activities and issues are properly assessed and accounted for and that costs and lead times are realistic and achievable, based on previous experience. Review and assess existing relevant documentation at the project outset i.e. tender documentation, specifications, contract particulars, and co-ordinate the development and creation of detailed plans, schedules and costings to enable the production of the construction schedule to the level of detail deemed appropriate, to allow for the overall co-ordination and implementation of the project resources. Review and assess existing relevant documentation at the project outset i.e. tender documentation, specifications, contract particulars, and co-ordinate the development and creation of a chart of accounts and project budget for approval at the appropriate level within ccc. Liaise with relevant project management, planning and cost engineers, to ensure they are properly briefed on all aspects of the planning and budgeting stages with responsibilities for implementation properly assigned and understood including the implementation and modification of the project monitoring system as defined in company procedures. With reference to senior engineers, advise and agree with project management proposed weight-factoring calculations to be used in the progress monitoring, ensuring this is compliant with company policy and procedures. Provide accounts section with cost allocations to enable issue of cost report together with advice on provisional accounts.

AHMED A. F. SEDKY (...continued)

Study cost reports and monitoring data to; 1. Establish/check its integrity and accuracy, 2. Actual performance versus budget, and 3. Timeliness, making recommendations to project management to manage any variations and implement remedial action.
Carry out periodic visits to site to keep up to date with progress, checking the implementation of plans and monitoring systems, providing troubleshooting support or technical guidance as necessary to project management to resolve problems and difficulties.
Provide training and guidance to subordinates and colleagues in the use of project monitoring and planning systems and the interpretation of data and information generated.
Review and analyze all cost/scheduling reports and forecasts against plan, studying and assessing trends and fluctuations providing clear interpretation and advice on suggested appropriate action to relevant project management.
Compile and collate data concerning unit cost and productivity norms, which can become reference material for both future estimating and cost control purposes.

September 2009 – October 2011

Project — **RLP** – Ras Laffan Port Expansion Project
Scope: Engineering, Procurement, Installation and Commissioning of berths and port infrastructure. Scope includes construction of block work quay walls for liquid products, container terminal, tugs & navy berths as well as infrastructure for the newly dredged and reclaimed port. The infrastructure works includes road works, networks, buildings, telecommunication and security systems.
Client: Qatar Petroleum
Contract Value: US$ 1,800,832,581

Title — Sr. Engineer (Planning) (**As of July 2010**)
Office Engineer (Planning)

Duties — Same as above

November 2006 – September 2009

Project — **QGX II** – QGX II LNG Onshore Facilities
Scope: The construction of new large LNG facilities (Trains 4 & 5) located adjacent to the existing three LNG trai9ns at the Qatar Gas Plant site in Ras Laffan Industrial City. Annual capacity is 7.8 mta per Train FOB Ras Laffan. The scope of work includes all construction activities (Temporary Facilities, Civil, Piping, Equipment Installation, Steelwork, Painting, Insulation, Fireproofing, and Electrical & Instrumentation), pre-commissioning assistance.
Client: CHIYODA/TECHNIP JV

CONSOLIDATED CONTRACTORS COMPANY (Offshore) (CCC) / TEXSEER CONTRACTING CO. WLL - JV

AHMED A. F. SEDKY (...continued)

	Contract Value: US$ 1,100,000,000
Title	Office Engineer (Planning)
Duties	Develop the method statement into a fully detailed method statement. Prepare amendments and alternatives to it during the course of construction to meet or improve on project targets. Prepared risk assessments, lifting plans, scope and schedule of works. Controlled design drawings done by local company. Prepared Front End Load (FEL) documents in order to mobilize and start work. Coordinating and providing technical support to site. Submitted material approval requests, site queries and correspondences to Client and Subcontractors.

NON - CCC GROUP EXPERIENCE

Egypt

October 2002 – October 2006

Employer	Petrojet
Project	October 2004 – October 2006 ELAB Project (Phase 1) in Alexandria (25 million LE)
Title	Planning and Cost Control Engineer (Head Office)
Duties	Follow up the project progress and preparing detailed cost plan and detailed monthly cost control reports (Earned Value Reports) and tracking of procurement and construction costs, preparing variance reports for the material and equipment and manpower usage and suggest any needed corrective actions.
Project	August 2005 – October 2006 Oil Pipeline in Sudan (100 km-16"-4 million USD)
Title	Planning and Cost Control Engineer (Head Office)
Project	October 2004 – October 2006 Oil Pipeline in Libya (725 km-30"-100 million €)
Title	Planning and Cost Control Engineer (Head Office)
Project	October 2004 – October 2006 Arab Gas Line in Jordan (393 km-36"-400 million LE)
Title	Planning and Cost Control Engineer (Head Office)
Project	September 2004 – October 2004 Central Workshop – Kaatima

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) / TEYSEER CONTRACTING CO. W.L.L. - JV

AHMED A. F. SEDKY (...continued)

Title	Cost Engineer
Duties	Preparing of projects estimates, budgets ,preparing detailed cost plan and detailed monthly cost control reports (Earned Value Reports) and tracking of fabrication costs , preparing variance reports for the: material and equipment and manpower usage and suggest any needed corrective actions.
Project	October 2002 – September 2004 UGDC Plants at Port Said & Damietta & Propane pipeline (51 km – 10") & LPG pipeline (51 km – 8") with total construction cost of US$ 150 million.
Title	Planning and Cost Control Engineer (Site)
Duties	Preparing Level 3 & 4 Schedule, Control Sheets, daily, weekly and monthly report, revised schedules, budgets updates and preparing and claim calculations and documents for all work packages for UGDC Port Said and preparing detailed cost plan and detailed monthly cost control reports (earned value reports) and tracking of construction costs, preparing variance reports for the material and equipment and manpower usage and suggest any needed corrective actions for UGDC Damietta and the two pipelines.

July 2014

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. WLL - JV

SECTION 13: APPENDIX E
CONTRACTOR'S RESOURCES
Annexure 2: Facilities, Plant & Equipment owned by Contractor

ANNEXURE (2) FACILITIES, PLANT AND EQUIPMENT OWNED BY CONTRACTOR

CONTRACTOR states below the details of its resources and facilities that under CONTRACTOR ownership, CONTRACTOR design office, design facilities, expediting and procurement agencies, fabrication yard (location and facilities) etc. shall be listed.

CONTRACTOR states below the details of the main items of constructional plant and equipment. Details of any special tools should be highlighted.

Description	Capacity and present whereabouts	Manufacturer and year of manufacture	No. of Units

The provision of this information shall not relieve CONTRACTOR from providing such information as KAHRAMAA may require in accordance with the General Conditions of Contract of the special equipment and tools CONTRACTOR proposes to supply or use, neither shall it in any way relieve CONTRACTOR of any of its obligations to carry out, and. complete the WORK in accordance with the CONTRACT.

Please find enclosed herein CONTRACTOR's facilities and resources.

ENGINEERING & PROCUREMENT

www.ccc.gr

Engineering & Procurement Support Office (EPSO)

Departments

- Civil Engineering Department (CED)
- Plants Engineering Department (PED) - EPC Oil & Gas
  - Project Management
  - Engineering
  - Procurement
- Central Procurement Department (CPD)
- QA/QC, HSE, Construction Support, IT and others

Services

- Residual FEED Engineering
- Detailed Engineering & Design
- Engineering for Procurement
- Support Field Engineering
- Support to Pre-commissioning, Commissioning, Start-Up

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

Engineering & Procurement Support Office (EPSO)

Resources

Total of 400 Engineers, Designers, Expeditors & Support Staff

Category	Nos.
Management & Project Controls	38
Engineers	195
Designers, Draftsmen and Technicians	110
Support (IT, Document Control, Secretarial)	24
Procurement	33

Current Annual Engineering Internal Capacity

- 800,000 MHR
- 600,000 MHR (Pure Engineering)

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. WLL - JV

Manning of Engineers & Designers

	Process	Piping	Mech.	Elec.	Instr.	Civil	*Total*
Engineers	21	31	32	22	29	60	195
Designers	3	21	3	9	6	68	110
Total	24	52	35	31	35	128	305

CONSTRUCTION EQUIPMENT RESOURCES

www.ccc.gr

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. WLL - JV

CCC Plant & Equipment

2013

ELECTRIC GENERATORS
& LIGHTING TOWERS
684

EARTHMOVING
EQUIPMENT
927

PIPELAYING
EQUIPMENT
223

CIVIL ENGINEERING
& CONSTRUCTION EQUIPMENT
1,297

AIR
COMPRESSORS
402

WORK/SURVEY BOATS
& STANDARD FACILITIES
170

HEAVY DUTY
VEHICLES
2,251

WELDING MACHINES
7,071

CRANES
875

VEHICLES
& LIGHT TRUCKS
2,723

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TRIDER CONTRACTING CO. W.L.L. - JV

TOTAL NO. OF EQUIPMENT: 16,623
TOTAL VALUE OF EQUIPMENT: US$ 1,068 MILLION

CCC Heavy Lift Operations

- CCC owns over 977 cranes with a capacity ranging from 20 to 1600 tons.
- CCC and Mammoet have formed a joint venture company called CCVS, on a 50-50 basis for the ownership of the following cranes:

Type		Capacity	No.
DEMAG CC 8800-1	Crawler	1,600 T	1
DEMAG CC 4800	Twin Ring	1,600 T	1
DEMAG CC 4800	Crawler	1,000 T	1
DEMAG CC 2500-1	Crawler	500 T	2

The highest flare stack
Erected 200mtr high Derrick Flare Stack 28-FL8401 using Demag CC8800 at QGX Project – Qatar.

The heaviest lift
Erected 2 Propylene Rectifiers. Each of 1,780 Tons for the Rabigh Development Project, Saudi Arabia

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

CCC Fleet of Equipment

The following is a detailed list of major plant and equipment owned by CCC worldwide.

GROUP NO.	CAPACITY	NO. IN SERVICE	SUB-TOTALS
1.	**AIR COMPRESSORS**		**402**
	50 – 200 CFM	24	
	201 – 400 CFM	278	
	401 – 800 CFM	66	
	801 – 1200 CFM	34	
2.	**ELECTRIC GENERATORS & LIGHTING TOWERS**		**684**
	15 – 200 KW	254	
	201 – 350 KW	119	
	351 – 400 KW	98	
	400 KW & over	186	
	Lighting Towers 5 – 7 KW	27	
3.	**WELDING MACHINES**		**7,071**
	Electric Bullet/Skid 300 - 500 AMPS	3,717	
	Diesel Driven 300 - 500 AMPS	3,354	
4.	**CRANES**		**875**
	Heavy Lift:		
	Demag CC 1800 SWSL 350 Ton	2	
	Demag CC 2500 SWSL 450 Ton	2	
	Demag CC 4800 SWSL 800 T & Twin Ring 1,200 Ton	2	
	Demag AC Truck Mounted with Super Lift 350 Ton	2	
	Demag CC 1500 300 Ton	1	
	Manitowoc Maxer 400 Ton	1	
	Demag CC 2200 350 Ton	1	
	Demag CC 8800 1,600 Ton	1	
	Crawler Lattice Boom 50 – 355 Ton	215	
	Truck Mounted Telescopic Boom 18 – 220 Ton	80	
	Off-Road 20 – 30 Ton Telescopic	30	
	Rough Terrain Telescopic Boom 31 – 120 ton	343	
	Industrial Telescopic Boom 5 – 15 Ton	4	
	All Terrain Telescopic Boom 20 – 355 Ton	85	
	Tower Top Slewing on Rail 100 – 299 Ton	78	
	Fast Erecting 10 – 99 Ton	18	
	Gantry on Rails single Girder/Winch 2 – 9 Ton	1	
	Gantry on Rails single Girder/Winch 151 – 200 Ton	1	
	Overhead Single Girder/Winch 2 – 9 Ton	6	
	Attachment Luffer on 250 Tons Crane	1	
	Attachment Maxer 272 / 450 Tons	1	
5.	**HEAVY DUTY VEHICLES**		**2,251**
	Prime Movers	359	
	Truck – Off-Road Rigid & Articulated	53	
	Truck – Water Tanker Off-Road up to 6,000 Imp. Gal.	3	
	Truck – Flat Bed 5 – 35 Ton	13	
	Trailer – Flat Bed 25 – 50 Ton	139	
	Trailer – Low Bed 25 – 150 Ton	55	
	Trailer – Desert Application – 50 – 75 Ton	3	
	Trailer – Tipping up to 45 M3	162	
	Trailer – Pipe Dolley up to 80 Ton	4	
	Trailer – Draw Bar 11 – 20 Ton	14	
	Transporter – Bitumen 5001 – 10,000 Imp. Gal.	2	
	Transporter – Water 5,000 – 12,000 Imp. Gal.	5	
	Transporter – Fuel 5,001 – 12,000 Imp. Gal.	1	
	Transporter – Passenger up to 130 Seats	12	
	Transporter – Cement 16 – 55 M3	13	
	Truck – Tipper 6.1 – 25 M3	568	
	Truck – Water Tankers up to 5,000 Imp. Gal.	197	
	Truck – Fuel Tankers up to 5,000 Imp. Gal.	90	
	Truck – Cold Storage	5	

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

GROUP NO.	CAPACITY	NO. IN SERVICE	SUB-TOTALS
	Truck – Cesspit Emptier up to 5,000 Imp. Gal.	33	
	Truck – Skip Logger up to 12.1 Ton	19	
	Truck – Bitumen Distributor 10,000 Imp. Gal.	32	
	Truck – Transit Mixers up to 9 M3	145	
	Truck – with Articulated Crane up to 10 Ton	241	
	Truck – Maintenance	73	
	Truck – Fire	2	
	Truck – Steam	2	
	Truck – Vehicle Recovery	6	
6.	**EARTHMOVING EQUIPMENT**		**927**
	Dozer Track Type 6 – 84 Ton	112	
	Excavator Track Type 12 – 80 Ton	233	
	Excavator Wheel Type 16 – 20 Ton	9	
	Wheel Loader 8 – 70 Ton	203	
	Loader Track Type 16 – 22 Ton	2	
	Loader Backhoe 6 – 8.5 Ton	107	
	Loader Skid Steer	146	
	Scraper Wheel Tractor 28 – 38 Ton	7	
	Motor Grader CAT 12G & 14G	101	
	Integrated Tool Carrier	4	
	Holland Loader	3	
7.	**PIPELAYING EQUIPMENT**		**223**
	Side Boom up to 150 Ton Lift Capacity	85	
	Auxiliary Crawler & Wheeled Tractor Generator/Twin Set	7	
	Trencher 6.1' – 7.1' Depth 36.1" – 44" Width Cut	1	
	Trencher 8' – 9' Depth 44.1" – 66" Width Cut	1	
	Boring Machine Hydraulic 41 – 50"	1	
	Directional Drilling	2	
	Bending Machine 6" – 48"	9	
	Mandrel Air & Hydraulic 6" – 48"	20	
	Line-up Clamp Internal or External 6" – 48"	44	
	Paywelder Crawler Mounted & Stationary	32	
	Preheating Crawler & Skid Mounted	4	
	Facing Machine Hydraulic 14" – 48"	11	
	Power Pack Hydraulic	6	
8.	**CIVIL ENGINEERING EQUIPMENT**		**1,297**
	Batching Plant Standard, Tropicalized & Winterized 15 – 120 M3/HR	22	
	Cement Silos 25 – 200 Ton	45	
	Chilling Plants 25 – 60 TR	12	
	Ice Water Plant 76 – 110 M3/Day	12	
	Ice Flake Plant 15 – 50 Ton/Day	9	
	Concrete Mixer Stationary	17	
	Concrete Mixer Self Propelled with Weighing Device	7	
	Concrete Pump 51 – 9- M3, 20 M – 45 M	29	
	Concrete Pump Trailer Mounted / Placing Boom & Belt Conveyor	8	
	Concrete Paver/Slipformer on Rails 12.1 – 20 M	3	
	Self Propelled Conveyor up to 25 m Length	5	
	Work Bridge Rubber Wheel Type up to 12 M Pave Width	1	
	Chip Spreader Self Propelled 3.1 – 6 M	3	
	Desalination Plant Reverse Osmosis 51 – 100 M3/Hr	4	
	Dumper up to 3 Ton	122	
	Forklift 2.1 – 10 Ton	149	
	Passenger, Manlift, Material Hoist & Sizzor Lift	137	
	Pile Driving & Extracting Impact Hammer Diesel/Hydraulic	6	
	Rock Breaker Hydraulic 1 Ton – 6 Ton, 16 – 80 Ton	85	
	Agricultural Tractor	34	
	Pumps – Submersible/Dewatering/Jetting/Filling/Testing	140	
	Asphalt Plant 61 – 400 TPH	12	
	Asphalt Paver 0.5 – 14 M Paving	37	

CCC Fleet of Equipment

GROUP NO.	CAPACITY	NO. IN SERVICE	SUB-TOTALS
	Mobile Feeder - Rubbered Crawler	2	
	Roller – Single & Tandem Vibrating 2 Ton – 13 Ton	174	
	Roller – Pneumatic 20 – 30 Ton	65	
	Roller – Double Drum Trench Compactor	3	
	Surface Crawler Drill Pneumatic/Hydraulic Top Hammer up to 5"	24	
	Asphalt Sweeper Self Propelled all Sizes	10	
	Conveyor for Crushing Plant 121 – 420 TPH	43	
	Crushing Plant 120 – 450 TPH	7	
	Crusher Cone Self Propelled, Impact & Jaw Stationary & Self Propelled, Cone Stationary 121 – 300 TPH	25	
	Screen Stationary & Self Propelled 3.8 – 11.2 M2	15	
	Screening Plant 120 – 350 TPH	6	
	Padding Machine	2	
	Stabilization Plant 201 – 350 TPH	7	
	Soil Reclaimer up to 200 TPH	2	
	Sand Classifier Single & Wet Screw	3	
	Sand Washing Plant 121 – 200 TPH	1	
	Road Milling Machine 1.6 – 2.5 M	3	
	Road Marking Machine	1	
	Super Structure Transit Mixer	2	
	Super Structure Water Tanker	1	
	Super Structure Fuel Tanker	2	
9.	**VEHICLES AND LIGHT TRUCKS**		**2,723**
	Motor Cars – Sedans	320	
	Buses 14 – 50 Seater	857	
	Vans Multi Purpose	3	
	SUV Short & Long Wheel	391	
	Pickups	880	
	Ambulances	37	
	Light Duty Trucks up to 50 Ton	235	
10.	**MARINE CRAFTS & STANDARD FACILITIES**		**170**
	Crane / Barge / Flat Barge	7	
	Workshop Container Machine Shops C5	23	
	Workshop Container Electric Shops C4	18	
	Workshop Container Tyre Shops C6	26	
	Workshop Container Lube Unit Shop C7	24	
	Workshop Container Store Office C1	19	
	Workshop Container General Store	4	
	Workshop Container Hose Shop C8	2	
	Workshop Container Tool Room	3	
	Workshop Container 2 & 3-Man Office C2 & C3	13	
	Workshop Container Testing Shop	1	
	Workshop Container Pioneer Workshop	9	
	Workshop Container Store C11	10	
	Workshop Container Instrumentation	2	
	Workshop Container Combined Lube Unit	1	
	Workshop Building 2-4 Bay, 5-8 Bay & 9-14 Bay	6	
	Motor Boat	2	
ALL GROUPS TOTAL			**16,623**
VALUE			**US$ 1,068,425,000**

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. WLL - JV

SECTION 13: APPENDIX E
CONTRACTOR'S RESOURCES
Annexure 3: Facilities, Plant & Equipment proposed by Contractor

ANNEXURE (3) FACILITIES, PLANT AND EQUIPMENT PROPOSED FOR THIS CONTRACT

CONTRACTOR states below the details of its resources and facilities intended to be utilized for this CONTRACT, CONTRACTOR design office, design facilities, expediting and procurement agencies, fabrication yard (location and facilities) etc. are listed.

CONTRACTOR states below the details of the main items of constructional plant and equipment, which it proposes to use for this CONTRACT. Details of all equipment etc. are specified. This list is the minimum that CONTRACTOR will be required to provide on WORKSITE. CONTRACTOR states whether the tool or equipment is already in CONTRACTOR ownership or will be purchased or hired. Details of any special tools should be highlighted.

Description	Capacity and present whereabouts	Manufacturer and year of manufacture	No. of Units
Please find enclosed herein the List of proposed Facilities, Plant and Equipment.			

The provision of this information shall not relieve CONTRACTOR from providing such information as KAHRAMAA may require in accordance with the General Conditions of Contract of the special equipment and tools CONTRACTOR proposes to supply or use, neither shall it in any way relieve CONTRACTOR of any of its obligations to carry out, and. complete the WORK in accordance with the CONTRACT.

List of Proposed Facilities, Plant and Equipment

DESCRIPTION	CAPACITY AND PRESENT WHEREABOUTS	PRESENT LOCATION	MANUFACTURER	YEAR OF MANUFACTURE	NO OF UNITS
AIR COMPRESSORS					
AIR COMPRESSOR 251 - 390 CFM	260 CFM - 290 CFM-QATAR	OWNED	P 260 WIR - XA 136 DD	2005 - 2006	3
CRANES					
CRAWLER CRANE 50 - 70 TON	60 TON-QATAR	OWNED	CKE 600	2006	1
CRAWLER CRANE 400 TON		LEASE			1
ROUGH TERRAIN CRANE 25 - 30 TON	30 TON-QATAR	OWNED	RT 530	2006	11
ROUGH TERRAIN CRANE 50 - 60 TON	55 TON-QATAR	OWNED	RT 760	2008	3
T/RAIL 200 E-CH HUH 54 M		OWNED	200 ECH - MD 238 A J 12	1994 - 1995 - 2006	6
HEAVY DUTY VEHICLES					
P/MOVER MER. 2031 WITH TRAILER FLAT BED 30TON	240 HP , QATAR	OWNED/LEASE	MERCEDES ,2007		6
TRUCK TIPPER 15 - 16 M3	16 M3. QATAR	OWNED	MERCEDES, 2005-2008		2
TRUCK WATER TANKER 5000 GL	5000 GALLONS	OWNED	MERCEDES ,2007		3
EARTH MOVING EQUIPMENT					
DOZER CAT D8 W/RIPPER	305 HP-QATAR	OWNED	CAT D 8	2007 - 2008	2
EXCAVATOR CAT 330		LEASE			35
WHEEL LOADER S/S BOBCAT 741/3	62 HP-QATAR	OWNED	226 B	2005 - 2007 - 2008	3
WHEEL LOADER CAT 950	196 HP - 200 HP - 205 HP-QATAR	OWNED	CAT 950 - ZL 50 G	2005 - 2006 - 2007	6
MOTOR GRADER CAT 14 H	260 HP-QATAR	OWNED	G 990	2008	1
BACKHOE LOADER CAT 422	90 HP-QATAR	OWNED	422 E	2008	3
CIVIL ENGINEERING & CONSTRUCTION EQUIPMENT					
ASPHALT PLANT 250 TPH	260 TPH-QATAR	OWNED	MAP 260	2008	1
PAVER FINISHER ABG 355 (473)	9.5 M-QATAR	OWNED	1900 - 2	2007 - 2008	2
V/ROLLER TANDEM 8/12 TON	10 TON-QATAR	OWNED	HD 90	2012	2
V/ROLLER DYNAPAC 3/4 TON	3 TON - 4 TON-QATAR	OWNED	TBA	NEW	2
V/ROLLER CA25D 10 TON	10 TON-QATAR	OWNED	SD 100 D	2008	1
PNEUMATIC ROLLER 10/27 TON	28 TON - 27 TON-QATAR	OWNED	GRW 18 - CP 271	2002 - 2003 - 2011	4
SCREEN ALLTON 200 TPH	2 & 3 DECK SCREENS-QATAR	OWNED	ST 358 - ST 458	NEW	1
Facilities	**Area**				
MAIN SITE OFFICE	1,000 M2				
GENERAL STORE/WAREHOUSE	2,000 M2				
CEMENT STORE	500 M2				
SUBCONTRACTOR'S STORE	1,000 M2				
CARPENTARY WORKSHOP	1,000 M2				
REBAR WORKSHOP	1,000 M2				
PLANT WORKSHOP	6,000 M2				

SECTION 13: APPENDIX E
CONTRACTOR'S RESOURCES
Annexure 4: Subcontractors

ANNEXURE (4) SUBCONTRACTORS

CONTRACTOR states below the names and addresses of all SUBCONTRACTORS from whom it proposes to obtain services.

CONTRACTOR is not permitted to change any SUBCONTRACTOR named in this list without first obtaining KAHRAMAA written approval.

Full technical submissions are required for all services rendered under the CONTRACT as required by the General Conditions of Contract and the Specifications.

Subcontractor	Subcontract Work

Please find enclosed herein the List of Proposed Subcontractors.

List of Proposed Subcontractors

#	Subcontractor	Subcontractor Work
1	SMEET	Precast concrete structures.
2	UNITED PRECAST	Hollow core slab.
3	AL KHAYARIN INT'L	Internal partitions & ceilings.
4	Q GARDENS	Landscaping & irrigation.
5	QATAR BUILDING	Road marking.
6	QATAR NEON	Signage.
7	PENINSULAR -GRACE	Roofing & waterproofing.
8	ALUMINUM GULF RAY	Aluminium works.
9	EL ALFY	Stone works.
10	EXTRACO	GRP lining.
11	ECO FAÇADE	Steel cladding.
12	**Power Systems :**	
12.1	SIEMENS	Engineering, Mterial supply,Supervising the installation Testing, commissioning & training of MV & LV VFD, Medium Voltage Switch Gears & Power Transformers.
	or	
12.2	ABB	Engineering, Material supply,Supervising the installation Testing, commissioning & training of MV & LV VFD, Medium Voltage Switch Gears & Power Transformers.
	or	
12.3	SCHNEIDER	Engineering, Materials' supply,Supervising the installation Testing, commissioning & training of MV & LV VFD, Medium Voltage Switch Gears & Power Transformers.
13	**SCADA & Control Systems**	
13.1	AVANCEON/ROCKWELL AUTOMATION	Project Management, System Engineering, Materials' supply (Allen Bradley products) ,Supervising the installation, Documentation Testing, commissioning & training SCADA & Control system.
	or	
13.2	SIEMENS	System Engineering, Material supply ,Supervising the installation , Documentation Testing, commissioning & training of SCADA & Automationl system.
	or	
13.3	NIVUS	Implementation & Engineering & Structure SCADA built installation & configuration / parameterization, site supervision & commissioning.
14	**SECURITY & Communication System :**	
14.1	SIEMENS	Engineering , Materials supply, installation Testing & commissioning Training of IP CCTV System, Access Control.
	or	
14.2	JBK CONTROL	Materials supply,Supervising the installation Testing & commissioning of IP CCTV System, Access Control & Data Communication equipment.
	or	
14.3	CONSOLIDATED GULF	Engineering , Materials supply, installation Testing & commissioning Training of IP CCTV System, Access Control & Data communication system.
15	NAFFCO	Total flooding system.
16	THYSSENKRUPP	Lifts.

SECTION 13: APPENDIX E
CONTRACTOR'S RESOURCES
Annexure 5: Suppliers

ANNEXURE (5) SUPPLIERS

Tenderers to state below the names and addresses of all suppliers/manufacturer as well as the name of nominated alternative suppliers / manufacturers name from where it proposes to procure goods.

CONTRACTOR is not permitted to change any suppliers/manufacturer named in this list.

Based on Kahramaa's estimates of the suppliers current commitments at the award of the Contract Kahramaa reserves the right to accept or reject the suppliers proposed by the Contractor and to instruct the Contractor to propose alternative suppliers

Full technical submissions are required for all goods procured under the CONTRACT as required by the General Conditions of Contract and the Specifications.

Proposed Material		Manufacturer				Remarks
		Proposal # 1	Proposal # 2	Proposal # 3	Proposal # 4	
1	Pumps					
2	D.I. Pipes & Fittings					
3	Carbon steel pipes					
4	Gate Valves					
5	Butterfly Valves					
6	Non-return valves	Please find enclosed herein the List of Proposed Suppliers.				
7	Couplings and adaptors					
8	Switchgear					
9	Motor Control Centres					
10	Variable Speed Drives					
11	Transformers					
12	Generators and fuel system					
13	Control System equipment					
14	Concrete					

List of Proposed Suppliers

#	PROPOSED MATERIALS	PROPOSAL # 1	PROPOSAL # 2	PROPOSAL # 3	PROPOSAL # 4	REMARKS
1	PUMPS	KSB	KUBOTA	TORISHIMA	PENTAIR	
2	DUCTILE IRON PIPE & FITTINGS	1.0 US PIPES (GLOBE CONSTRUCTION) P.O. BOX 10521, DOHA, QATAR	SAINT GOBAIN (MANNAI TRDG. COMPANY) P.O. BOX 76, DOHA, QATAR	KUBOTA (AL HASHEMI GROUP) P.O. BOX 187, DOHA, QATAR	ACIPCO - OITC GROUP P.O. BOX 4844, DOHA, QATAR	
		2.0 DUKER (TROUVAY & CAUVIN GULF) P.O. BOX 2117, DOHA, QATAR				
3	CARBON STEEL PIPE	SEAH (PETROFAC INTERNATIONAL LTD) P.O. BOX 55031, DOHA, QATAR	SEAH (PETROFAC INTERNATIONAL LTD) P.O. BOX 55031, DOHA, QATAR	SEAH (PETROFAC INTERNATIONAL LTD) P.O. BOX 55031, DOHA, QATAR	SEAH (PETROFAC INTERNATIONAL LTD) P.O. BOX 55031, DOHA, QATAR	
4	GATE VALVES	VAG (PETROFAC INTERNATIONAL LTD.) P.O. BOX 55031, DOHA, QATAR	SAINT GOBAIN (MANNAI TRDG. COMPANY) P.O. BOX 76, DOHA, QATAR	SAINT GOBAIN (MANNAI TRDG. COMPANY) P.O. BOX 76, DOHA, QATAR	SAINT GOBAIN (MANNAI TRDG. COMPANY) P.O. BOX 76, DOHA, QATAR	
5	BUTTERFLY VALVES	1.0 SAINT GOBAIN (MANNAI TRDG.COMPANY) P.O. BOX 76, DOHA, QATAR	TTV (FIELD INDUSTRIAL SUPPLIES) P.O. BOX 55735, DOHA, QATAR	DUKER (TROUVAY & CAUVIN GULF) P.O. BOX 2117, DOHA, QATAR	VAG (PETROFAC INTERNATIONAL LTD.) P.O. BOX 55031, DOHA, QATAR	
		2.0 VAG for diameter >2000mm				
6	NON-RETURN VALVES	VAG (PETROFAC INTERNATIONAL LTD.) P.O. BOX 55031, DOHA, QATAR	VAG (PETROFAC INTERNATIONAL LTD.) P.O. BOX 55031, DOHA, QATAR	VAG (PETROFAC INTERNATIONAL LTD.) P.O. BOX 55031, DOHA, QATAR	VAG (PETROFAC INTERNATIONAL LTD.) P.O. BOX 55031, DOHA, QATAR	
7	COUPLINGS & ADAPTORS	DUTCO TENNANT QATAR WLL P.O. BOX 3288, DOHA, QATAR	VIKING JOHNS (AL OBEIDLY & GULF ETERNIT) P.O. BOX 1965, DOHA, QATAR	UPE (AHMAD ALUTHMAN & BROS) P.O. BOX 218, DOHA, QATAR	UPE (AHMAD ALUTHMAN & BROS) P.O. BOX 218, DOHA, QATAR	
8	SWITCHGEARS	ABB	SIEMENS	SCHNEIDER	SCHNEIDER	
9	MOTOR CONTROL CENTERS	ABB	SIEMENS	BIN GHALIB	BIN GHALIB	
10	VARIABLE SPEED DRIVES	ABB	SIEMENS	SCHNEIDER	SCHNEIDER	
11	TRANSFORMERS	ABB	SIEMENS	SCHNEIDER	SCHNEIDER	
12	GENERATORS AND FUEL SYSTEM	CUMMINS	CUMMINS	CUMMINS	CUMMINS	
13a	CONTROL SYSTEM EQUIPMENT	ALLEN BRADLEY	SIEMENS	SIEMENS	SIEMENS	Control means automation system.
13b	CONTROL SYSTEM SERVERS & SWITCHES	SISCO	SISCO	SISCO	SISCO	
14	CONCRETE	BETON WLL P.O. BOX 22581, DOHA, QATAR	QATAR ALPHA BETON P.O. BOX 23952, DOHA, QATAR	KHALID CEMENT INDUSTRIES P.O. BOX 3246, DOHA, QATAR	REDCO INTERNATIONAL P.O. BOX16750 DOHA, QATAR	

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

SECTION 13: APPENDIX E
CONTRACTOR'S RESOURCES
Annexure 6: Contractor's Company Organization Chart

ANNEXURE (6) CONTRACTOR'S COMPANY ORGANIZATION CHART

CONTRACTOR inserts a copy of its organization chart, which clearly shows the Company structure with respect to Subsidiaries and Joint Venture Partners, if applicable. The CONTRACTOR'S company organization chart shall indicate positions of Company Directors, Managers, Partners, etc. and nominate the persons holding these positions.

Please find enclosed herein the following:

1. CCC Organisation Chart
2. TCC Organisation Chart

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

APPENDIX E – ANNEXURE 6

COMPANY ORGANISATION CHART - CCC

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

CCC GROUP

Chairman Emeritus: SAID T. KHOURY

CCC BOARD
Chairman: WAEL S. KHOURY
Executive Vice Chairman: TAWFIC S. KHOURY

CCC Board Committee

Group President: SAID T. KHOURY

- **Acting President Corporate** — JAMAL NAKHLEH
- **President Engineering & Construction** — SAMER S. KHOURY
- **President Human Resources** — SUHEIL H. SABBAGH
- **President Petroleum & Minerals** — WAEL S. KHOURY

CFO	FARID ASFOUR
CIO	ZUHAIR HADDAD
CORPORATE SECRETARY & GROUP GOVERNANCE	AHMAD LADIKI
GROUP LEGAL COUNSEL	EDGARD MARINA
GVP STRATEGIC PLANNING, BUDGETING & INVEST.	NAHED KHAMISA
VP TREASURY, INSURANCE & INVESTMENT	FOUAD KHOURY
MGR CORPORATE PLANNING & MONIT. (GROUP)	SUHAYL A. SHAMI
EXECUTIVE VICE PRESIDENT OPERATIONS	HAZIM ABDUL KADER
MD OPERATIONS, NORTH AFRICA	SAMIR ZABEN
GVP SALES, PROPOSALS & SUPPORT	JAMAL AKL
GVP ENGINEERING, PROCUREMENT & E/M	HANI ALI
EXECUTIVE DIRECTOR BUSINESS UNIT (PIPELINES)	RASHID BHUHAIDER
MDO, CIS & IRAQ	HANI AKKAWI
RMD OPERATIONS ACP	SOUJJALLY JABAHA
ADVISOR TO PRESIDENT (E & C)	HAZIB KHOURY
RMD OPERATIONS, SPECIAL ASSIGNMENTS	DIMITRI ECONOMIDES
VP TRANSPORTATION (AIRPORTS & RAIL)	ISIDRIT LOS
VP CONSTR. SUPPORT & QUALITY MGMT.	NEMRI TADROS
GROUP HSE DIRECTOR	ROBERT DAVIES
VP RENEWABLE ENERGY & SPECIAL ASSIGNMENTS	NABIL HAMDAN
VP SALES, ESTIMATION & PROPOSALS (CIVIL)	ANTOINE NADDAD
VP SALES, EST. & PROP. (OIL, GAS & PIPELINES)	HANI HAYYA
MANAGING DIRECTOR, BUILDING DIVISION	MUNIR MAHMOUD
VP OIL & GAS	MARWAN SALLOUM
VP INFORMATION SYSTEMS & TECHNOLOGY	NAFEZ HUSSEINI
VP CORPORATE, RISK AUDIT, ASSETS & ACQUISITIONS	MAKRAM KHOURY
VP HR, OPERATIONS & DEPLOYMENT	CHASSAN OUAJJAH
VP HR, REWARDS & SYSTEMS	OUSAMA BALEH
SGM, B.O.T., POWER & ALTERNATIVE ENERGY	HEMMAT SAFWAT
MANAGER PLANT (GROUP)	DAHER ZAKI
VP ACCOUNTS M.O.	YOUSEF ASDO
VP GROUP ACCOUNTS & FINANCIAL CONTROL	IBRAHIM GHONEIM
VP BUDGETS, COST MONITORING & INTERNAL AUDIT	ADDEL HALIM RATEB
AVP ELECTRO-MECHANICAL	MICHEL BAAD
AVP TRAINING & DEVELOPMENT	RIAD EL-HAJ
MGR HEAVY LIFT	MANER KABBANI
MGR QUALITY (GROUP)	EMMANUEL KOUKOURAKIS
SECURITY MANAGER (GROUP)	SEAN McNUPP
GROUP RISK MANAGER (OPERATIONS	YENIA NELMY

BRANCHES & SUBSIDIARIES

- **CCC WLL SAUDI ARABIA** — AMD Mazen Qaddoura; Imad Khaled
- **CCC NORTH AFRICA** — MDO Samih Zaben; Bassam Daher; Ziad Beyoud
- **CCC YEMEN** — AMD Hani Shehadeh
- **CCC (Bahrain) WLL BAHRAIN** — EVPO Hazim Abdul Kader
- **CCC RUSSIA** — RMD Dimitri Economides
- **CCC THAILAND**
- **CCC UAE** — RMD Walid Salman; Yousef Chantous; George Haddad
- **CCC CIS** — MDO Hani Akkawi; Kazakhstan: Ghasi Anouti; Azerbaijan: Juan Boulos; Turkmenistan: Ahmad Refai
- **CCC PALESTINE** — RMD Walid Salman
- **CCC SAL LEBANON** — AMD Yusef Kan'an
- **CC Mining PANAMA** — John Burgess
- **CCC QATAR** — GM Mustafa Younis
- **CCC Ltd. Jordan JORDAN** — AMD Ghassan Danan
- **Al Ghandi & CCIC LLC DUBAI** — AMD Samir Khoury
- **CCC IRAQ** — MDO Hani Akkawi
- **CC GROUP SAL (Offshore) LEBANON** — CH Tawfic S. Khoury
- **CCC BUSINESS DEVELOPMENT**
  - GCC: Sobeil Gharayeb
  - N. Africa: Mohamed Tarek
  - USA: Patrice Chemin
  - CIS: Juan Boulos
- **CCC OMAN** — RMD Fathi Alaaldin; Hamed Amin
- **CCC AFRICA & CARIBBEAN** — RMD Moujally Jabara; AM Walid Jabara
  - Nigeria: Bassam Kawash
  - Mozambique: Simon Hamra
  - Botswana: George Chemmas
  - Mauritania: Nisham Gasayel
  - Guinea: Nayef Haddad
  - Senegal: Nisham Gasayel
  - Eq. Guinea: Nayef Haddad
  - Caribbean: Bassel Hilal
- **Consolidated Contractors (PNG) Company Ltd. PAPUA NEW GUINEA** — MGR Jean El Moussa
- **CC Engineering & Procurement SAL (Offshore) LEBANON** — CH Samer S. Khoury
- **CCC CHINA** — SRM Trevor Ford
- **CCC KUWAIT** — AMD Behjat Mousa
- **Consolidated Contracting Company Australia PTY Ltd. AUSTRALIA** — RMD Moujally Jabara
- **Consolidated Maritime Engineering & Development SAL LEBANON** — EVC Tawfic S. Khoury
- **CCC (Underwater Engineering) SAL LEBANON** — MD Semi Ghandour
- **SICON Oil & Gas SpA ITALY** — EVC Rashid Bhuhaiber
- **CSPC Consolidated Sicon Power Company** — SGM Hemmat Safwat
- **SICON Industries SAL** — VP Makram Khoury

ASSOCIATE COMPANIES

- **Morganti Group Inc. USA** — PR & CEO Habil Table
  - **USA OPERATIONS** — PR & CEO Habil Table
  - **INT'L OPERATIONS** — COO Leon Der Ghemeselian; Joy Nakhleh
  - **CM UAE** — COO Walid Salman
  - **FACILITY MANAGEMENT** — AM Dany Saliby
- **NPCC UAE** — SVP, DIR. Farid Asfour; CEO Agnel Machi
- **Palestine Electric Co.** — RMD Walid Salman
- **CCC (Kuwait) WLL KUWAIT** — PR Dirar Y. Alghanim; AMD Behjat Mousa
- **CC Van Saumeren SAL LEBANON** — CH Tawfic S. Khoury
- **Chiyoda - CCC Engineering (PTE) Limited SINGAPORE** — MD Hadeka Koda; GMD Hasan Seoudi
- **Wood Group - CCC Ltd. CYPRUS** — DGM Ghassan Dabbagh
- **ACWA Services Ltd. UNITED KINGDOM** — MD Gary Jackson
- **CC Energy Development LEBANON** — VP Marwan Salloum

AM	= Area Manager	EVPO	= Executive Vice President Operations
AMD	= Area Managing Director	GM	= General Manager
AVP	= Assistant Vice President	GVP	= Group Vice President
CEO	= Chief Executive Officer	MD	= Managing Director
COO	= Chief Operating Officer	MDO	= Managing Director Operations
CH	= Chairman	MGR	= Manager
CIO	= Chief Information Officer	PR	= President
CM	= Construction Management	RMD	= Regional Managing Director
CRD	= Central Rigging Department	SGM	= Segment General Manager
DGM	= Deputy General Manager	SRM	= Senior Manager
EVC	= Executive Vice Chairman	VP	= Vice President

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. WLL - JV

Consolidated Contractors Company

Organization Chart

- CCC GROUP BOARD
  - CHAIRMAN: SAID T. KHOURY
  - DEPUTY CHAIRMAN: TAWFIC S. KHOURY
  - ADVISOR: NAJIB KHOURY
  - BOARD'S EXECUTIVE COMMITTEE: MOHAMAD SEOUDI, JAMAL NAKHLEH, MAHMOUD ZEIBAK, IMAD SAAD
  - PETROLEUM & MINERALS BOARD
    - PRESIDENT PETROLEUM & MINERALS: WAEL S. KHOURY
  - PRESIDENT ENGINEERING & CONSTRUCTION: SAMER S. KHOURY
    - ADVISOR: NAJIB KHOURY
    - EXECUTIVE VICE PRESIDENT OPERATIONS: JEAN DESEILLIGNY
      - GVP ENGINEERING, PROCUREMENT & ELECTRO-MECHANICAL: HANI ALI
        - AVP ENGINEERING: GEORGE KFOURY
        - GM EPC-OIL & GAS: FRANCOIS DANGEON
        - MANAGER ELECTRO-MECHANICAL: MICHEL SAAD
        - SENIOR MANAGER PROCUREMENT: M. ABU EL-NIL
      - GVP SALES, PROPOSALS & SUPPORT: JAMAL AKL
        - VP CONSTRUCTION SUPPORT & QUALITY MANAGEMENT: HENRY TADROS
        - VP HEALTH, SAFETY & ENVIRONMENT: BELAL KAYYALI
        - VP SALES, ESTIMATION & PROPOSALS (OIL, GAS & PIPELINES): HANI RAYYA
        - VP SALES, ESTIMATION & PROPOSALS (CIVIL): ANTOINE HADDAD
        - VP RENEWABLE ENERGY & SPECIAL ASSIGNMENTS: NABIL HAMDAN
        - TECHNICAL DIRECTOR: ABDEL GHANI HILBAWI
        - ACWA SERVICES LTD.: PETER RIPLEY
        - SENIOR MANAGER CHINA: MAROUN LEBBOS
        - RISK MANAGER (PROJECTS): CHRISTOPHER MORRIS
        - RD PROJECT DEVPT. N. AFRICA & CIS: ALAN AYRIA
        - SENIOR MANAGER BUSINESS DEVPT. MALAYSIA: GEORGE DABBAS
        - SALES & BUSINESS DEVPT. MANAGER ARAB GULF & SAUDI ARABIA: SOHEL GHORAYEB
        - MANAGER BUSINESS DEVPT. CIS: JUAN BOULOS
        - SR. CONSULTANT MARKETING & BUSINESS DEVPT. AFRICA: PATRICE CHEMIN
        - BUSINESS DEVPT. AUSTRALIA: HASSAN SEOUDI, PAUL BOWLER
      - MD OPERATIONS MIDDLE EAST: NAZIH ABDUL KADER
        - RMD OPERATIONS UAE & PALESTINE: WALID SALMAN
        - AMD UAE (NORTHERN EMIRATES): SAMIR N. KHOURY
        - AMD SAUDI ARABIA: MAZEN QADDOURA
        - AMD KUWAIT: BAHJAT MOUSSA
        - GM QATAR: MUSTAFA YOUNIS
        - REPRESENTATIVE OFFICE BAHRAIN
        - WOOD GROUP-CCC LTD. (O&M): SHAMS DABBAGH, DEPUTY GM
      - MD OPERATIONS NORTH AFRICA: SAMIH ZABEN
        - AM EGYPT & SUDAN: BASSAM DAHER
        - AM LIBYA: BASSAM ADDADA
        - AM ALGERIA & MOROCCO: ZIAD BAYYOUD
        - AM SYRIA: SHAWKAT FAKIH
        - CCC BUILD EGYPT: AZZAM FEDDA, DIRECTOR
      - RMD OPERATIONS CIS & IRAQ: HANI AKKAWI
        - RMD OPERATIONS AFRICA, ASIA & THE PACIFIC: MOUJALLY JABARA
        - RMD OPERATIONS, SPECIAL ASSIGNMENTS: DIMITRI ECONOMIDES
        - EXCUTIVE DIRECTOR BUSINESS UNIT (PIPELINES): RASHID SHUHAIBER
        - GM CONTRACTUAL MATTERS: LEON DEROHANNESSIAN
    - IMAD SAAD
      - RMD OPERATIONS OMAN & PAKISTAN: FATHI ALA'ADDIN
      - AMD YEMEN: HANI SHEHADEH
      - AMD JORDAN: GHASSAN DANAN
      - AVP CONSTRUCTION MANAGEMEMT: SUHEIL HALABY
      - MORGANTI GROUP, INC.: NABIL TAKLA, EVP
  - PRESIDENT HUMAN RESOURCES: SUHEIL H. SABBAGH
    - VP HUMAN RESOURCES, REWARDS & SYSTEMS: OUSAMA SALEH
    - VP HUMAN RESOURCES, OPERATIONS & DEPLOYMENT: GHASSAN OUAIJAN
  - CHIEF FINANCIAL OFFICER: JAMAL NAKHLEH
    - GVP FINANCE, ACCOUNTS, TREASURY & CONTROL: FARID ASFOUR
      - VP ACCOUNTS (MANAGING OFFICE): YOUSEF ABDO
      - VP GROUP ACCOUNTS & FINANCIAL CONTROL: IBRAHIM GHONEIM
      - VP TREASURY & INSURANCE: FOUAD KHOURY
        - MANAGER INSURANCE: RAMI ABI AAD
    - GVP FINANCE, ACCOUNTS, TREASURY & CONTROL: FARID ASFOUR
      - CCC (UNDERWATER ENGINEERING) S.A.L. & OFFSHORE: SAMI GHANDOUR, MD
      - NATIONAL PETROLEUM CONSTRUCTION CO. (NPCC)
      - OTHER AFFILIATED COMPANIES
      - EPC SUBSTATIONS OPERATIONS MANAGER: HEMMAT SAFWAT
      - GROUP LEGAL COUNCIL: EDGARD MARINA
      - TOP RELATIONS IN COUNTRIES OF OPERATIONS & SALES OPPORTUNITIES DEVELOPMENT
      - VP STRATEGIC PLANNING, BUDGETING & INVESTMENTS: NAHED KHARMA
        - SEGMENT GM BOT, POWER, DESALINATION & ALTERNATIVE ENERGY: HEMMAT SAFWAT
        - AVP INVESTMENTS
        - MANAGER CORPORATE PLANNING & MONITORING (GROUP): SUHAYL SHAMI
    - CIO CORPORATE ASSETS & RISK MANAGEMENT: ZUHAIR HADDAD
      - VP INFORMATION SYSTEMS & TECHNOLOGY: NAFEZ HUSSEINI
      - VP PLANT (GROUP): IMAD MEHIO
      - VP CORPORATE RISK MANAGEMENT, ASSETS, MERGERS & ACQUISITIONS: MAKRAM KHOURY
      - E-PROCUREMENT – CORPORATE ASSETS: GHASSAN SHANAA, MAROUN LEBBOS
      - CONTRACTS
    - VICE CHAIRMAN SICON OIL & GAS: RASHID SHUHAIBER
      - VP STRATEGIC PLANNING, BUDGETING & INVESTMENTS: NAHED KHARMA
      - CORPORATE SECRETARY & GROUP GOVERNANCE: WALID NOUREDDINE
      - GENERAL INTERNAL AUDIT & ASSURANCE: ABDEL HALIM RATEB, SAMI TAHA

LEGEND

AM	Area Manager
AMD	Area Managing Director
AVP	Assistant Vice President
CIO	Chief Information Officer
GM	General Manager
GVP	Group Vice President
MD	Managing Director
RD	Regional Director
RMD	Regional Managing Director
VP	Vice President
	Managing Office Athens
	Area/Regional Offices
	Associate Companies

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

REVISION 5.2 - MARCH 03, 2012

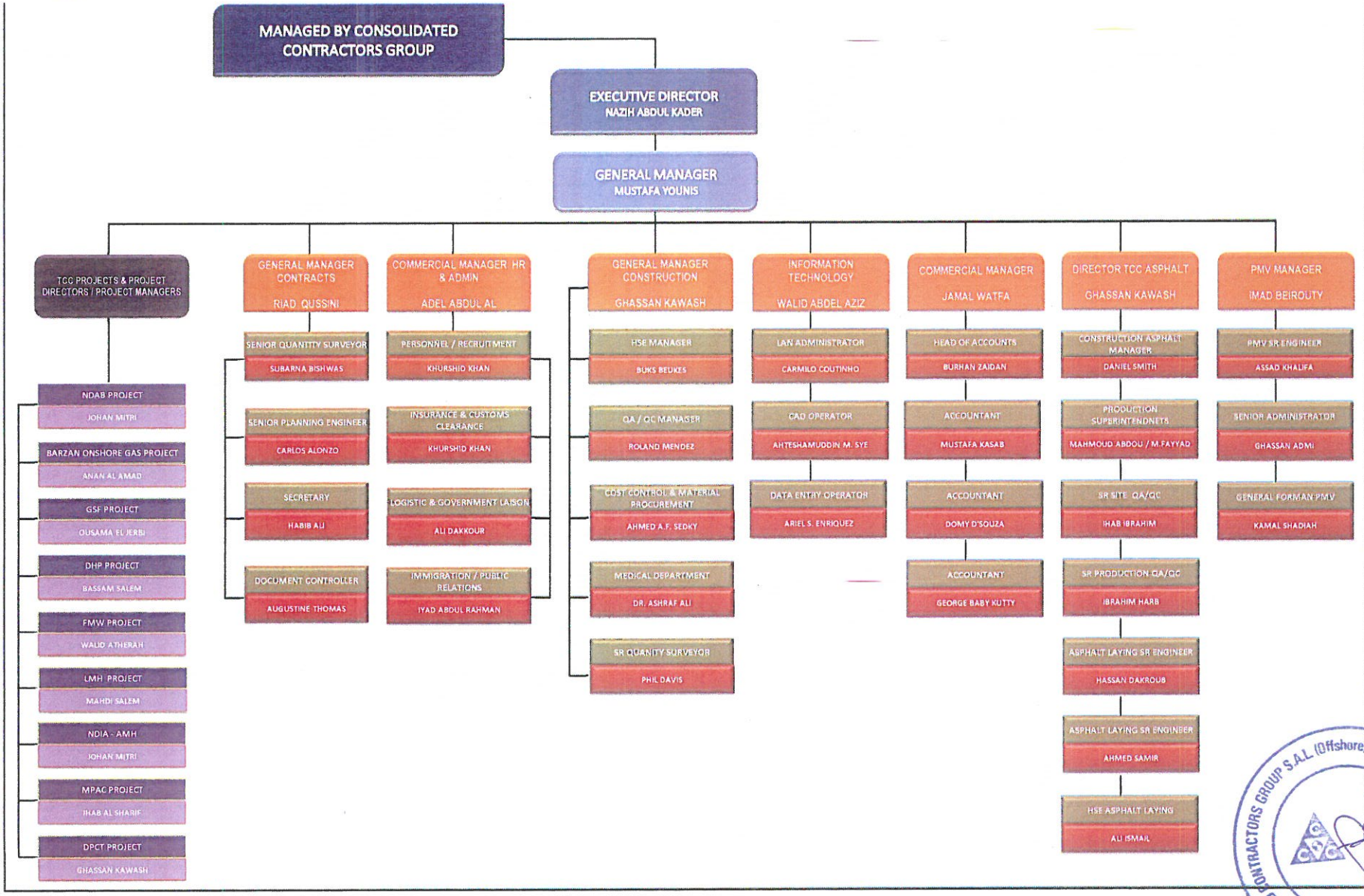
APPENDIX E – ANNEXURE 6

COMPANY ORGANISATION CHART - TCC

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) / TEYSEER CONTRACTING CO. W.L.L. - JV

TEYSEER CONTRACTING COMPANY W.L.L.

COMPANY ORGANIZATION CHART



CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

SECTION 13: APPENDIX E
CONTRACTOR'S RESOURCES
Annexure 7: Contractor's Project Organization Chart

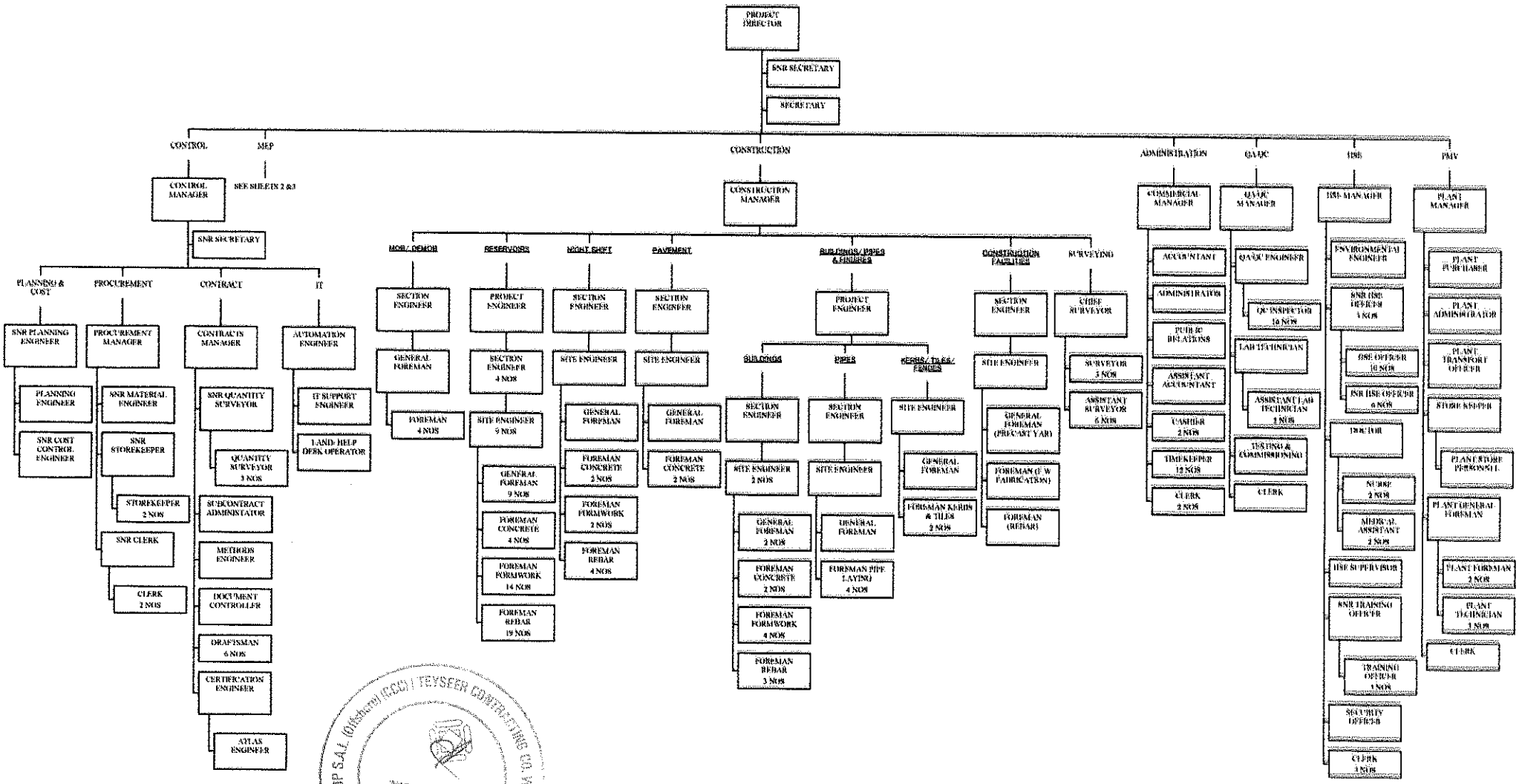
ANNEXURE (7) CONTRACTOR'S PROJECT ORGANISATION CHART

CONTRACTOR provides the proposed organisation chart for this CONTRACT (including key CONTRACTOR and SUBCONTRACTOR personnel, where applicable, and the person responsible for QA/QC, etc.). The CV's of all the personnel identified under this Annexure shall be submitted under Annexure 1.

Please find enclosed herein the proposed Project Organization Chart.

The CVs of Key Personnel are submitted under Annexure 1.

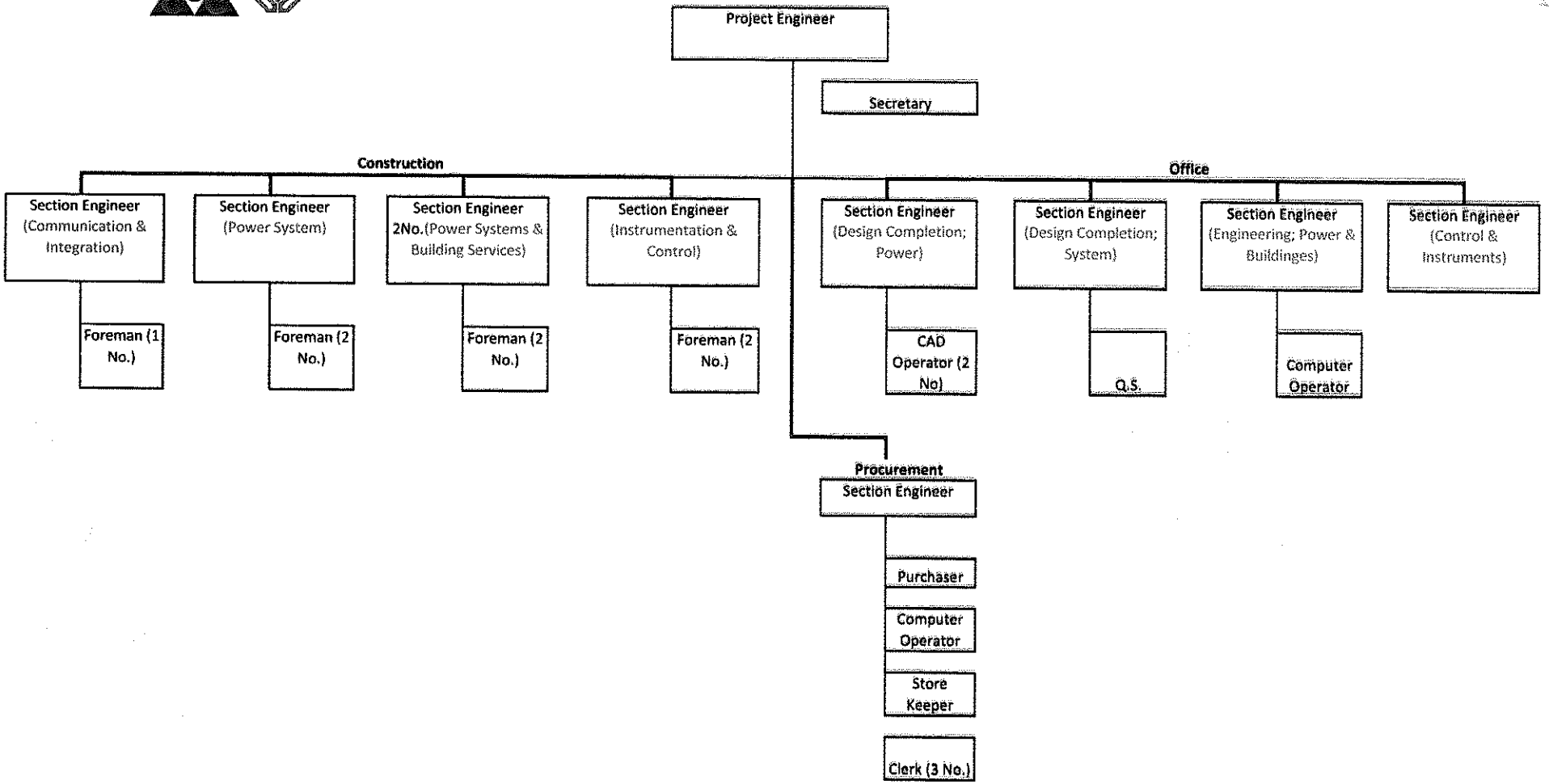
CONSTRUCTION OF MEGA RESERVOIR PRPSs - QATAR
ORGANISATION CHART



September, 2014

SHEET 1 OF 1

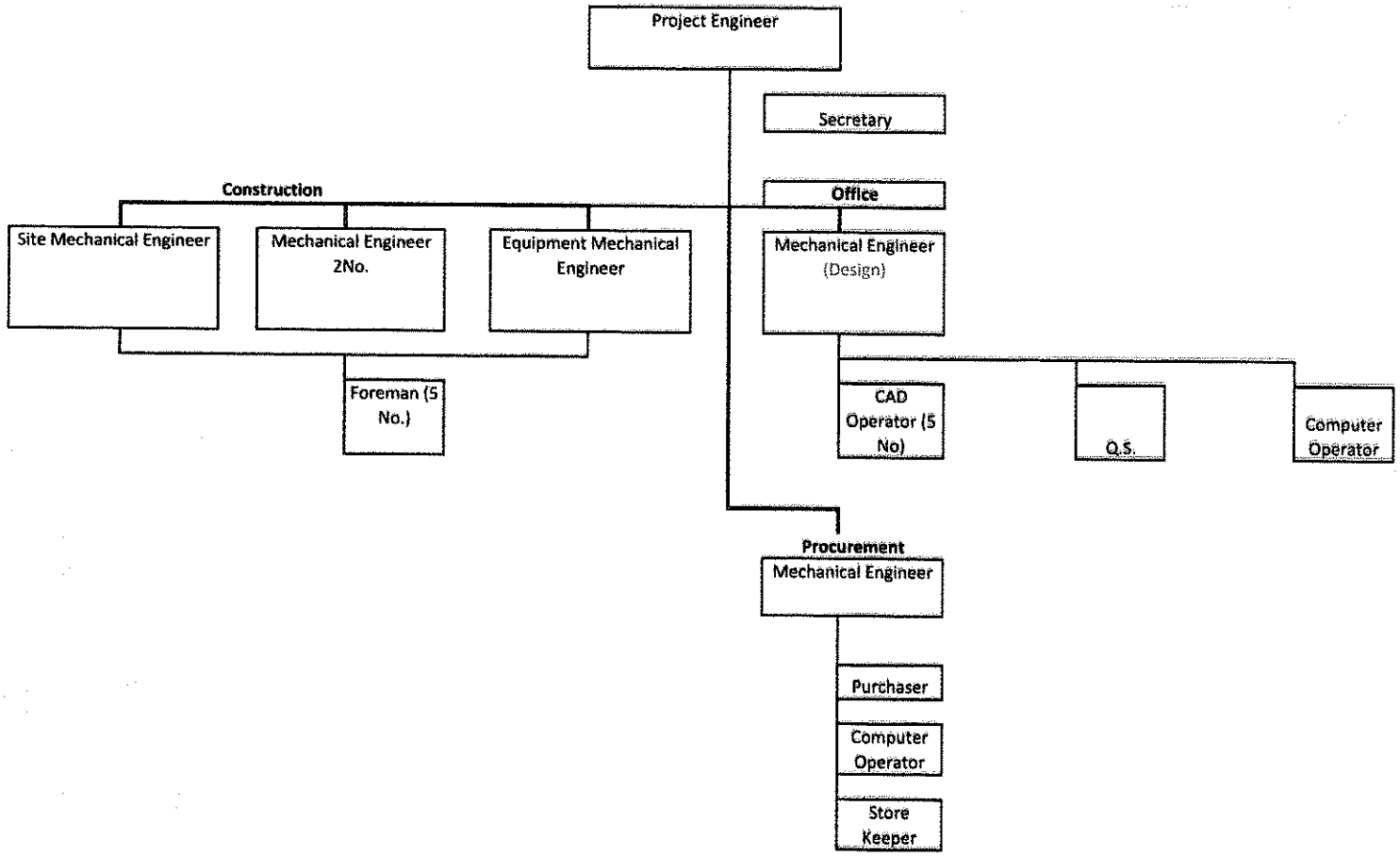
CONSTRUCTION OF MEGA RESERVOIR PRPSs-QATAR
ORGANISATION CHART (ELECTRICAL)



CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) / TEYSEER CONTRACTING CO. W.L.L.

September, 2014

CONSTRUCTION OF MEGA RESERVOIR PRPSs-QATAR
ORGANISATION CHART (MECHANICAL)



CONSOLIDATED CONTRACTING GROUP S.A.L. (Holding) (CCG) / TEYSEER CONTRACTING CO. WLL - JV

SECTION 13: APPENDIX E
CONTRACTOR'S RESOURCES
Annexure 8: QA/QC Procedure

ANNEXURE (8) QA/QC PROCEDURES

Contractor shall submit text type of Project Specific Quality Plan; certificate related to Quality Management System if any, other Quality related documents such as Quality Procedures etc.

Project Quality Plan (PQP) shall include the following within their scope of work as minimum requirements:

1. Scope.
2. Reference.
3. Terms and definitions.
4. Responsibilities of key personnel.
5. Organization chart.
6. Outline of contractor's Quality Management System and its principles.
7. *Quality Management System*: Control of project management processes, Control of documents and data, Control of records.
8. Management Responsibility.
9. Resource Management.
10. *Project Management*:
    - Project administration
    - Mobilization.
    - Project planning.
    - *Procurement Management*: Materials control and storage, control of subcontractor and supplier. Verification of purchased product, Identification and traceability, preservation of product
    - *Engineering Management*: Design and development, control of drawings, coordination, As-built drawing, Technical queries.
    - Variation / site measurement.
    - *Construction Management*: Execution plan, construction procedures, inspection and test plan, testing laboratory, Control of monitoring, measuring and test equipment, field coordination procedure, Project close-out.
11. *Measurement, analysis and improvement:* Internal audit, monitoring and measurement, Control of nonconforming product, analysis of data ,corrective action, preventive action.

Please find enclosed herein the QA/QC Index and the relevant QA/QC Documentation.

QA/QC Index

Please find enclosed herein the following QA/QC Documentation:

- CCC ISO 9001-2008 Certificate
- TCC ISO 9001-2008 Certificate
- Master List of Approved Procedures
- List of Quality Management Procedures
- Control of Non-Conforming Product Flowchart
- Monthly Quality Reporting Template
- Quality Improvement Write-up
- Quality Management Procedure for Inspection & Testing (QMP-GEN-011)
- Quality Management Procedure for Planning and Scheduling (QMP-GEN-015)
- Quality Management Procedure for Quality System Audits (QMP-GEN-016)
- Quality Management Procedure for Corrective and Preventive Action (QMP-GEN-017)
- Quality Management Procedure for Customer Complaints (QMP-GEN-021)
- Proposed Project Quality Plan
- CCC Quality Manual

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. WLL - JV

APPENDIX E – ANNEXURE 8

ISO 9001:2008 CERTIFICATE - CCC

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

BUREAU VERITAS
Certification

Certification

Awarded to

CONSOLIDATED CONTRACTORS GROUP S.A.L. (HOLDING COMPANY)

62B, Kifissias Ave., "POLIS" Center, 151 10 Amaroussion
GREECE

Bureau Veritas Certification certify that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

Standards

ISO 9001:2008

Scope of supply

PROJECT MANAGEMENT, ENGINEERING, PROCUREMENT, CONSTRUCTION, INSTALLATION AND COMMISSIONING OF PLANTS FOR THE OIL AND GAS RELATED INDUSTRY, CIVIL STRUCTURES, INFRASTRUCTURE WORKS AND MARINE WORKS.

Original Approval Date: 29 November, 1993

Subject to the continued satisfactory operation of the organisation's Management System, this certificate is valid until: 16 March, 2015

To check this certificate validity please call + 30 210 4063 000

Further clarifications regarding the scope of this certificate and the applicability of the management system requirements may be obtained by consulting the organisation.

N. TRILIZAS

Date: 30 March, 2012

Certificate Number: *GR18493Q*

UKAS MANAGEMENT SYSTEMS
008

Bureau Veritas Certification (Holding) S.A.S. using the accreditation certificate number 008

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEKSEER CERTIFICATION

CERTIFICATION AUTHORITY OFFICE ADDRESS: Olbrachtova 1, 140 02 Praha 4, Czech Republic
MANAGING OFFICE ADDRESS: Bureau Veritas Certification Hellas S.A., 23 Etoliikou St., 185 45 Piraeus, Greece

APPENDIX E – ANNEXURE 8

ISO 9001:2008 CERTIFICATE - TCC

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) / TEYSEER CONTRACTING CO. WLL - JV

Applus+ VELOSI

Velosi Quality Management International LLC

hereby certifies that the management system of

Teyseer Contracting Company W.L.L

Building no. 106, Ali Bin Abi Taleb Street 820, Al Assery Area, Zone-40
Near Khalifa Al Attiya Interchange, Off 'D' Ring Road, P.O Box 2630
Doha, State of Qatar

has been audited and found to be in compliance with
the requirements of

ISO 9001:2008
Quality Management System

for

Contracting, Construction, Installation and Maintenance of Mechanical, Civil, Electrical, Pipelines, Road Works & Infrastructure Works in Projects Associated with Oil & Gas and Other Sectors

Certificate No	:	C 314
Original Date	:	20.01.2011
Current Date	:	02.02.2014
Expiry Date	:	19.01.2017

Head of Operations

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) TEYSEER CONTRACTING CO. W.L.L. - JV

MGMT. SYS.
RvA C 407

The certificate may be rendered invalid if there is any lack of fulfilment of conditions set out in the VQMI Rules of Certification

Correspondence Address: #205, Block 'B', Abu Dhabi Business Hub, P.O. Box: 114182, ICAD-I, Mussafah, Abu Dhabi (UAE)
Registered Address: 201, Mayfair Business Centre, P.O.Box: 62726, DIP, Dubai (U.A.E), Commercial License No. 533437, Registration No. 59107
Tel: 00971 2 5502600 Fax: 00971 2 5502601 Email: velosiqm@velosi.ae Web: www.vqmi.com

APPENDIX E – ANNEXURE 8

MASTER LIST OF APPROVED PROCEDURES

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC)

QUALITY MANAGEMENT PROCEDURES

MOA

QMP-MOA-001	PREPARATION OF QUALITY MANAGEMENT PROCEDURES
QMP-MOA-003	DOCUMENT CONTROL
QMP-MOA-005	MANAGEMENT REVIEW
QMP-MOA-006	CONTROL OF QUALITY RECORDS
QMP-MOA-009	PREPARATION OF ESTIMATION AND PROPOSALS
QMP-MOA-010	MOBILIZATION
QMP-MOA-013	PREPARATION OF METHOD STATEMENTS
QMP-MOA-016	QUALITY SYSTEM AUDITS
QMP-MOA-017	CORRECTIVE AND PREVENTIVE ACTION
QMP-MOA-018	QUALITY MEASUREMENT AND IMPROVEMENT
QMP-MOA-019	PROJECT TECHNICAL & COMMERCIAL AUDIT
QMP-MOA-021	PLANNING
QMP-MOA-022	PROJECT MONITORING
QMP-MOA-024	WRITTEN PRACTICE FOR NDT PERSONNEL QUALIFICATION
QMP-MOA-025	CONSTRUCTABILITY
QMP-MOA-026	PREPARATION & ISSUE OF CORPORATE MANUALS
QMP-MOA-027	PRE-COMMISSIONING
QMP-MOA-028	EPC INTERFACE PROCEDURE
QMP-MOA-029	ETHICS AND ANTI-CORRUPTION PROGRAM
QMP-MOA-030	ENGINEERING DEPARTMENT ACTIVITIES
QMP-MOA-030A	PLANTS ENGINEERING DEPARTMENT ACTIVITIES
QMP-MOA-031	DESIGN AND DEVELOPMENT PLANNING
QMP-MOA-031A	(PLANTS) DESIGN AND DEVELOPMENT PLANNING
QMP-MOA-032	NUMBERING, ISSUING AND CHECKING OF DOCUMENTS
QMP-MOA-033	PREPARATION, CHECKING AND CONTROL OF CALCULATIONS
QMP-MOA-034	DESIGN AND DEVELOPMENT VALIDATION
QMP-MOA-036	DESIGN REVIEW
QMP-MOA-036A	(PLANTS) DESIGN REVIEW
QMP-MOA-037	DESIGN VERIFICATION & VALIDATION
QMP-MOA-037A	(PLANTS) DESIGN VERIFICATION & VALIDATION
QMP-MOA-038	CHANGES PROCEDURE
QMP-MOA-038A	(PLANTS) DESIGN CHANGE
QMP-MOA-040	HR MANAGEMENT
QMP-MOA-050	MANAGING OFFICE, PLANT DEPARTMENT FUNCTIONS
QMP-MOA-051	TRAINING AND PERSONNEL QUALIFICATION
QMP-MOA-052	PURCHASING OF EQUIPMENT AND SPARE PARTS
QMP-MOA-060	INFORMATION SYSTEMS DEPARTMENT FUNCTIONS
QMP-MOA-061	EMAIL AND INTERNET USAGE

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) / TEYSEER CONTRACTING CO. W.L.L. - JV
ISO 9001 BUREAU VERITAS Certification

PROJECTS*

QMP-GEN-001	TRANSFER OF CONTRACT RESPONSIBILITY & POST CONTRACT REVIEW
QMP-GEN-002	DOCUMENT AND DATA CONTROL
QMP-GEN-003	MANAGEMENT REVIEW
QMP-GEN-004	QUALITY RECORDS
QMP-GEN-005	TRAINING AND PERSONNEL QUALIFICATIONS
QMP-GEN-006	PURCHASING
QMP-GEN-007	MATERIAL CONTROL
QMP-GEN-008	CONTROL OF NON-CONFORMING PRODUCT
QMP-GEN-009	MATERIAL CERTIFICATION AND TRACEABILITY
QMP-GEN-010	INSPECTION, MEASURING & TEST EQUIPMENT
QMP-GEN-011	INSPECTION & TEST STATUS
QMP-GEN-012	SUBCONTRACTING
QMP-GEN-013	CONCESSION / INFORMATION REQUEST
QMP-GEN-014	CONTROL OF CORRESPONDENCE
QMP-GEN-015	PLANNING & SCHEDULING
QMP-GEN-016	QUALITY SYSTEM AUDITS
QMP-GEN-017	CORRECTIVE AND PREVENTIVE ACTION
QMP-GEN-018	CERTIFICATION AND HANDING OVER
QMP-GEN-019	FIELD ENGINEERING
QMP-GEN-021	CUSTOMER COMPLAINTS
QMP-GEN-022	PROGRESS MONITORING
QMP-GEN-027	PRECOMMISSIONING / COMMISSIONING

*This is an indicative list and could be revised as per project needs without revising the Quality Manual.

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ISO 9001
BUREAU VERITAS

APPENDIX E – ANNEXURE 8

LIST OF QUALITY MANAGEMENT PROCEDURES

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCCI) / TENSKER CONTRACTING CO. WLL - JV

ATTACHMENT 4

QUALITY MANAGEMENT PROCEDURES

Internal Code No.	Document Title
QMP-GEN-001	Transfer of Contract Responsibility And Post Contract Review
QMP-GEN-002	Document & Data Control
QMP-GEN-003	Management Review
QMP-GEN-004	Quality Records
QMP-GEN-005	Training & Personnel Qualifications
QMP-GEN-006	Purchasing
QMP-GEN-007	Material Control
QMP-GEN-008	Control of Non-Conforming Products
QMP-GEN-009	Material Certification & Traceability
QMP-GEN-010	Inspection, Measurement & Testing Equipment
QMP-GEN-011	Inspection and Testing
QMP-GEN-012	Subcontracting
QMP-GEN-013	Concession & Information Request
QMP-GEN-015	Planning & Scheduling
QMP-GEN-016	Quality System Audits
QMP-GEN-017	Corrective & Preventive Action
QMP-GEN-018	Handover Procedure
QMP-GEN-019	Field Engineering
QMP-GEN-021	Customer Complaints
QMP-GEN-022	Progress Monitoring
QMP-MOA-018	Quality Measurement & Improvement
QMP-MOA-027	Precommissioning / Commissioning

NOTE 3: *The QMP-MOA-XXX procedures form part of CCC corporate Quality System and can only be revised under the authority of the Construction Support & Quality Management Dept. at MOA and with the consent of the certifying authority.*

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCCO) / TEYSEER CONTRACTING CO. W.L.L. - JV

ATTACHMENT 4

QUALITY MANAGEMENT PROCEDURES

Internal Code No.	Document Title
QMP-GEN-001	Transfer of Contract Responsibility And Post Contract Review
QMP-GEN-002	Document & Data Control
QMP-GEN-003	Management Review
QMP-GEN-004	Quality Records
QMP-GEN-005	Training & Personnel Qualifications
QMP-GEN-006	Purchasing
QMP-GEN-007	Material Control
QMP-GEN-008	Control of Non-Conforming Products
QMP-GEN-009	Material Certification & Traceability
QMP-GEN-010	Inspection, Measurement & Testing Equipment
QMP-GEN-011	Inspection and Testing
QMP-GEN-012	Subcontracting
QMP-GEN-013	Concession & Information Request
QMP-GEN-015	Planning & Scheduling
QMP-GEN-016	Quality System Audits
QMP-GEN-017	Corrective & Preventive Action
QMP-GEN-018	Handover Procedure
QMP-GEN-019	Field Engineering
QMP-GEN-021	Customer Complaints
QMP-GEN-022	Progress Monitoring
QMP-MOA-018	Quality Measurement & Improvement
QMP-MOA-027	Precommissioning / Commissioning

NOTE 3: *The QMP-MOA-XXX procedures form part of CCC corporate Quality System and can only be revised under the authority of the Construction Support & Quality Management Dept. at MOA and with the consent of the certifying authority.*

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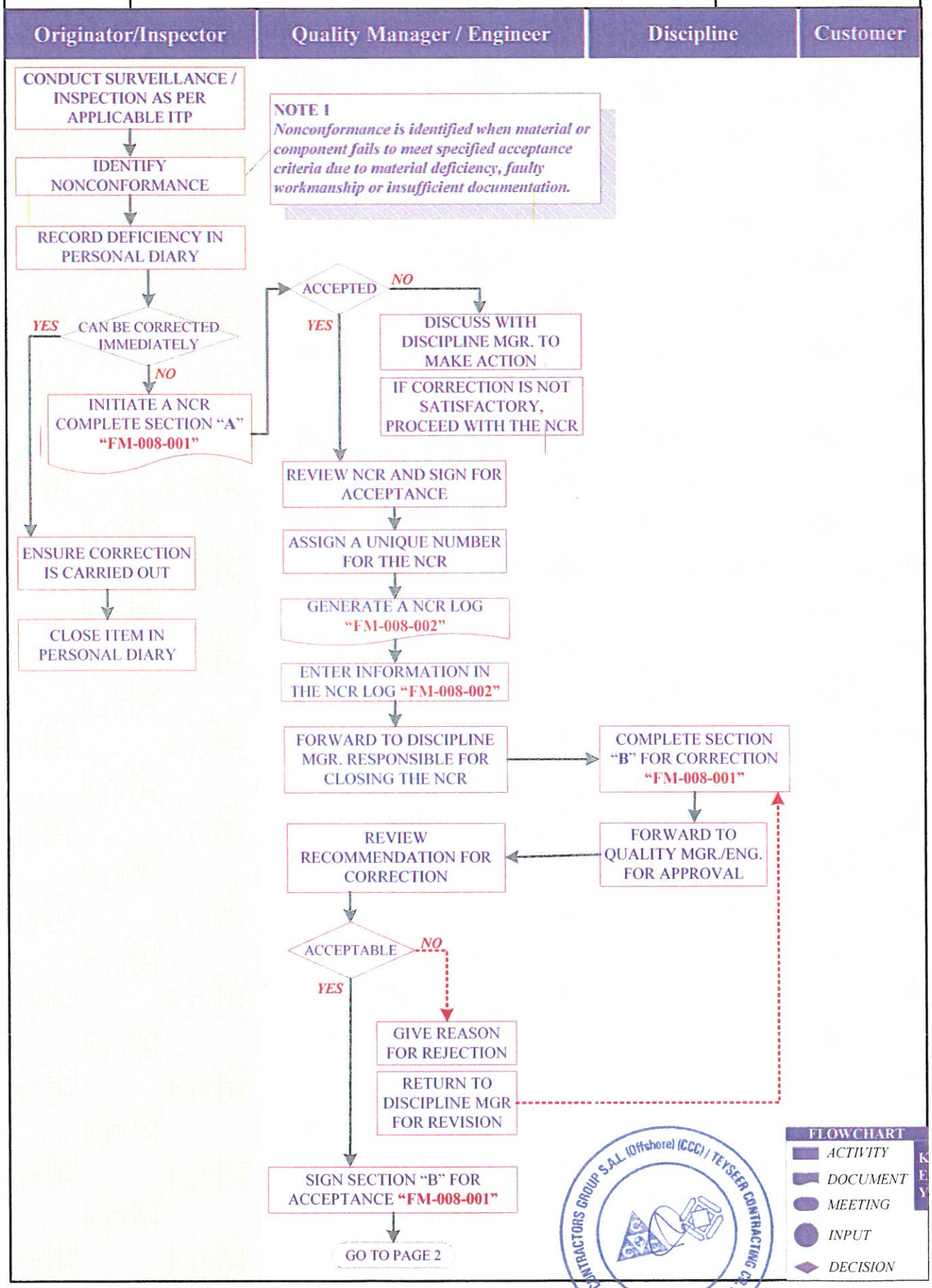
APPENDIX E – ANNEXURE 8

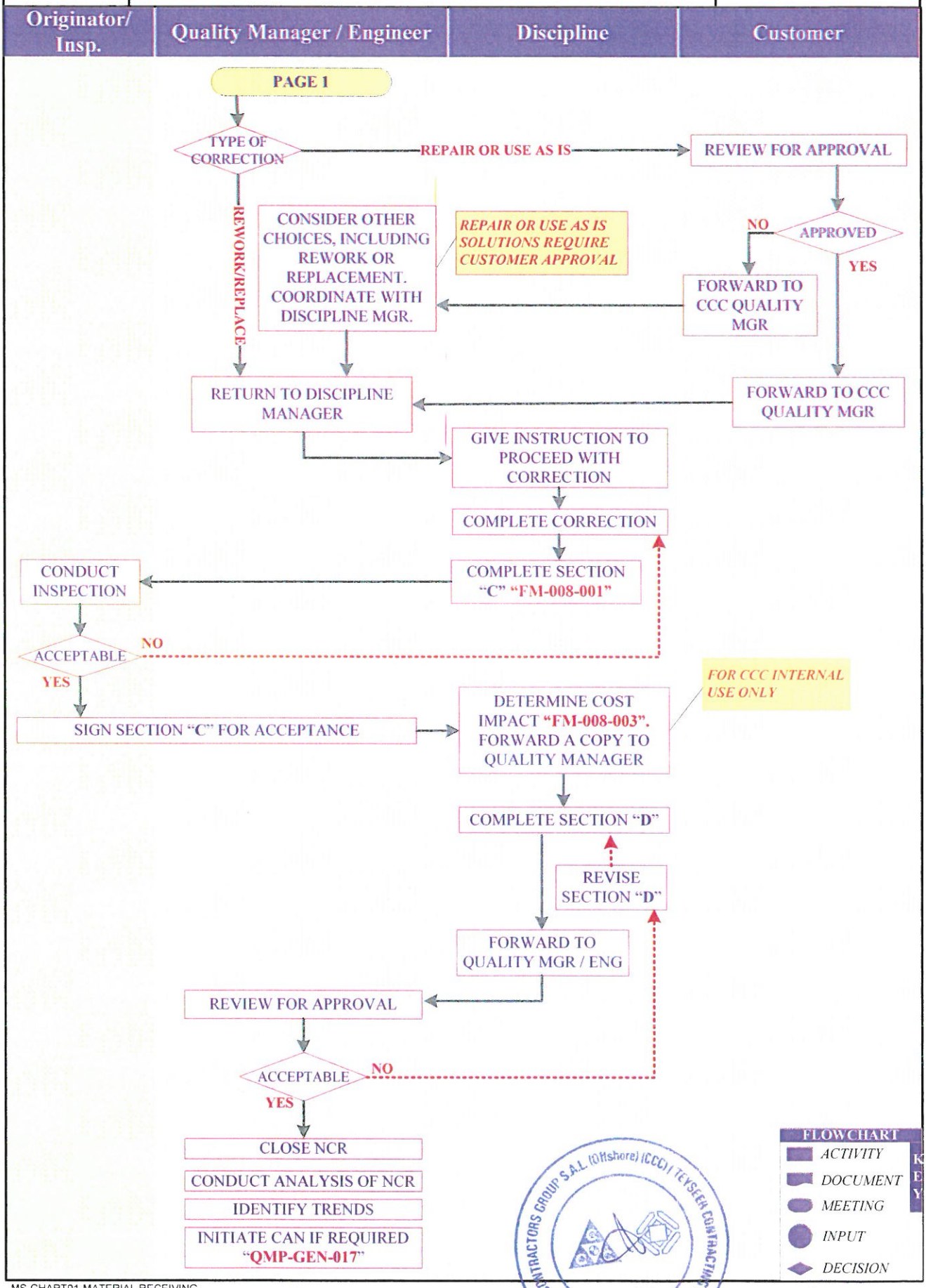
CONTROL OF NON-CONFORMING PRODUCT FLOWCHART

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

CONTROL OF NON-CONFORMING PRODUCT



CONTROL OF NON-CONFORMING PRODUCT



CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

APPENDIX E – ANNEXURE 8

MONTHLY QUALITY REPORTING TEMPLATE

CONSOLIDATED CONTRACTORS GROUP S.A.L (Offshore) (CCG) / TEYSEER CONTRACTING CO. WLL - JV

	CCC-TCC JV Project Name **QA/QC Monthly Report**	Form No: FM-017-001 Owner: QMP-GEN-017 Rev. No: B Page No: 1 of 2

Reporting Month: | **Project percentage completion:**

(I) Status of Procedures

Type	No to be Issued	No Issued	No Approved	Notes
PQP				
QMP				
QCP				
ITP				
WPS				
PQR				

NOTE: A table can be attached in addition to the above information

(II a) Non Conformances

Description	CCC-TCC JV NCR	COMPANY NCR
Total NCR's Issued		
Total NCR's Closed		
Total NCR's Open		

(II b) Ratio of NCR's to IR's

Disciplines	Target %	IR's Issued (Total)	CCC-TCC JV NCR's Issued (Total)	Ratio of NCR's Issued to IR's Issued (Total)
Civil	≤ 0.35			
Mechanical	≤ 0.35			
E&I	≤ 0.35			

(II c) Ratio of Rejected IR's

Disciplines	Target %	IR's Issued (Total)	IR's Rejected (Total)	Ratio of IR Rejected to IR's Issued (Total)
Civil	≤ 3			
Mechanical	≤ 3			
E&I	≤ 3			

(III) Audits / Corrective Action Notices

No of Audits Scheduled (Total)	
No of Audits Conducted (Total)	

No of CAN Issued (Total)	
No of CAN Open (Total)	

NOTE: Please attach copy of latest Audit Schedule and Audit Reports carried out during this Month.

(IV) Management Review Meetings

No of MRM Scheduled (Total)	
No of MRM Conducted (Total)	

(V) Areas of Concern

(VI) COMPANY Complaints

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) / CCC / TCC / TEXSEL CONTRACTING CO. W.L.L. JV

	CCC-TCC JV Project Name **QA/QC Monthly Report**	Form No: FM-017-001 Owner: QMP-GEN-017 Rev. No: B Page No: 2 of 2

Reporting Month: | **Project percentage completion:**

(VI) QA/QC Staff

	On Site	Org. Chart
No of QC Inspectors		
No of QC Clerks/Operators		

(VII) Welders

No of Welders on Site	
No of Welders Qualified	

(VIII) NDT / PWHT Performance & CIVIL Performance

NDT PERFORMANCE		
Description	Target	Actual (Cumulative)
No of Welds Requested for RT		
No of Welds Radiographed by S/C		
RT Backlog (No of Joints)	≤ 500	
No of Repairs		
% Repair Rate	≤ 3%	
No of Welds Requested for MT/PT		
No of Welds MT/PT completed		
MT/PT Backlog (No of Joints)	≤ 500	
No of Welds Requested for UT		
No of Welds UT completed		
UT Backlog (No of Joints)	≤ 500	
No of Welds Requested for FN		
No of Welds FN completed		
FN Backlog (No of Joints)	≤ 500	
No of Welds Requested for PMI		
No of Welds PMI completed		
PMI Backlog (No of Joints)	≤ 500	

PWHT PERFORMANCE		
Description	Target	Actual (Cumulative)
No of Welds Requested for PWHT		
No of Welds PWHT completed		
PWHT Backlog (No of Joints)	≤ 500	

EARTHWORKS

Tests	No.Tests Done	Passed	Failed	Ratio

CONCRETE AND AGGREGATES

Tests	No.Tests Done	Passed	Failed	Ratio

ASPHALT AND AGGREGATES

Tests	No.Tests Done	Passed	Failed	Ratio

Note: *A Copy of Talisman report may be attached*

(X) Architectural/Finishing

(XI) Lessons Learned / Proposals for Improvement

NOTE: *Please attach details in a separate file, as applicable.*

Signed By : _____ **Date :** _____

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) / TASEER CONTRACTING WLL - JV

APPENDIX E – ANNEXURE 8

QUALITY IMPROVEMENT WRITE-UP

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

QUALITY IMPROVEMENT

POLICY

CORPORATE

CCC's basic principles and core values are epitomized in the Corporate Quality Policy. With respect to continual improvement, the Quality Policy specifically states:

"We will apply the best possible technology in the industry to comply with the agreed requirements and continually to improve the effectiveness of the quality management system. We will create enabling structure for continual improvement by involving employees at all levels of the organization."

CCC's Corporate Quality Policy is signed by the Company Chairman, is reviewed for continuing suitability and shall be followed by all employees.

PROJECTS

On the Projects' level, the Project Quality Policy and Project Quality Commitment Statement not only bind and enforce CCC's drive towards continual improvement, but in addition provide the path towards achieving this goal by means of measurable Key Performance Indicator (KPI) targets.

Both statements are signed by the Project Manager and QA/QC Manager, and all personnel become familiarized with their terms through indoctrination seminars.

PROCEDURES

Aside from Quality Policy statements, CCC follows Quality Management System Procedures addressing quality improvement at both the Corporate and Project levels.

CORPORATE

Corporate Quality Management System Procedure QMP-MOA-018 "Quality Measurement and Improvement" defines methods of implementing measurement, analyzing data, monitoring the Quality Management System and improvement of processes at CCC in an effective manner, in order to meet the requirements of section 8 of ISO 9001:2008. This procedure also describes the methodology applied for assessing the level of Client's satisfaction and the process for its improvement.

Tools to accomplish the above include among others:

- Balanced Scorecards
- Key Performance Indicators (KPI)
- Statistical techniques

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QUALITY IMPROVEMENT

PROJECTS

Project Quality Management System Procedure QMP-GEN-017 "Corrective and Preventive Action" uses corrective and preventive action as a tool to improve the Project Quality Management System and meet the requirements of ISO 9001:2008 clause 8.5.2 & 8.5.3.

Tools to accomplish the above include among others:

- Trend Analysis of Non-conformities (product and system)
- Root Cause Analysis
- Corrective Action Request & Preventive Action Request and follow-up actions

ESSENTIALS

Through Company Procedures, Top-level Management of CCC acts to continually improve the Quality Management System utilizing:

- Lessons Learned, across CCC at Corporate and Project levels.
- Management Review Meetings.
- Corrective and Preventive Action.
- Knowledge Management: Forming the common platform for elicitation, validation of the best available knowledge in CCC group and its implementation through best practice procedures and process workflows. This platform constitutes the baseline for establishing and implementing advanced project processes in our operations. Best practice procedures incorporate improved project execution methodologies leading to systematic improvements to the productivity and quality. Examples, are procedures for Pressure Testing and Pre-commissioning.
- Initiatives to promote application of new technology and ideas through R&D teams.

TRAINING

Finally, CCC provides and supports employees' training and strives to increase their competence, adding to the Plan-Do-Check-Act (PDCA) methodology of continual improvement of the Quality Management System. Quality Management System Procedures on "Training and Personnel Qualification" (QMP-MOA-051 & QMP-GEN-005) define how this is achieved.

APPENDIX E – ANNEXURE 8

QUALITY MANAGEMENT PROCEDURE FOR INSPECTION & TESTING (QMP-GEN-011)

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCCO) / TEYSEER CONTRACTING CO. W.L.L. - JV

This document is categorized as a "GEN" document and should not be used directly. It's provided by CS&QM Department and is to be modified to suit Project specific requirements. Modification may entail, inclusion of Project specific requirements (often prescribed in Contract documents), Customer preferences (when expressed), logos, organizational names and job titles that are unique to the Project concerned.

REV.	DATE	DESCRIPTION	PREP. BY	REV. BY	APPR. BY
B					

CLIENT

CONTRACTOR

CONSOLIDATED CONTRACTORS COMPANY

PROJECT TITLE

DOCUMENT TITLE

QUALITY MANAGEMENT PROCEDURE

INSPECTION & TESTING

CONTRACT No.	DOCUMENT No.	REV. No.	PAGE No.
	QMP-GEN-011	B	1 of 12

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CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) / TEYSEER CONTRACTING CO. W.L.L. - JV

1. SCOPE

1.1. This procedure is applicable to all CCC Inspection and Test activities within CCC scope of work for the Project related to the site installation phase.

2. PURPOSE

2.1. To define inspection plan, testing, implement measurement, analysis and improvement of processes to ensure that test requirements are met according to Project Specifications / Standards and Design Requirements.

2.2. As part of CCC Quality Management System, this procedure addresses the quality system requirements of ISO 9001:2008, Section 7.1.

3. REFERENCES

3.1.	ISO 9001:2008	Quality Management Systems – Requirement
3.2.	PQP-GEN-001	Project Quality Plan
3.3.	QMP-GEN-002	Document and Data Control
3.4.	QMP-GEN-004	Quality Records
3.5.	QMP-GEN-008	Control of Non-Conforming Product
3.6.	QMP-GEN-007	Material Control
3.7.	QMP-GEN-010	Inspection, Measurement and Testing Equipment
3.8.		Relevant Project Contract Specifications

4. ABBREVIATIONS / DEFINITIONS

4.1.	Project	Project Name
4.2.	Contract	Contract Number
4.3.	COMPANY	Project Owner / Customer
4.4.	CCC	Consolidated Contractors Company
4.5.	Subcontractor	Any person, company, or group that, through contractual agreement, performs a Site Construction/Installation for CCC
4.6.	NCR	Non-Conformance Report – A form used to document a Non-Conformance relative to a deficiency in characteristic, documentation or procedure which renders the quality of a product or service unacceptable or indeterminate or not according to specified requirements
4.7.	ITP	Inspection and Test Plan

4.8. QCP Quality Control Procedure

4.9. IR* Inspection Request

**Note: IR is also commonly referred to as "RFI" or "WIR"*

5. RESPONSIBILITIES

5.1. QA/QC MANAGER

5.1.1. The QA/QC Manager is responsible for the following activities:

- Ensuring the effective implementation of this procedure;
- Generating and updating QCPs and ITPs as required;
- Ensuring that Project approved QCPs and ITPs are available prior to start of work as per PQP-GEN-001. This will also take into consideration the review and approval cycle as per contractual requirements; and
- Monitoring the ITP tracking system and the IR Rejection Rate and initiating corrective or preventive action as necessary.

5.2. QC ENGINEERS

5.2.1. The QC Engineers are responsible for the following:

- Organizing inspections, testing and documentation;
- Submission of IRs to all concerned parties; and
- Reviewing and signing off completed inspection documents according to the approved ITPs.

5.3. QC INSPECTORS

5.3.1. The QC Inspectors are responsible for the following:

- Carrying out the IRs, testing and preparing the verification (inspection forms) documentation according to the latest approved QCPs and ITPs.
- Collect COMPANY signature on inspection and test documents.
- Submission of completed documents to the Discipline QC Engineer.

5.4. SITE/SECTION ENGINEERS

5.4.1. The Site/Section Engineers in charge are responsible to initiate an Inspection Request together with all supporting documents (latest revision of IFC Drawings, duly signed Inspection forms, etc.) and submit it to the Discipline QC Engineer, at minimum of 24 hours prior to commencement of inspection and testing or as otherwise agreed on site between the interested parties.

5.4.2. The issuance of Inspection Request presumes that the work to be inspected is completed as per Project specifications and ready to receive inspection / testing at the time agreed on submitted IR.

6. PROCEDURE

6.1. PREPARATION AND APPROVAL OF ITP

6.1.1. At the initial stage of the Project, QC Engineers conduct a review of inspection and testing requirements related to their scope of work. Following the review, Inspection and Test Plans shall be developed for major activities using standard CCC or COMPANY format. A reference list of inspection and test plans is also attached to the Project Quality Plan.

6.1.2. The Inspection and Test Plan is a document that defines the following:

- Sequence of activities requiring inspection or tests
- Inspection and testing requirements (controls)
- Reference documents, codes, standards and acceptance criteria
- Inspection level (review, surveillance, witness, hold points)
- Person(s) responsible
- Verification records (forms) to be produced

6.1.3. The presentation of the ITP is in tabular form and the title used depends on contractual requirements (see Attachment 1 - Standard Template for CCC Project ITPs).

6.1.4. The following documents shall be considered during the development of Inspection and Test Plans:

- Specific project specifications
- Applicable codes and standards
- Drawings and any engineering instructions or data sheets
- Quality Control Procedure if applicable
- Methods Statement if applicable
- Any other related requirement

6.1.5. ITPs are controlled documents (see procedure QMP-GEN-002) and shall be coded as shown in PQP-GEN-001: Attachment 4. ITPs shall be subject to review and approval by COMPANY.

6.1.6. The ITP referenced forms are controlled outside the ITPs. However, the attached forms are controlled within the corresponding ITP and shall be revised to the next revision number whenever a change is made. In both cases, only the latest revision forms, as approved with the controlling document, shall be used during work execution.

6.1.7. Distribution of revised ITPs shall be controlled by CCC Document Control Group as per latest approved Document Distribution Matrix.

6.1.8. The ITP shall indicate the QC intervention points during the execution of the works as follows:

H	Hold Point:	QC must be notified and the work can proceed only after the QC release is clearly put on the respective inspection form.
W	Witness Point:	QC must be notified to witness the construction activity or testing. If not show, work can proceed. In that case, the preferred practice is QC to review of inspection & test results for acceptance.
S	Surveillance Point:	Construction does not have to notify QC.
R	Document Review:	Review of QC inspection & test results for acceptance.

6.1.9. CCC QC intervention points shall be equivalent or higher than the COMPANY's.

6.1.10. ITPs shall be originated by the QA/QC Manager or his designee, approved by the Project Manager and issued to COMPANY for final review and approval.

6.1.11. The usual manner of preparation of the ITP is carried out as follows:

- Preparation: QC Engineer
- Checking : Quality Manager / QA Engineer
- Approval: Project Manager

6.1.12. The ITP shall be forwarded to the Discipline Engineer for comments. Any disagreement between the discipline engineer and the QC Engineer shall be ruled out by the QA/QC Manager as a final authority.

6.1.13. Subsequent revisions to ITPs shall be prepared by the QA/QC Manager or his designee as necessary.

6.1.14. ITPs shall be issued for implementation at least 30 days before work starts in the respective area

6.2. PREPARATION AND APPROVAL OF QCP

6.2.1. The Quality Control Procedure is a procedure that complements, (as and when required) the ITP, by providing information related to QC activities of specific process such as:

- Methodology of inspection and testing
- Responsibilities
- References
- Forms used for recording inspection and testing activities

6.2.2. QCPs are also issued when international standards or contract specifications do not contain sufficient information on how to control the quality of an activity or how to perform the required inspections or tests.

6.2.3. QCPs are prepared, approved and issued in the same way as that of the ITPs, as per section 6.1. During preparation of quality control procedures the following requirements have to be considered:

- Applicable Project specifications
- Method statement if applicable
- Codes and standards
- Drawings and engineering instructions
- Vendor's instructions if applicable
- Any other related requirements

(See Attachment 2 - Standard Template for CCC Project QCPs)

6.3. LIST OF QCP AND ITP

6.3.1. The QA/QC Manager shall develop and maintain a list of QCPs and ITPs to be produced for the Project, shall schedule their issue date and shall arrange for their production and maintenance.

6.4. USE OF ITP AND INSPECTION FORMS

6.4.1. ITPs shall be used as inspection and test plans only. Acceptance certifying signatures shall be obtained on the ITP attached or referenced forms only.

6.4.2. The Discipline QC Engineer is responsible for ensuring that the inspection and testing activities are carried out, recorded, signed and dated as designated on appropriate forms required by the ITPs including attachment of all relevant documents.

6.5. INSPECTION REQUEST

6.5.1. Inspection and testing is carried out in accordance with approved Inspection and Test Plan.

6.5.2. Upon completion of work, where a HOLD / WITNESS point is identified in the ITP the related Discipline Site/Section Engineer shall raise an IR (see Attachment 3), completing the following sections:

- Applicable Inspection Form No.
- Activity / Inspection Item
- Location / Place / Area
- TAG No. / Equipment No.
- Applicable Drawing & Revision No.
- Date & Time of Inspection
- Reason for rejection, if applicable

6.5.3. The site Engineer shall ensure that all required documents and IFC drawings are attached to the inspection request.

6.5.4. The discipline Site/Section Engineer shall sign and date the IR and, together with all supporting documents, submit it to the QC Inspector (CCC QCD) in charge of the work.

6.5.5. If the QC Inspector, based on in-process inspection, is satisfied with the work under consideration, he shall forward the IRs to the QC Engineer for further processing.

6.5.6. The QC Engineer shall obtain from the QA clerk a unique number for each inspection request. The QA clerk shall enter relevant information of the IR in the tracking system.

6.5.7. The QC Engineer shall compile a list of inspection requests in an inspection schedule for the next day (see Attachment 4). A separate list shall be generated for each discipline by the respective QC Engineers. The inspection schedule shall be forwarded to Company Representative at minimum of twenty-four (24) hours in advance of the date and time of inspection or as otherwise required by the contract or as agreed between CCC and the Company.

6.5.8. The QC Inspector coordinates with Company Representative and attends a joint inspection. Upon satisfactory inspection, the IRs and associated reports shall be signed by all parties. The inspection activities shall be considered as completed only when the IR form is signed as designated.

6.5.9. Observations of Company representative may be recorded on the inspection request. For minor observations that may be corrected immediately, the same inspection request shall be used.

6.5.10. Prior to filing of closed IR, the QA clerk shall scan the IR along with its attachments.

6.5.11. Where SURVEILLANCE or SURVEILLANCE / REVIEW points are identified in the ITP for all parties then no IR shall be raised by Construction Group and the work may proceed without the presence of the SURVEILLANCE or REVIEW party.

6.5.12. Numbering of Inspection Requests

The following IR numbers represent an example of numbering of inspection requests for electrical and mechanical works:

First Inspection Request	M312
Second Inspection Request	M312 - A
Third Inspection Request	M312 - B

Where commonly:

C is related to civil work	**M** for mechanical
S for structural	**P** for piping
E for electrical	**I** for instrumentation

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6.5.13. If the above numbering system is in conflict with the applied tracking system for the Project, such as ATLAS, QCD may use any other numbering system in line with the applied IR tracking system. However, traceability of the rejected IR to the accepted IR for the same activity must be maintained.

6.6. REJECTION OF INSPECTION REQUESTS

6.6.1. In case of a major observation that may lead to rejection of the inspection request, a new inspection request shall be issued "upon satisfactory completion of work" using the same original number with a prefix A, B, or C at the end.

6.6.2. IRs may be rejected for several factors being:

- Work not completed
- "No show"
- "Minor discrepancies" due to lack of quality requiring rework and re-inspection
- Weather conditions
- Other (to be defined on a case-by-case basis)

6.6.3. The ratio of "*Rejected IRs / Total IRs Issued*" shall be monitored as one of the Quality Key Performance Indices for the Project. The accepted IR rejection ratio shall be less than or equal to 3%. Above this level, the QA/QC Manager shall carry out a complete investigation for the reasons of rejection based on the categories mentioned above and initiate, in conjunction with the discipline Construction Manager, improvement actions.

6.7. INSPECTION OF INCOMING MATERIALS

6.7.1. Specific receiving inspection procedure for incoming materials is given in procedure QMP-GEN-007.

6.7.2. Status of accepted materials that may require repair on site shall be controlled by quality management procedure "QMP-GEN-008".

6.7.3. The calibration status of inspection, measuring, and testing equipment shall be checked upon receipt at site based on procedure QMP-GEN-010.

6.8. INSPECTION AT SUPPLIERS AND SUBCONTRACTORS

6.8.1. In order to let Subcontractor/Supplier fully understand the inspection and test requirements according to this procedure, the QA/QC Manager shall initiate and conduct a pre-inspection meeting with the Subcontractor/Supplier and the Manager/Discipline Supervisor in charge of relevant activities prior to commencing construction work.

6.8.2. In this meeting, the QA/QC Manager shall clarify all of the requirements and criteria for the inspection/test and ensure that they are clearly understood by the Subcontractor/Supplier. Subcontract inspection activities shall be covered by approved ITPs and QCPs as necessary.

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6.9. INSPECTION AND TEST RECORDS

6.9.1. Inspection forms as specified in the ITPs shall be filled by designated QC personnel and signed by COMPANY as the job proceeds. Entries and attachment of reports shall not be left till later. Submission of the inspection records to Certification shall follow immediately after completion of each package of work. Records shall be generated in line with the requirement specified in the inspection and test plan and according to applicable codes and standards.

6.9.2. The quality records generated as a result of inspection and testing shall be in the custody of the QC Inspector till the time the work is finalized and accepted, and all the associated reports are signed by Company Representative.

6.9.3. On receipt of COMPANY signature on inspection and test documents, signifying acceptance of the specified activity, the completed inspection and test documents shall be recorded as completed in the relevant ITP tracking system and the original documents handed over to Certification.

6.9.4. An indexing system for quality records shall be developed by Certification with the assistance of QCD and documents shall be filed according to this system.

6.9.5. Inspection and Test Records shall be kept in a secure place, with controlled access, protected from the environment and with fire protection (see procedure QMP-GEN-004).

6.10. INSPECTION AND TEST STATUS

6.10.1. Identification Markings for Inspection and Test Status

6.10.1.1. Identification markings are necessary for identifying materials, fabricated items and installations. The responsibility of the extent and type of identification markings lies primarily with the QA/QC Manager. He will ensure that whichever approach is used is clearly explained to all construction supervisors. Identification markings may include status indicators such as color-coding, TAGs and markings on the item with markers or paint, stamps etc.

6.10.1.2. Permanent works will only be physically marked to indicate their inspection status if they are non-conforming in accordance with QMP-GEN-008. Material that is not identified shall not be inspected and shall be considered to have no inspection status until identification is confirmed.

6.10.2. Status of Inspection and Test

6.10.2.1. The inspection and test status of materials, fabricated items and installations shall be identified where required and all personnel involved in the installation/fabrication process, shall be made aware of the requirements by the Construction Discipline Engineers. Inspection and test status shall be maintained during construction phase.

6.10.2.2. The quality control procedures "QCP" and inspection and test plans "ITP" used for each discipline identify inspection and testing requirements where status of inspection and testing must be recorded during construction works.

6.10.2.3. For civil works, mechanical works, electrical works and instrumentation, inspection request "IR" and associated inspection and test reports shall be used to identify inspection and test status. For piping works, daily welding report "DWR" and associated inspection and test reports shall be used to identify inspection and test status.

6.10.2.4. The QA/QC Manager is responsible for ensuring that all permanent works have been inspected, that inspection is properly recorded and that all non-conformances are closed-out before handover.

6.11. ITP TRACKING

6.11.1. A computerized database (ITP Tracking System) shall be employed to track the current status of inspection pertaining to the installation works. The purpose of this tracking system is to ensure that the QC status of each Project unit, system, tagged item is monitored as work progresses. Certification section has the overall responsibility for the setting up, continuous updating and maintenance of the system.

6.11.2. The QA/QC Manager is responsible to review the inspection and test progress based on the information extracted from the ITP Tracking System on a weekly basis. The results of this review and actions to be taken shall be presented during the weekly Project Progress meetings.

6.12. ITP TRACKING CONTROL SOFTWARE

6.12.1. ATLAS

6.12.1.1. The preferred ITP Tracking control software is ATLAS. ATLAS is a comprehensive Project completion system that provides full visibility of Project throughout the Project lifecycle. It supports the QC and certification process throughout all Projects' phases of the Project life cycle, and maintains the records needed for the Project handover & completion.

6.12.1.2. ATLAS provides a smooth and easy-to-use interface to accomplish all the required tasks in the Project handover process. It starts with data collection of reference data (like defining disciplines, phases, categories, TAGs, forms, form types, etc.), and then data preparation (Assigning required forms to categories, mapping categories to phases, building relations between TAGs to build the system hierarchy, etc.).

6.12.1.3. Further to above two activities, the Scope of work can be generated automatically by ATLAS. The scope report shows the hierarchy of Systems, Subsystems, TAG Categories, TAGs, and all required forms by the corresponding TAG, hence, making the scope of work recognized at a very early stage.

6.12.2. IR Monitoring

6.12.2.1. Having the scope of work ready (or partially ready), the day-to-day activities (inspections and walk-downs) can start. Inspections start with the Construction Department issuing an Inspection Request (IR). In the IR, the required attendees (QC Inspectors / Engineers) are selected. All attendees will be notified with the IR details (Date & Time, location, etc.)

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6.12.2.2. On inspection time, an official QC form will be issued and the inspection will take place. The inspection result will be noted on the hard copy QC form where it will be handed over to the Certification Department. The operator will update ATLAS IR electronic form with the inspection result; besides attaching the scanned original QC form containing all required signatures.

6.12.2.3. At any time, Project management is provided with dynamic progress reporting showing all activities taking place and their statuses. Thus, next to every TAG, the list of required forms is listed, and for every required form details (Sequence No, Status, Signature Dates, etc.) are listed.

6.12.3. Walk-down Punch Listing

6.12.3.1. Walk-down punch listing is also a major activity in ATLAS. In the walk-down punch list form, the required attendees are selected. All attendees will be notified with the Walk-down details (Date & Time, location, etc.).

6.12.3.2. At walk-down time, an official walk-down form will be issued and the walk-down will take place. The walk-down result will be noted on the hard copy walk-down form where it will be handed over to the certification department. The operator will update ATLAS Walk-down electronic form with the walk-down result (by logging punch-list items, if any), besides attached the scanned original walk-down form containing all required signatures.

6.12.3.3. At any time, Project management is provided with dynamic punch-list reporting showing all punch-list items and their statuses. Thus, for every punch-list item, details are listed (classification code, action code, responsibility, signature dates, etc.).

6.12.4. TALISMAN

6.12.4.1. TALISMAN is a quality control application for piping jobs. It keeps track of welding performance, stores information about all types of welded joints, radiographic examination, and welders.

6.12.4.2. For material control and piping, "TALISMAN" Tracking System shall be used to identify status of inspection and testing to complement ATLAS.

6.12.4.3. TALISMAN has very powerful reporting capabilities. Reports can be designed according to both Project needs and COMPANY requirements. Data can be easily exported to other systems.

7. ATTACHMENTS

7.1.	Attachment 1:		Standard Template for Project ITPs
7.2.	Attachment 2:		Standard Template for Project QCPs
7.3.	Attachment 3:	FM-011-001	Inspection Request (IR)
7.4.	Attachment 4:	FM-011-002	Inspection Schedule

REV.	DATE	DESCRIPTION	PREP. BY	REV. BY	APPR. BY

CLIENT	CONTRACTOR
	CONSOLIDATED CONTRACTORS COMPANY

PROJECT TITLE

[PROJECT NAME] – [COUNTRY]

DOCUMENT TITLE

INSPECTION & TEST PLAN FOR – – – – – – – – –

CONTRACT No.	DOCUMENT No.	REV. No.	PAGE No.
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FORMS INDEX

LIST OF ATTACHED FORMS

Reference	Description
ITP-GEN-xxx	ITP Title
FM-GEN-xxx	Form Title

LIST OF REFERENCED FORMS

Reference	Description	Controlled by
FM-GEN-xxx	Form Title	

NOTE

This ITP is to be used as a plan. Acceptance signatures shall be obtained on the forms. The documents listed above as Referenced Forms are controlled outside of this ITP and are included for information purposes only during the Review and Approval cycle.

The latest revision of a Referenced Form as approved with the controlling document shall be used during work execution.

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. JV

CLIE	CONTR TOR CONSOLIDATED CONTRACTORS COMPANY	PROJECT	
CONTRACT No.	DOCUMENT No. ITP-GEN-xxx	REV. No.	PAGE No. 3 of 3
TITLE	INSPECTION & TEST PLAN FOR – – – – – – – – –		

No	Activity Description	Test / Inspection Requirements	Reference Documents	Inspection and Acceptance			Report Reference No.
				CCC QC	CONTRACTOR	COMPANY	
1.		•	•				
2.		•	•				
3.		•	•				
4.		•	•				
5.		•	•				
6.		•	•				
7.		•	•				
8.		•	•				
9.		•	•				
10.		•	•				

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Legend: **S** – Surveillance Inspection **W** – Witness Inspection Point **H** – Mandatory Hold Point for Inspection **R** – Record Review

REV.	DATE	DESCRIPTION	PREP. BY	REV. BY	APPR. BY

CLIENT

CONTRACTOR

CONSOLIDATED CONTRACTORS COMPANY

PROJECT TITLE

[PROJECT NAME] – [COUNTRY]

DOCUMENT TITLE

QUALITY CONTROL PLAN FOR – – – – – – – – –

CONTRACT No.	DOCUMENT No.	REV. No.	PAGE No.
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LIST OF ATTACHED FORMS

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FM-GEN-xxx	Form Title

LIST OF REFERENCED FORMS

Reference	Description	Controlled by
FM-GEN-xxx	Form Title	

NOTE

The latest revision of a Referenced Form as approved with the controlling document shall be used during work execution.

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	CONSOLIDATED CONTRACTORS COMPANY	

CONTRACT No.	FORM OWNER	FORM No.	REV.	PAGE No.
	QMP-GEN-011	FM-011-001	B	1 of 1

FORM TITLE

INSPECTION REQUEST (IR)

YOUR PRESENCE IS REQUESTED FOR INSPECTION ACCORDING TO THE FOLLOWING SCHEDULE

IR Serial No. :

Item	Inspection Form No.	Activity / Inspection Item	Location / Place / Area	Tag No.	Date of Inspection	Time of Inspection	Drawing / Document No.	Rev. No.	Remarks

Note to Construction: Attach relevant Document / Inspection forms duly signed by Construction Discipline Engineers / Surveyors and latest IFC Drawing revision

CCC CONSTRUCTION	CCC QC INSPECTOR	CONTRACTOR (if applicable)	COMPANY (if applicable)
NAME	NAME	NAME	
DATE	DATE	DATE	
SIGNATURE	SIGNATURE	SIGNATURE	

COMPANY	CONTRACTOR CONSOLIDATED CONTRACTORS COMPANY		PROJECT	
TENDER No.	FORM OWNER QMP-GEN-011	FORM No. FM-011-002	REV. B	PAGE No. 1 of 1
FORM TITLE				

INSPECTION SCHEDULE

#	IR NUMBER	LOCATION / AREA	DWG No.	INSPECTION TYPE	H/W	DATE/ TIME	ITP No.	INSPECTOR	REMARKS

CONSOLIDATED CONTRACTORS GROUP S.A.L (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L - JV

APPENDIX E – ANNEXURE 8

QUALITY MANAGEMENT PROCEDURE FOR PLANNING AND SCHEDULING (QMP-GEN-015)

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. WLL - JV

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REV.	DATE	DESCRIPTION	PREP. BY	REV. BY	APPR. BY
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CLIENT

CONTRACTOR

CONSOLIDATED CONTRACTORS COMPANY

PROJECT TITLE

DOCUMENT TITLE

QUALITY MANAGEMENT PROCEDURE
PLANNING AND SCHEDULING

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CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. WLL - JV

1. SCOPE

1.1. This document defines the on-site construction planning and schedule control procedure that will be applied to the Project.

2. PURPOSE

2.1. The intention of this procedure is to provide necessary guidelines to establish and maintain Critical Path Method (CPM) activities network for the Project scope of work.

2.2. Although very closely related, progress measurement and progress reporting are briefly mentioned throughout this procedure, as all details on the same can be found in QMP-GEN-022.

3. REFERENCES

3.1.	ISO 9001:2008	Quality Management Systems – Requirements
3.2.	PQP-GEN-001	Project Quality Plan
3.3.	QMP-GEN-022	Progress Monitoring
3.4.		Relevant Project Contract Specifications

4. ABBREVIATIONS / DEFINITIONS

4.1.	Project	Project Name
4.2.	CONTRACT	Contract Number
4.3.	COMPANY	Project Owner / Customer
4.4.	CCC	Consolidated Contractors Company
4.5.	CPM	Critical Path Method - Determines the longest possible pathway(s) through a network which is/are the shortest possible project completion.
4.6.	WPS	Work Breakdown Structure - A "tree shape" arrangement of the different scheduling levels indicating their relation to the Project.
4.7.	PRIMAVERA	The planning software which is used by Planning Engineers, at present is Primavera Project Management (P6)
4.8.	DCG	Document Control Group

5. RESPONSIBILITIES

5.1. Maintenance of this procedure is the responsibility of the Project Controls Manager.

5.2. The Planning Engineer is reporting to the Project Controls Manager and is responsible for implementing this procedure and issuing the required reports on time and to update all information pertaining to planning and scheduling.

5.3. Preparation of the Daily Progress Report shall be the responsibility of the field discipline engineers who shall feed the information to Planning Department as agreed.

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5.4. Field discipline engineers are responsible to ensure correct and accurate reporting of achieved progress on site using daily progress reporting forms.

5.5. Frequent visits on site shall be carried out by the Planning Engineer to complete random checks on the reported progress against actual achieved commodities on site.

5.6. The operation of the Progress Monitoring System shall be the responsibility of the Project Controls Manager or his appointees.

6. PROCEDURE

6.1. LEVEL IV CONSTRUCTION NETWORK SCHEDULE

6.1.1. The Planning Engineer shall build up a detailed CPM construction network logic diagram resourced with quantities and man hours to the level of detail of the available information and the agreed Construction Work Breakdown System, codes and network strategy (after the kick off meeting).

6.1.2. The Logic Diagram shall be developed in precedence format and scheduled using a computerized system (PC based) such as PRIMAVERA.

6.1.3. The schedule shall adequately cover construction activities up to mechanical completion, and shall be integrated with the overall Project network schedule. The integration of the overall Project network is the responsibility of the COMPANY.

6.1.4. The schedule shall be submitted to the COMPANY for approval. Once approved, it shall be used as a baseline schedule. The schedule shall also serve as an interface level between CONTRACTOR and COMPANY progress monitoring systems.

6.1.5. Actual progress achieved shall be regularly recorded in the schedule together with actual dates, and comparisons with the target schedule shall be carried out on a monthly basis.

6.2. LEVEL V CONSTRUCTION SCHEDULE

6.2.1. Level V planning and scheduling represent the lowest level of planning.

6.2.2. The level V schedule shall be progressively detailed from level IV schedule, as more information becomes available, and shall be issued in the form of six weeks look ahead bar chart.

6.2.3. The level V schedule shall have a compatible structure with the baseline schedule, thus allowing roll-up of information to the level IV schedule.

6.3. SIX-WEEKS LOOK AHEAD WORK SCHEDULE

6.3.1. This will be an extract of the level V detailed Schedule.

6.4. SCHEDULE MONITORING

6.4.1. Schedule monitoring shall be initiated by the approved plan which shall be monitored and regularly updated. An analysis of the results of this update shall enable corrective action to be determined.

6.4.2. Schedule monitoring shall be carried out through the following:

I. Work Direction

The six weeks look ahead schedule shall be issued to the responsible field engineers, who shall determine the work volume and the resources required to implement the schedule. Field engineers shall direct the work toward achieving scheduled objectives.

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II. Work Monitoring

Throughout the construction period field engineers shall be responsible for reporting progress on a weekly basis by marking up the forms and/or schedules with progress achieved, key quantities achieved, and expected start/finish dates for scheduled activities.

The Planning Engineer shall use this information together with physical audit where feasible to measure the percentage achieved by means of the progress measurement calculation, and to update the relevant schedule.

III. Corrective Action

Minor delays shall be accommodated by rescheduling the activities.

When major delays are found, the Planning Engineer together with Field Discipline Engineers and the Controls Manager shall propose the best way to recover such delays. Recovery plans shall clearly define the areas of delay, the reasons for the delay, and the proposed method of recovering such delays.

6.5. UPDATE OF SCHEDULES

6.5.1. All schedules shall be regularly updated. The normal routine for updating and reporting will be:

I. The six weeks Schedule shall be updated for progress on weekly basis.

II. Level IV network update shall be performed on a fortnightly basis.

6.6. PROGRESS AND MANPOWER

6.6.1. Progress Trending Control

I. The Planning Engineer shall set up and operate a physical percentage progress calculating and reporting system in accordance with the relevant project procedures.

II. The Planning Engineer shall issue planned physical percentage progress tables and curves prepared in such a way that subsequent actual results can be compared with those planned, enabling deviations to be readily identified and analyzed.

III. Calculation of actual physical progress achieved shall be carried out in a systematic way so that it can be examined and verified.

IV. Actual results shall be regularly calculated during the progress of work, and summarized for submission as part of the regular progress reports.

V. Planned Curves shall be prepared on early dates basis before the network has been updated with any progress achievement. They shall cover the full project period and on a fortnightly basis an actual curve shall be superimposed that is derived from the same network updated for progress.

VI. Planned curves shall only be changed if the network is the subject of major logic or duration changes.

6.6.2. Manpower Control

I. The Planning Engineer shall issue manpower histograms showing the planned manning levels used to establish the construction schedules.

II. The histograms shall be broken down to show the planned manning levels in all major disciplines.

CONSOLIDATED CONTRACTORS GROUP S.A. (Athens) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

III. A strict correlation between manpower histograms and progress curves shall be maintained in order to facilitate subsequent analysis of any deviations. Actual manning levels shall be regularly recorded, tabulated, and summarized for submission as part of the monthly project progress report.

6.7. PROGRESS REPORTING

6.7.1. Weekly Report

Weekly progress is to be extracted directly from Level IV Schedule showing progress for each activity. A weekly report shall be prepared and presented during the weekly project meetings. Cut-off date is day ending Thursday.

6.7.2. Monthly Report

At points defined in the Project Calendar as the cut off dates for the month end a Monthly Report shall be produced in lieu of the Weekly Report. The format shall be in accordance with Project Procedures.

7. ATTACHMENTS

No Attachments

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CO. WLL - JV

APPENDIX E – ANNEXURE 8

QUALITY MANAGEMENT PROCEDURE FOR QUALITY SYSTEM AUDITS (QMP-GEN-016)

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEKSTEN CONTRACTING CO. W.L.L. - JV

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CLIENT	CONTRACTOR
	CONSOLIDATED CONTRACTORS COMPANY

PROJECT TITLE

DOCUMENT TITLE

QUALITY MANAGEMENT PROCEDURE
QUALITY SYSTEM AUDITS

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CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEXSEER CONTRACTING CO. W.L.L. - JV

1. SCOPE

1.1. This procedure applies to quality system audits including product realization performed by competent auditors, to verify implementation and effectiveness of the Project quality management system, and to ensure that this system conforms to the requirements of the Project Quality Plan, ISO 9001:2008 and applicable Contract specifications.

1.2. The audit process will include product and service requirements, as well as, implementation of each process in the quality management system and the mechanisms to measure and monitor these processes. Additionally, the result of previous audits must be verified.

2. PURPOSE

2.1. The purpose of this procedure is to detail the processes of planning, organising, advising, conducting, reporting and following up of internal / supplier / subcontractor quality system audits, so that when this process is followed, audits will be carried out consistently with identical objectives, using the same methods and provide a solid foundation for documenting audit results.

2.2. The purpose of conducting a quality audit is to determine the degree to which the quality management system conforms to planned arrangements and the requirement of the international standard ISO 9001:2008 and whether the management system is effectively implemented and maintained.

3. REFERENCES

3.1.	ISO 9001:2008	Quality Management Systems – Requirement
3.2.	PQP-GEN-001	Project Quality Plan
3.3.	ISO19011:2011	Guidelines for Quality and/or Environmental Management Systems Audits
3.4.	QMP-GEN-003	Management Review
3.5.	QMP-GEN-017	Corrective & Preventive Action
3.6.		Relevant Project Contract Specifications

4. ABBREVIATIONS / DEFINITIONS

4.1.	Project	Project Name
4.2.	Contract	Contract Number
4.3.	Company	Project Owner / Customer
4.4.	CCC	Consolidated CCCs Company
4.5.	CS&QMD	Construction Support & Quality Management Department
4.6.	MOA	CCC Management Office, Athens
4.7.	Audit	Systematic, independent and documented process for obtaining evidence

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and evaluating it objectively to determine the extent to which audit criteria are being fulfilled

4.8. Audit Plan — An audit plan is provided by the Audit Team to the Auditee representative prior to and leading up to the opening audit meeting and specifies how the Audit Team intends to conduct a particular audit (i.e. describes the activities intended to be carried out, noting the time arrangements and Auditees required during whole audit process).

4.9. Audit Schedule — A set of one or more audits planned for a specific time frame

4.10. Auditee — Department / individual being audited

4.11. Auditor — Auditor (Lead) is a person who has the personal attributes, qualifications and/or competencies required to take a lead role in preparing, conducting and is closing out an audit. There will only ever be one Lead Auditor for each audit team on a given day.

4.12. Auditor — Auditors (Team Members) are persons who will support the Lead Auditor, as technical experts and/or as participants from various stakeholder groups (including 1st and 2nd parties) and who will participate and contribute to the establishment of the audit criteria, to the analysis of whether an audit finding is conforming or not conforming and to compiling the draft audit report. Audit team members will have the personal attributes and qualifications and/or competencies required in their field or discipline of expertise.

4.13. CAN — Corrective Action Notice - A form used to identify and eliminate a non-conformity identified during a quality system audit

4.14. Correction — Action to eliminate a detected non-conformity. A correction can be made in conjunction with a corrective action. A correction can be, for example, rework or degrade.

4.15. Corrective Action — Action to eliminate the cause of a detected non-conformity or other undesirable situation

4.16. Preventive Action — Action to eliminate the cause of a potential non-conformity or other undesirable potential situation

5. RESPONSIBILITIES

5.1. QA/QC MANAGER

5.1.1. The QA/QC Manager is responsible for:

- The effective and efficient implementation of this procedure
- Ensuring the establishment, approval and implementation of an appropriate schedule of quality system audits of sufficient scope to ensure that all important aspects of the Project quality management system are audited including Subcontractors and Suppliers as required
- Establishing and maintaining up to date a CAN register (see Attachment 8)

- Following up and ensuring the closure of quality system audit findings

5.2. AUDITOR

5.2.1. The Auditor is responsible for following the requirements of this procedure including:

- Maintaining the principles of auditing
- Issuing the audit notification
- Audit planning
- Collecting audit evidence
- Reviewing all audit findings and determining validity
- Agreeing and presenting audit findings to the Auditee
- Chairing the closing meeting
- Preparing and issuing the audit report
- Preparing, issuing and verifying satisfactory closure of CANs

5.3. AUDITEE

5.3.1. The Auditee shall:

- Provide all necessary help and assistance to the Audit Team
- Review audit evidence together with the Audit Team
- Propose correction and action to prevent recurrence along with the target completion date
- Close CANs and Observations in the agreed time frame
- Verify closure of CANs

6. PROCEDURE

6.1. AUDIT SCHEDULING

6.1.1. A Quality System Audit Schedule will be prepared to address the full scope of work including any Subcontracts. This schedule shall be subject to COMPANY review and comment prior to formal approval and issue.

6.1.2. The Audit Schedule (see Attachment 2) will be developed by the QA/QC Manager from the Project Execution Schedule to ensure the most effective timing of audits. It will include all applicable site and office operations falling in line with ISO 9001:2008 standards (such as pipe fabrication, site preparation, structural steel erection etc.).

6.1.3. Status and importance of the operations as well as the results of previous audits will be taken into consideration when preparing / updating the Audit Schedule.

6.1.4. The Audit Schedule will foresee audits on such operations at 3 stages minimum, i.e. 15%, 45% and 70% completion stages or as otherwise agreed with COMPANY.

6.1.5. If a planned audit is postponed the audit will be rescheduled and the Audit Schedule marked-up accordingly.

6.2. AUDIT TYPES

6.2.1. Within the scope of this procedure, there are four types of quality system audits which may be carried out:

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a. ***Internal Audit*** – An audit, sometimes called first-party audit, carried out by CCC qualified site based QA/QC Engineer to assess whether the CCC Project quality management system is effectively implemented and maintained.

b. ***External Audit*** – An audit, sometimes called second and third party audit, carried out by CCC Corporate, COMPANY or Third Party Company. External are also considered the audits performed by the Site QC Engineers to evaluate Vendors / Subcontractors activities.

c. ***Follow Up Audit*** - An audit undertaken in order to verify and/or validate that a corrective and preventive action to a negative audit finding is completed and is effective in closing out CANs. The Quality Manager determines whether a follow-up audit is required or not.

d. ***Surveillance Audits*** - Apart from the scheduled quality audits the QC Engineers may perform Surveillance Audits of selected Project site activities as deemed necessary. Such surveillance audits will be performed when there is need for a systematic and independent verification due to the following reasons:

- Non-conformances showing a negative trend with regard to quality level of a certain site activity or system application.
- Repeated COMPANY complaints pertaining to quality.
- Statistical data (e.g. weld repair rate) showing an alarming trend.
- Corrective or preventive actions taken by the Project team but not considered satisfactory.

6.3. QUALIFICATION REQUIREMENTS FOR INTERNAL AUDIT TEAM MEMBERS

6.3.1. When the audit has been declared feasible, an Audit Team shall be selected, taking into account the competence needed to achieve the objectives of the audit. The qualification requirements for the Internal Audit Team Members are listed in Attachment 1.

6.3.2. If there is only one auditor, the auditor shall perform all the duties of an audit team leader.

6.4. AUDIT NOTIFICATION

6.4.1. The initial contact for the audit with the Auditee may be informal or formal, but shall be made by those assigned responsibility for managing the audit or the audit team leader.

6.4.2. The purpose of the initial contact is to;

- Establish communication channels with the Auditee's representative;
- Confirm the authority to conduct the audit;
- Provide information on the proposed timing and audit team composition;
- Request access to relevant documents, including records;
- Determine applicable site safety rules;
- Make arrangements for the audit; and
- Agree on the attendance of observers and the need for guides for the audit team.

6.4.3. An audit notification shall be issued, similar to that shown in Attachment 3 of this procedure, minimum fourteen (14) calendar days in advance of the audit dates.

6.4.4. The audit notification shall be issued to the Auditee and the Project Manager. Further distribution will depend on the audit scope. Discussion and agreement of the distribution, with the Auditee is encouraged.

6.4.5. The COMPANY Representative shall be invited to participate in all quality audits as agreed.

6.5. AUDIT PLANNING

6.5.1. The Auditor shall prepare an audit plan to provide the basis for the agreement among the Auditor and the Auditee regarding the conduct of the audit. The plan shall facilitate scheduling and coordination of the audit activities (see Attachment 4).

6.5.2. As a minimum the audit plan shall cover the following:

- Audit objectives;
- Audit criteria and any reference documents;
- Audit scope, including identification of the organizational and functional units and processes to be audited;
- Dates and places where the audit activities are to be conducted;
- Expected time and duration of audit activities, including meetings with the Auditee's management and audit team meetings; and
- Allocation of appropriate resources to critical areas of the audit.

6.6. AUDIT OPENING MEETING

6.6.1. An opening meeting shall be held with the Auditee's management or, where appropriate, those responsible for the functions or processes to be audited. The purpose of an opening meeting is to:

- Confirm the audit plan,
- Provide a short summary of how the audit activities will be undertaken,
- Confirm communication channels, and
- Provide an opportunity for the Auditee to ask questions

6.6.2. An audit meeting attendance sheet shall be signed by all attendees (see Attachment 5).

6.7. AUDIT CONDUCT

6.7.1. Auditors shall review the information relevant to their audit assignment and prepare work documents as necessary for reference and for recording audit proceedings.

6.7.2. Such work documents may include audit checklist and forms for recording information, such as supporting evidence, audit findings and records of meetings.

6.7.3. The use of checklists and forms shall not restrict the extent of audit activities, which may change as a result of information collected during the audit.

6.7.4. During the audit, information relevant to the audit objectives, scope and criteria, including information relating to interfaces between functions, activities and processes, shall be collected by appropriate sampling and shall be verified. Only information that is verifiable may be audit evidence. Audit evidence shall be recorded.

6.7.5. Methods to collect information include:

- Interviews
- Observation of activities
- Review of documents

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6.7.6. Audit evidence shall be evaluated against the audit criteria to generate audit findings. Audit findings can indicate either conformity or non-conformity with audit criteria. When specified by the audit objectives, audit findings can identify an opportunity for improvement.

6.7.7. The audit team shall confer prior to the closing meeting to:

- Review the audit findings, and any other appropriate information collected during the audit, against the audit objectives;
- Agree on the audit conclusions, taking into account the uncertainty inherent in the audit process;
- Prepare recommendations, if specified by the audit objectives; and
- Discuss audit follow-up, if included in the audit plan.

6.8. CORRECTIVE ACTION NOTICE

6.8.1. Quality system non-conformities identified during the audit process shall be recorded on a Corrective Action Notice (CAN) form.

6.8.2. When raising a CAN (see Attachment 7) the Auditor will complete the top section and the "Description of Deficiency" (Section A).The Description of Deficiency section describes the actual non-compliance in relation to the requirements (audit criteria).

6.8.3. The Auditor shall classify the non-compliance as either being a major or a minor one and shall tick the relevant box on CAR form (Section A). The definition of a major or minor non-conformance is as follows:

a. Major Non-compliance

- Complete absence of a quality system element either from the process, documentation or implementation viewpoint.
- Example: No evidence of Management Review Meetings.
- Repeated instances of a quality system process not being implemented constituting thus a clear trend.
- Example: Numerous cases of obsolete or non-controlled documents available at work places.
- Deviations of project practice from the relevant quality system process rendering thus the latter obsolete or inactive.

b. Minor Non-compliance

- Isolated instances of a quality system process not being implemented.

6.8.4. The Auditee is required to review the "Description of Deficiency" (section A) and acknowledge that the audit evidence is accurate and non-conformities understood.

6.8.5. The "Correction Proposed" (Section B) and "Action Taken to Prevent Recurrence / Corrective Action" (Section C) along with the target completion date must be completed by the Auditee.

6.8.6. The Auditee is responsible for closing the CAN in the agreed time frame and to verify the completion in Section D.

6.8.7. The Auditor is also responsible to verify the satisfactory closing of the CAN in Section E.

6.8.8. Verification may require re-auditing (follow-up audit) or for the Auditee to provide the necessary records and/or documents.

6.8.9. A copy of the CAN shall be distributed in a controlled manner as per Section F.

6.9. OBSERVATIONS

6.9.1. Audit Observations (OBS) are raised to highlight minor issues which are not classed as NCRs and CANs, but are required to be addressed and closed out.

6.9.2. Observations are also raised for potential improvement within the Project quality management system.

6.9.3. A time limit of three (3) months for the closure of Observations will be applied as a general rule unless otherwise agreed with the Auditor.

6.10. CLOSING MEETING

6.10.1. A closing meeting, chaired by the Lead Auditor, shall be held to present the audit findings and conclusions in such a manner that they are understood and acknowledged by the Auditee, and to agree, if appropriate, on the timeframe for the Auditee to present a corrective and preventive action plan.

6.10.2. Participants in the closing meeting shall include the Auditees, and may also include other parties. If necessary, the Auditor shall advise the Auditee of situations encountered during the audit that may decrease the reliance that can be placed on the audit conclusions.

6.10.3. The meeting shall be formal and records of attendance (see Attachment 5), shall be kept.

6.11. AUDIT REPORT

6.11.1. The Auditor is responsible for the preparation/issuance of the audit report within fifteen (15) calendar days from the completion of each audit.

6.11.2. The Quality Audit Report as a minimum shall follow the layout and contents list as per Attachment 6. All audit reports shall be addressed to the Project Manager and copied to the Manager of the area or element audited plus any other concerned parties.

6.11.3. A copy of the audit report shall also be sent to the COMPANY and CS&QMD.

6.12. RECORDS

6.12.1. All audit records shall be maintained by Quality Department to demonstrate the implementation of the audit schedule.

7. ATTACHMENTS

7.1.	Attachment 1:		Qualifications for Auditors
7.2.	Attachment 2:	FM-016-001	Audit Schedule
7.3.	Attachment 3:	FM-016-002	Audit Notification
7.4.	Attachment 4:	FM-016-003	Audit Plan
7.5.	Attachment 5:	FM-016-004	Audit Meeting Attendance Sheet
7.6.	Attachment 6:	FM-016-005	Audit Report
7.7.	Attachment 7:	FM-016-006	Corrective Action Notice (CAN)

7.8. Attachment 8: FM-016-007 CAN Register

Note: *The attached forms are sample forms and can be revised independently of the present procedure as required during Project execution.*

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ATTACHMENT 1

QUALIFICATION REQUIREMENTS FOR INTERNAL AUDIT TEAM MEMBERS

Lead Auditor

- Shall be thoroughly familiar with the nature of work being carried out
- Shall have attended a internal auditor training course within the previous five (5) years
- Shall have carried out at least 6 previous audits in the role of auditor or lead auditor
- Shall have high competency values for "concern for quality", "self-confidence" and "judgement"

Auditor

- Shall be conversant with the nature of work being carried out
- Shall have attended a internal auditor training course within the previous five (5) years
- Shall have high competency values for "concern for quality", "self-confidence" and "judgement"

Technical Expert

- Shall have specific knowledge or expertise that relates to the organization, the process or activity to be audited, or language or culture
- It should be noted that a technical expert does not act as an auditor

Trainee Auditor

- There are no specific qualification requirements for trainee auditors

COMPANY	CONTRACTOR CONSOLIDATED CONTRACTORS COMPANY		PROJECT	
CONTRACT No.	FORM OWNER QMP-GEN-016	FORM No. FM-016-001	REV. B	PAGE No. 1 of 1
FORM TITLE				

QUALITY SYSTEM AUDIT SCHEDULE

Year / Month / Phase / Progress	2013									2014												2015				
	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
Resource Management																										
Document & Data Control																										
Management Review																										
Quality Records																										
Field Purchasing																										
Material Control																										
Control of Non-conforming Product																										
Material Certification and Traceability																										
IM&TE																										
Inspection and Testing																										
Subcontracting																										
Concession / Information Request																										
Planning & Scheduling																										
Quality System Audits																										
Corrective and Preventive Actions																										
Progress Monitoring																										
Consumable Storage & Handling																										
ROW Clear and Grade																										
Trenching																										
Welding																										
NDT																										
Field Joint Coating																										
Cathodic Protection																										
Lowering in																										
Backfilling																										
Hydrostatic Testing																										

Rev. Date.:	Prepared By:	Approved By:

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COMPANY	CONTRACTOR CONSOLIDATED CONTRACTORS COMPANY		PROJECT	
CONTRACT No.	FORM OWNER QMP-GEN-016	FORM No. FM-016-002	REV. B	PAGE No. 1 of 1
FORM TITLE	AUDIT NOTIFICATION			

AUDIT DETAILS		
Audit Number:		
Audit Title:		
Company / Department:		
Auditee:		
Audit Location:		
Audit Date / Time:		
Lead Auditor:	Audit Team Members:	Focal Point (Auditees):

AUDIT OBJECTIVE	
Audit Criteria:	

AUDIT METHODOLOGY

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COMPANY	CONTRACTOR CONSOLIDATED CONTRACTORS COMPANY		PROJECT	
CONTRACT No.	FORM OWNER QMP-GEN-016	FORM No. FM-016-003	REV. B	PAGE No. 1 of 1
FORM TITLE	AUDIT PLAN			

AUDIT DETAILS	
Audit Number:	
Audit Title:	
Company / Department Name:	
Contract / PO Number:	
Audit Location:	
Audit Date:	

Lead Auditor:	Audit Team Members:	Focal Point (Auditees):

OBJECTIVE

Reference:	

AGENDA

Date	Audit Activities	Time	Location	Focal Points (Auditees)

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COMPANY	CONTRACTOR CONSOLIDATED CONTRACTORS COMPANY		PROJECT	
CONTRACT No.	FORM OWNER QMP-GEN-016	FORM No. FM-016-004	REV. B	PAGE No. 1 of 1
FORM TITLE	AUDIT MEETING ATTENDANCE SHEET			

Audit Number:		**Meeting Date:**	
Audit Location:		**Type of Meeting:**	☐ Opening Meeting ☐ Closing Meeting
Audit Title:			

ATTENDEES

No.	Name	Position Title	Organisation	Signature
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

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COMPANY	CONTRACTOR CONSOLIDATED CONTRACTORS COMPANY		PROJECT	
CONTRACT No.	FORM OWNER QMP-GEN-016	FORM No. FM-016-005	REV. B	PAGE No. 1 of 1
FORM TITLE **AUDIT REPORT**				

AUDIT No:	AUDIT DATE:
AUDIT TITLE:	
COMPANY / DEPARTMENT:	
AUDIT CRITERIA:	
LEAD AUDITOR / AUDIT TEAM:	
AUDITEES:	

1. INTRODUCTION
2. CORRECTIVE ACTIONS ISSUED
3. OBSERVATIONS
4. RECOMMEDATIONS
5. CONCLUSIONS
6. ATTACHMENTS

DISTRIBUTION	FOR IMPLEMENTATION :-
	FOR INFORMATION :-

LEAD AUDITOR:	DATE:	SIGNATURE:

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCGI / ...

COMPANY	CONTRACTOR CONSOLIDATED CONTRACTORS COMPANY		PROJECT	
CONTRACT No.	FORM OWNER QMP-GEN-016	FORM No. FM-016-006	REV. B	PAGE No. 1 of 1
FORM TITLE				

CORRECTIVE ACTION NOTICE (CAN)

CAN No:	
Company / Department:	
Audit No:	

Description of Deficiency – by Auditor (Section A):

☐ MINOR ☐ MAJOR

Auditor
Name _____ Signature _____ Date _____

Auditee
Name _____ Signature _____ Date _____

Correction Proposed - by Auditee (Section B):

Action Taken to Prevent Recurrence / Corrective Action - by Auditee (Section C):

Target Completion Date:	Auditee Name _____ Signature _____ Date _____

Verification of Completion - by Auditee (Section D):

Date of Completion:	Auditee Name _____ Signature _____ Date _____

Verification of Completion – by Auditor (Section E)

Date of Verification:	Auditor Name _____ Signature _____ Date _____

Distribution (Section F):

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) KOC/ KAYSEER CONSTRUCTIONS CO.

COMPANY	CONTRACTOR Consolidated Contrcators Company	PROJECT

CONTRACT No.	FORM OWNER	FORM No.	REV.	PAGE No.
	QMP-GEN-016	FM-016-007	B	1 of 1

FORM TITLE

CAN REGISTER

Audit No	Auditor	Auditee / Department	CAN No.	Discrepancy	Issue Date	Date for Completion	Completion Date	Status	Remarks

APPENDIX E – ANNEXURE 8

QUALITY MANAGEMENT PROCEDURE FOR CORRECTIVE AND PREVENTIVE ACTION (QMP-GEN-017)

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCCI) / TEYSEER CONTRACTING CO. W.L.L. JV

This document is categorized as a "GEN" document and should not be used directly. It's provided by CS&QM Department and is to be modified to suit Project specific requirements. Modification may entail, inclusion of Project specific requirements (often prescribed in Contract documents), Customer preferences (when expressed), logos, organizational names and job titles that are unique to the Project concerned.

REV.	DATE	DESCRIPTION	PREP. BY	REV. BY	APPR. BY
B					

CLIENT

CONTRACTOR

CONSOLIDATED CONTRACTORS COMPANY

PROJECT TITLE

DOCUMENT TITLE

QUALITY MANAGEMENT PROCEDURE
CORRECTIVE AND PREVENTIVE ACTION

TENDER No.	DOCUMENT No.	REV. No.	PAGE No.
	QMP-GEN-017	B	1 of 10

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1. SCOPE

1.1. This procedure establishes and maintains a documented procedure for identifying and implementing corrective and preventive action arising from quality system / product non-conformances and COMPANY complaints.

2. PURPOSE

2.1. To use corrective and preventive action as a tool to improve the quality management system, and to meet the requirements of EN ISO 9001:2008 Clause 8.5.2 & 8.5.3 Corrective and Preventive Action.

2.2. To ensure that corrective and preventive actions are processed and dealt with effectively and that the experience is fed back into the quality system to prevent recurrence.

2.3. To define the responsibilities and process to be applied when using the corrective and preventive action system.

3. REFERENCE

3.1.	ISO 9001:2008	Quality Management Systems – Requirement
3.2.	PQP-GEN-001	Project Quality Plan
3.3.	QMP-GEN-003	Management Review
3.4.	QMP-GEN-008	Control of Non-conforming Product
3.5.	QMP-GEN-016	Quality System Audit
3.6.	QMP-GEN-021	Customer Complaints
3.7.		Relevant Project Contract Specifications

4. ABBREVIATIONS / DEFINITIONS

4.1.	Project	Project Name
4.2.	COMPANY	Project Owner / Customer
4.3.	CCC	Consolidated Contractors Company
4.4.	CS&QMD	Construction Support & Quality Management Department
4.5.	MOA	CCC Management Office, Athens
4.6.	NCR	Non-Conformance Report – A form used to document a Non-Conformance relative to a deficiency in characteristic, documentation or procedure which renders the quality of a product or service unacceptable or indeterminate or not according to specified requirements.

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4.7.	CAN	Corrective Action Notice - A form used to identify and eliminate a non-conformity identified during a quality system audit.
4.8.	Customer Complaint	A contractual notification by the COMPANY that a contract requirement or expectation is not being met also the concerns expressed by the customer or customers representative in other forms such as NCR's, minutes of meeting, memos etc.
4.9.	CAR	Corrective Action Request - A form used to identify and to eliminate the cause of non-conformities identified as a result of trend analysis, customer dissatisfaction, or any other repeated undesirable condition.
4.10.	PAR	Preventive Action Request - A form used to prevent the occurrence of potential non-conformity or any undesirable potential situation.
4.11.	Correction	Action to eliminate a detected non-conformity. A correction can be made in conjunction with a corrective action. A correction can be, for example, rework or degrade.

5. RESPONSIBILITIES

5.1. PROJECT MANAGER

5.1.1. The Project Manager is responsible for the following:

- Ensuring that Corrective and Preventive system has been established for the Project; and
- Ensuring that Corrective and Preventive Action system is an item to be discussed in the Management Review Meeting (QMP-GEN-003).

5.2. QA/QC MANAGER

5.2.1. The QA/QC Manager is responsible for the following activities:

- Maintaining and implementation of this procedure;
- Maintaining NCR, CAN, CAR, PAR & IR Register;
- Maintaining a register for test results;
- Conducting trend analysis as described in this procedure (paragraph 6.1.1);
- Participating in root cause analysis process;
- Conducting internal audits to ensure that preventive measures established at all phases of the Project are implemented;
- Issuing CAR or PAR as necessary;
- Following up on CAR & PAR till final closing;
- Evaluating the effectiveness of the corrective and preventive actions;
- Logging, monitoring and reporting to Project Management and MOA suggestions made by the Project staff regarding improvement actions,

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preventative actions and lessons learned that might be applied to this or a future Project; and

- Preparing and submitting the QA/QC Monthly Report to MOA as per Attachment 4 (FM-017-001).

5.3. DEPARTMENT MANAGERS

5.3.1. The Department Managers are responsible for the following:

- Implementation of preventive measures established in their areas of responsibilities;
- Conducting root-cause-analysis based on identified trends in their areas
- Issuing CAR or PAR through the QA/QC Manager; and
- Implementing measures as described in CAR or PAR;

6. PROCEDURE

6.1. CORRECTIVE ACTION

6.1.1. General

6.1.1.1. Corrective action is taken after non-conformance is identified, to eliminate the cause of non-conformance in order to prevent recurrence.

6.1.1.2. The corrective actions taken shall be appropriate to the effects of non-conformance encountered and should depend upon and be directly related to the risk, size, and nature of the problems and their direct effects on product quality.

6.1.2. Corrective Action Initiation

6.1.2.1. The need for corrective actions arises from the following situations:

- Product Non-conformances
- Process Non-conformances
- Customer complaints
- Quality Audits and surveillances
- Adverse trends on:
  - Non-conformances
  - Excessive rejections on IRs during field inspection and testing
  - Weld repair rate, concrete strength data and other product quality related performance data
  - Any other adverse situations observed on site

6.1.2.2. All such instances shall be reviewed for identification of their cause(s), in order to proceed with the elimination of this cause(s) and to prevent potential recurrence.

6.1.3. Root-Cause-Analysis

6.1.3.1. Identification of the cause(s) of non-conformances may be carried out using the root cause analysis approach. Root cause analysis is an approach for identifying the underlying causes of why an incident occurred so that the most effective solutions can be identified and implemented.

6.1.3.2. The preferred method to identify the root cause is Ishikawa diagram, known as Fishbone Diagram or the 5-why method. In the process, we may identify main causes and secondary causes. The problem may have been initiated as a result of many causes that require solutions. The most usual elements of causes may be classified in the following manner:

- Design / Engineering
- Procurement / Material
- Resources
- Environment
- Management
- Method / Process
- Measurement

Other causes may be applied for specific situation.

6.1.3.3. Root-Cause-Analysis is applicable where unsatisfactory condition may have a significant effect on quality, cost or schedule. There are two preferred methods that are recommended to conduct root cause analysis:

6.1.4. The 5 Whys Method

6.1.4.1. The five whys method is used during root cause analysis to identify the real cause of a problem. The term "five" is a figurative term, the root cause analysis may need less or more than 5 whys. The principle is to keep asking questions that may lead to the root cause. Attachment 2 represents an example of failure to achieve compaction level for earthworks.

6.1.5. ISHIKAWA Diagram

6.1.5.1. Ishikawa Diagram, also known as Fishbone Diagram or Cause & Effect Diagram is a diagram that shows the causes of a certain event. The basic concept in the Cause & Effect Diagram is that the name of a basic problem of interest is entered at the right of the diagram at the end of the "backbone". The main possible causes are drawn as main bones off the backbone. Brainstorming is typically used to add more causes on the main "bone" and break it down to specific causes. The 4 Ms method is illustrated in Attachment 3.

6.1.6. Trend Analysis

6.1.6.1. The term "trend analysis" refers to the concept of collecting information and attempting to spot a pattern, or trend, in the information. Trend analysis is a tool for continual improvement of the Project Quality Management System.

6.1.6.2. Non-conformances are subject to trend analysis per discipline. Trends may fall within any of the following classification:

- Material and equipment
- Poor workmanship
- Communication
- Violation of specified requirements
- Other classification as applicable

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6.1.6.3. CCC applies trend analysis in many areas related to quality of products and services. The following areas should be covered:

- **Non-conformance Reports "NCR"**

  The non-conformance reports shall be classified per discipline, and each discipline would have further classification in relation to trends, such as, poor workmanship, violation of method statement, disregard of inspection and test plan, using the wrong materials, etc.

  Project management should apply corrective action where necessary, for example, if workmanship carries 40% of the total defects, the root cause of poor workmanship should be identified. This could be related to competence that may require a training program.

- **Inspection Request "IR"**

  Inspection request is another area where data related to quality of product or service may be collected. Following inspection, the IR could be accepted or rejected by COMPANY representative; a statistical method shall be applied to identify possible trends related to rejection of IRs. Inspection requests rejection can be considered as reflection of customer's dissatisfaction related to quality of product or service.

- **Corrective Action Notice**

  CANs are generated as a result of quality system audits. CANs are subject to trend analysis and in some cases may require identification of root cause.

- **Weld Defects / Non-Destructive Testing**

  The purpose of trend analysis of weld defects is to identify the defects that carry a large weight (%) in relation to total number of defects for a specific period. For example, if the defect rate of porosity is 30% and lack of fusion is only 1%; the project should identify the root cause of porosity and to provide corrective action. As for the 1% of lack of fusion, it may be considered as isolated case that does not require any further investigation.

- **Earthworks and Concrete Works**

  Compaction test results and compression test results are subject to trend analysis to identify trends and to provide corrective action as necessary.

- **Key Performance Indicators**

  The key performance indicators listed in the Project Quality Plan are used to identify positive or negative trends, corrective actions may be required in case of a significant negative trend.

- **Customer Complaints**

  Customer complaints shall be subject to trend analysis, further investigation may lead to root-cause-analysis that may require a corrective action from CCC. Refer to QMP-GEN-021.

  Samples of trend analysis are shown in Attachment 1.

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6.1.7. Corrective Action Notice

6.1.7.1. Corrective Action Notices (CANs) are issued as a result of audit activity. The procedure for issuing CANs is described in QMP-GEN-016 "Quality System Audits". When issuing CANs, distinction is made between individual or repeated events of product or process origin. For individual one-off events such as encountered during the normal inspection and testing activities for project activities, the use of NCR system shall be considered, as described in the relevant QMP-GEN-008 "Control of Non-Conforming Product".

6.1.7.2. As described in QMP-GEN-016 "Quality System Audits", corrective action is determined and implemented by the recipient of the CAN, and verified by the issuer of the CAN.

6.1.8. Issue of Corrective Action Request (CAR)

6.1.8.1. Corrective Action Requests (CARs) are issued by the QA/QC Manager or Department Managers as a result of surveillance, observation or data analysis. Corrective Action may also be recommended by any person at the construction site. In this case, following discussion and approval by the Department Manager, a CAR (FM-017-002) may be issued. A copy of the CAR shall be forwarded to QA/QC Manager. QA/QC Manager shall keep a register for CARs.

6.1.8.2. Following issue, corrective action is implemented by the recipient of the CAR, its completion is confirmed by the Discipline Engineer and its verification and closure is checked and signed by the originator of the CAR. A copy of the closed CAR shall be forwarded to QA/QC Manager.

6.1.9. Corrective Action Records

6.1.9.1. The records of the corrective action taken shall be maintained. A periodical review shall be conducted by the Project QA/QC Manager to verify the effectiveness of the corrective actions implemented.

6.2. PREVENTIVE ACTION

6.2.1. Preventive action is taken when a potential non-conformity is identified as a result of the analysis of records and other relevant sources of information such as the following, in order to prevent incident recurrence:

- Processes and work operations that affect quality
- Audit results
- Quality related COMPANY complaints
- Root cause analysis
- Statistical process control documents (e.g. Talisman and ATLAS reports)

6.2.2. Records relating to product/process performance should be analyzed regularly to detect any trends and to identify areas of risk that may lead to potential non-conformities. The analysis should also determine the actions necessary to prevent any identified potential problems.

6.2.3. Preventive actions shall be appropriate to the effects of the potential problem.

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6.2.4. Information on corrective and preventive actions taken is required as an integral part of the management review process (see procedure QMP-GEN-003) to maintain and improve the efficiency and effectiveness of the Project quality management system.

6.2.1. Preventive Measures

6.2.5.1 Preventive Measures in CCC operation are applied in all phases of the Project and utilized in the following areas:

6.2.5.2 Design Phase

During the design stage a set of preventive measures is carried out to ensure that the design meets specified requirements, these are:

- Design Review
- Design Verification
- Design Validation

6.2.5.3 Procurement Phase

During procurement a set of preventive measures is also established to ensure that procured products meet specified requirements. The following processes are utilized:

- Proper selection of vendors and approval by CCC and the Employer.
- Approval of material request internally and by Employer.
- ITP for main supplies also subject to CCC and Employer approval.
- Verification of purchased product at vendor's facilities for complex product.
- Controlling the process of transportation, handling and preservation.
- Receiving inspection at site

6.2.5.4 Construction Phase

Construction is carried out based on planned arrangement by development of method statement for main activities. In addition to method statement, inspection and test plan, and quality control procedures are developed to prevent nonconformity.

6.2.5.5 Commissioning Phase

The commissioning phase is carried out in accordance with approved commissioning plan and procedures to ensure that final product "systems, subsystems and units" meets specified requirements.

6.2.2. Preventive Action Request

6.2.6.1 Preventive Action may be recommended by any person at construction site, following discussion and approval by Department Manager a Preventive Action Request "FM-017-003" may be issued, a copy of the PAR shall be forwarded to QA/QC Manager. QA/QC Manager shall keep a register for PAR.

6.3. QA/QC MONTHLY REPORT

6.3.1. At the end of each month the QA/QC Manager shall prepare and submit the QA/QC Monthly Report to MOA as per Attachment 1 (FM-017-001).

6.3.2. The QA/QC Monthly Report will include the following information as a minimum:

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- Quality Key Performance Indices
- Minutes of Management Review Meetings
- Audit reports including all internal and external audits
- Latest Quality Audit Schedule
- Close out status of all NCR's and CANs
- Statistics and trend analysis
- Proposals for Improvement
- COMPANY complaints about quality
- Actions/support required by MOA department
- Issue/approval status of quality procedures
- QA/QC manning levels
- Summary of the preventive actions and/or lessons learned identified in that period

7. ATTACHMENTS

7.1. Attachment 1: Samples of Trend Analysis

7.2. Attachment 2: The 5 whys method

7.3. Attachment 3: Example of ISHIKAWA Diagram

7.4. Attachment 4: FM-017-001 QA/QC Monthly Report

7.5. Attachment 5: FM-017-002 Corrective Action Request

7.6. Attachment 6: FM-017-003 Preventive Action Request

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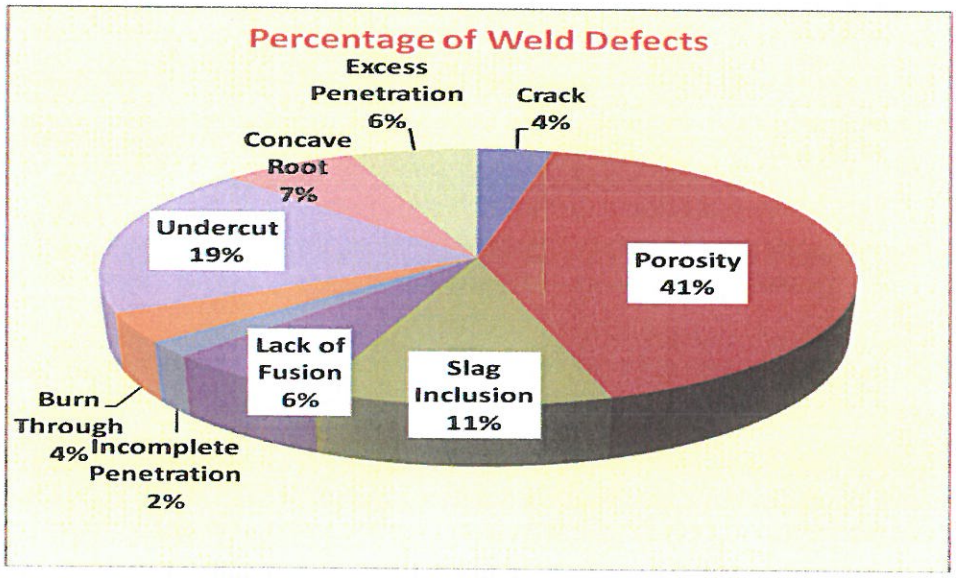
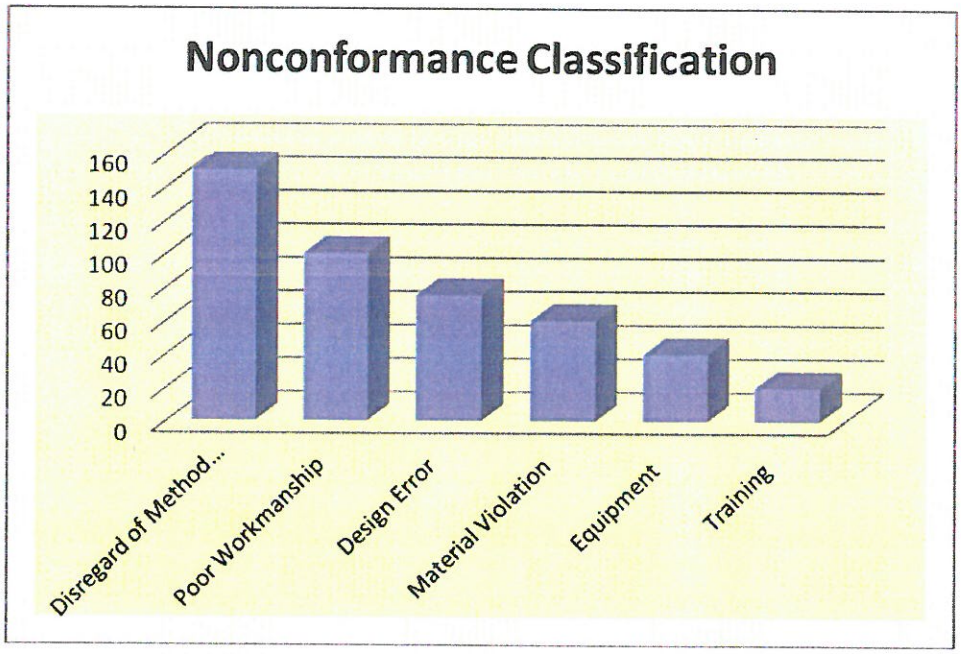
ATTACHMENT 1
SAMPLES OF TREND ANALYSIS

WELD DEFECT RATES



NON-CONFORMANCE CLASSIFICATION



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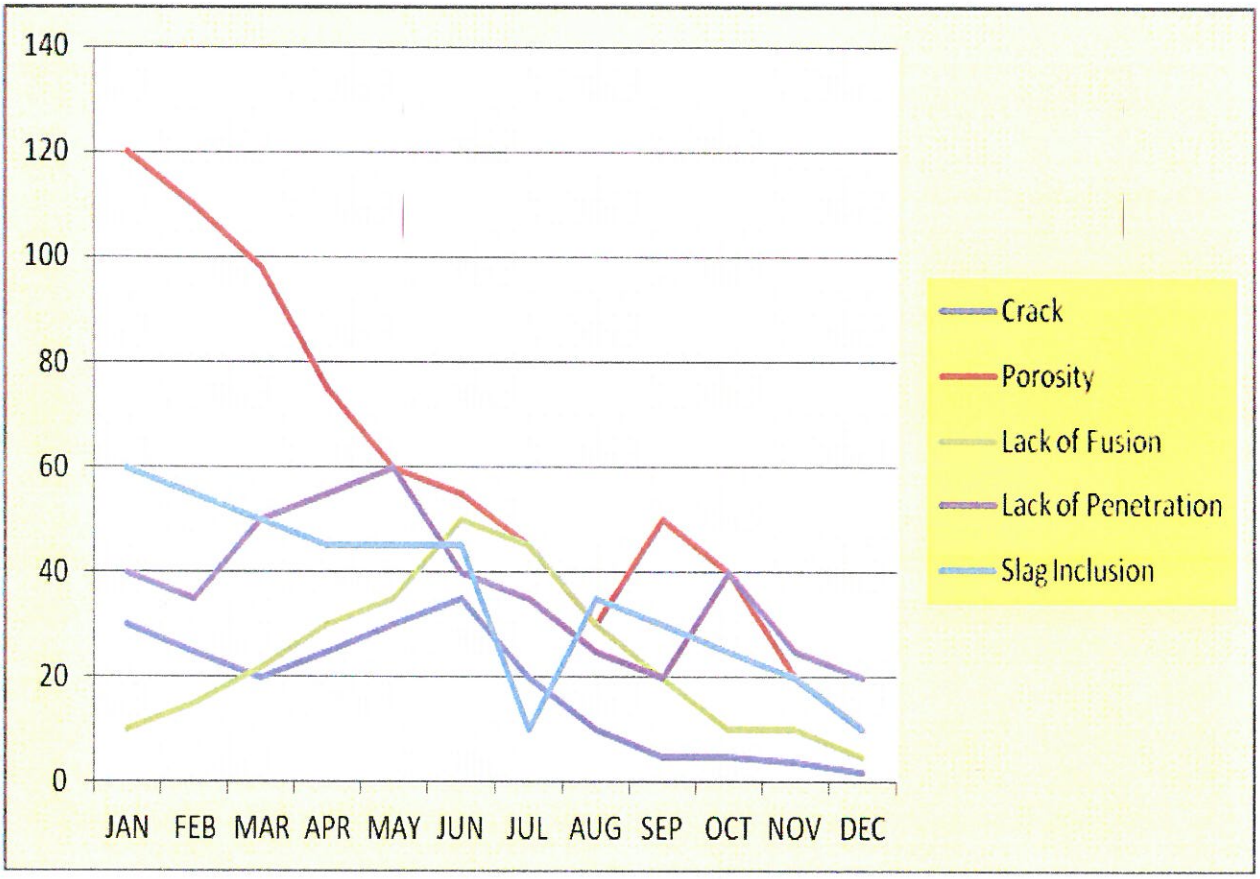
ATTACHMENT 1
SAMPLES OF TREND ANALYSIS

CHANGES IN WELD DEFECT RATE IN TIME



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ATTACHMENT 2
THE 5 WHYS METHOD

	Questions	Answers
Why 1	Why compaction level has not been achieved?	The compactor failed to achieve results.
Why 2	Why the compactor failed to achieve result?	The compactor broke during compaction process.
Why 3	Why the compactor broke?	Preventive maintenance was not carried out.
Why 4	Why preventive maintenance was not carried out?	Maintenance schedule was not followed.
Why 5	Why maintenance schedule was not followed?	The workshop was overloaded with work.
Why 6	Why the workshop was overloaded with work?	Shortage of skilled workers to do the maintenance.
Why 7	Why the workshop has shortage of skilled employees?	Human resources failed to recruit skilled workers on time.

Although, you know that shortage of skilled workers represent a major cause, you may continue in further questioning that may lead you to other problems within the organization.

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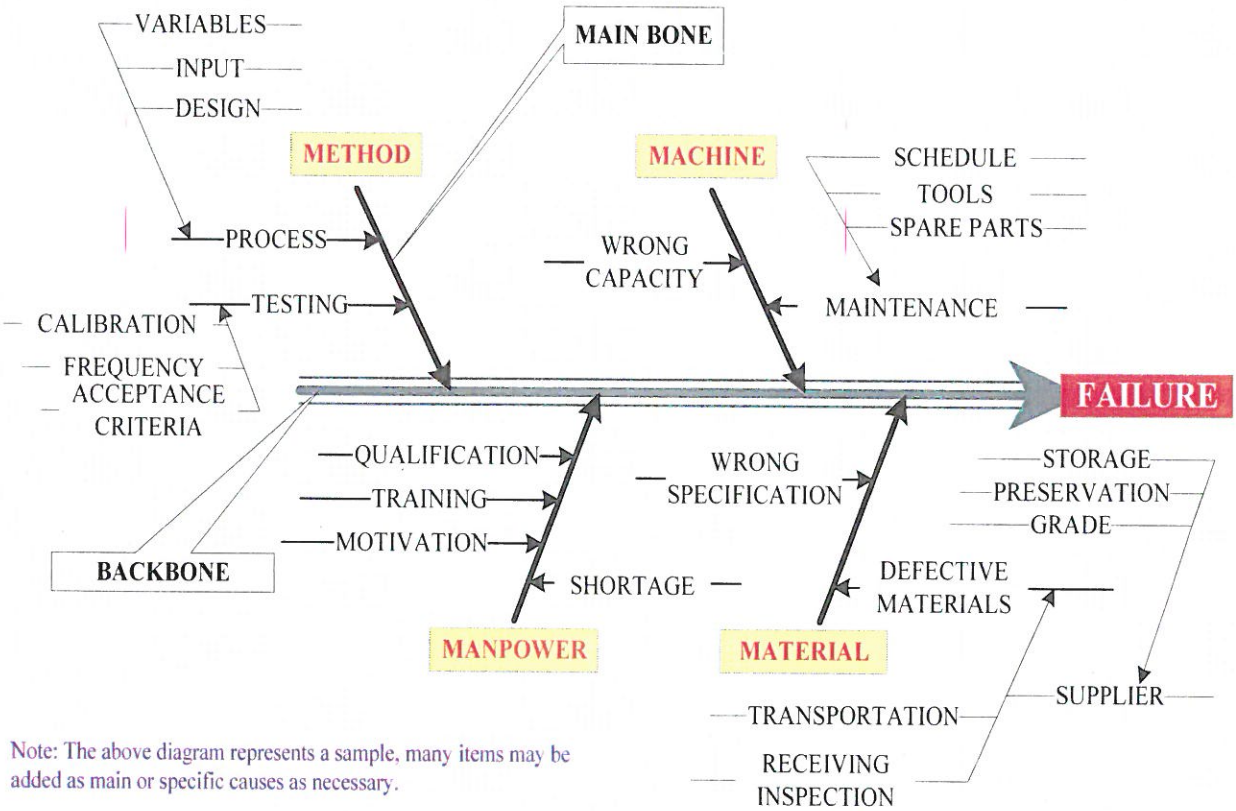
ATTACHMENT 3
SAMPLE OF ISHIKAWA DIAGRAM



Note: The above diagram represents a sample, many items may be added as main or specific causes as necessary.

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Company Logo	Consolidated Contractors Company Project Name **QA/QC Monthly Report**	Form No: FM-017-001 Owner: QMP-GEN-017 Rev. No: B Page No: 1 of 2

Reporting Month: | **Project percentage completion:**

(I) Status of Procedures

Type	No to be Issued	No Issued	No Approved	Notes
PQP				
QMP				
QCP				
ITP				
WPS				
PQR				

NOTE: *A table can be attached in addition to the above information*

(II a) Non Conformances

Description	CCC NCR	CONTRACTOR NCR	COMPANY NCR
Total NCR's Issued			
Total NCR's Closed			
Total NCR's Open			

(II b) Ratio of NCR's to IR's

Disciplines	Target %	IR's Issued (Total)	CCC NCR's Issued (Total)	Ratio of NCR's Issued to IR's Issued (Total)
Civil	≤ 0.35			
Mechanical	≤ 0.35			
E&I	≤ 0.35			

(II c) Ratio of Rejected IR's

Disciplines	Target %	IR's Issued (Total)	IR's Rejected (Total)	Ratio of IR Rejected to IR's Issued (Total)
Civil	≤ 3			
Mechanical	≤ 3			
E&I	≤ 3			

(III) Audits / Corrective Action Notices

No of Audits Scheduled (Total)	
No of Audits Conducted (Total)	

No of CAN Issued (Total)	
No of CAN Open (Total)	

NOTE: *Please attach copy of latest Audit Schedule and Audit Reports carried out during this Month.*

(IV) Management Review Meetings

No of MRM Scheduled (Total)	
No of MRM Conducted (Total)	

(V) Areas of Concern

(VI) CONTRACTOR/COMPANY Complaints

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L.

Company Logo	Consolidated Contractors Company Project Name **QA/QC Monthly Report**	Form No: FM-017-001 Owner: QMP-GEN-017 Rev. No: B Page No: 2 of 2

Reporting Month: | **Project percentage completion:**

(VI) QA/QC Staff

	On Site	Org. Chart
No of QC Inspectors		
No of QC Clerks/Operators		

(VII) Welders

No of Welders on Site	
No of Welders Qualified	

(VIII) NDT / PWHT Performance & CIVIL Performance

NDT PERFORMANCE		
Description	**Target**	**Actual** (Cumulative)
No of Welds Requested for RT		
No of Welds Radiographed by S/C		
RT Backlog (No of Joints)	≤ 500	
No of Repairs		
% Repair Rate	≤ 3%	
No of Welds Requested for MT/PT		
No of Welds MT/PT completed		
MT/PT Backlog (No of Joints)	≤ 500	
No of Welds Requested for UT		
No of Welds UT completed		
UT Backlog (No of Joints)	≤ 500	
No of Welds Requested for FN		
No of Welds FN completed		
FN Backlog (No of Joints)	≤ 500	
No of Welds Requested for PMI		
No of Welds PMI completed		
PMI Backlog (No of Joints)	≤ 500	

PWHT PERFORMANCE		
Description	**Target**	**Actual** (Cumulative)
No of Welds Requested for PWHT		
No of Welds PWHT completed		
PWHT Backlog (No of Joints)	≤ 500	

EARTHWORKS

Tests	No.Tests Done	Passed	Failed	Ratio

CONCRETE AND AGGREGATES

Tests	No.Tests Done	Passed	Failed	Ratio

ASPHALT AND AGGREGATES

Tests	No.Tests Done	Passed	Failed	Ratio

Note: *A Copy of Talisman report may be attached*

(X) Painting

(XI) Lessons Learned / Proposals for Improvement

NOTE: *Please attach details in a separate file, as applicable.*

Signed By : _____ **Date :** _____

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEXSEE CONTRACTING CO. W.L.L.

COMPANY	CONTRACTOR Consolidated Contractors Company		PROJECT	
CONTRACT No.	FORM OWNER QMP-GEN-017	FORM No. FM-017-002	REV. B	PAGE No. 1 of 1
FORM TITLE				

CORRECTIVE ACTION REQUEST (CAR)

PROJECT/DEPARTMENT/DISCIPLINE:

CORRECTIVE ACTION REQUEST No.:

CAR SUBJECT:

SOURCE OF CAR:

- Engineering ☐
- Procurement ☐
- DCG ☐
- IT ☐
- QA/QC ☐
- HR ☐
- Other "specify" ☐

Construction:

- Civil ☐
- Mech. ☐
- E & I ☐
- Structural ☐
- Piping ☐

Description of Unsatisfactory Condition and its Cause (Section A):

Root Cause "only for situations that may cause a significant effect on quality, cost or schedule":

Originator Name: Signature: Date:	QA/QC Mgr.:

Description of Proposed Corrective Action (Section B):

Description of Action to Prevent Recurrence:

Note: QA/QC Manager to be consulted. **DUE DATE:**

Discipline Engineer Name: Signature: Date:	Dept. Mgr.:

Completion by The Discipline Engineer (Section C):

Actual Date of Completion:	Discipline Engineer Name: Signature: Date:

Verification of Completion by the Originator / Closing of CAR (Section D)

Originator Name: Signature: Date:	QA/QC Mgr.:

Distribution:	QCD FILE ☐	ORIGINATOR ☐	DEPARTMENT ☐	OTHER ☐

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) / TEC... CO. WLL - JV

COMPANY	CONTRACTOR Consolidated Contractors Company		PROJECT	
CONTRACT No.	FORM OWNER QMP-GEN-017	FORM No. FM-017-003	REV. B	PAGE No. 1 of 1
FORM TITLE				

PREVENTIVE ACTION REQUEST (PAR)

PROJECT/DEPARTMENT/DISCIPLINE:

PREVENTIVE ACTION REQUEST No.: _____

PAR SUBJECT: _____

SOURCE OF PAR:

- Engineering ☐
- Procurement
- DCG ☐
- IT
- QA/QC ☐
- HR ☐
- Other "specify" ☐

Construction:

- Civil ☐
- Mech. ☐
- E & I ☐
- Structural ☐
- Piping ☐

Description of Existing Situation (Section A):

Description of Potential Non-conformity (Section B):

Description of Proposed Preventive Action (Section C):

Proposed Date of Completion:

Originator

Name _____ **Signature** _____ **Date** _____

Dept. Mgr.:

Verification of Completion by The Discipline Engineer (Section D):

Actual Date of Completion:

Discipline Engineer

Name _____ **Signature** _____ **Date** _____

Verification of Completion – Closing (Section E)

Originator

Name _____ **Signature** _____ **Date** _____

QA/QC Mgr.:

Distribution: QCD FILE ☐ ORIGINATOR ☐ DEPARTMENT ☐ OTHER ☐

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) CCC

APPENDIX E – ANNEXURE 8

QUALITY MANAGEMENT PROCEDURE FOR CUSTOMER COMPLAINTS (QMP-GEN-021)

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCCO)
AL - TIM - O - WIL - JV

This document is categorized as a "GEN" document and should not be used directly. It's provided by CS&QM Department and is to be modified to suit Project specific requirements. Modification may entail, inclusion of Project specific requirements (often prescribed in Contract documents), Customer preferences (when expressed), logos, organizational names and job titles that are unique to the Project concerned.

REV.	DATE	DESCRIPTION	PREP. BY	REV. BY	APPR. BY
B					

CLIENT	CONTRACTOR
	CONSOLIDATED CONTRACTORS COMPANY

PROJECT TITLE

DOCUMENT TITLE

QUALITY MANAGEMENT PROCEDURE
CUSTOMER COMPLAINTS

CONTRACT No.	DOCUMENT No.	REV. No.	PAGE No.
	QMP-GEN-021	B	1 of 7

CONSOLIDATED CONTRACTORS GROUP (Offshore) (CCG) | TEYSEER CONTRACTING CO. WLL - JV

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CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG)

1. SCOPE

1.1. This procedure is applicable to all aspects of the Project and can be applied at any level of the organisation. It details how CCC will manage and monitor both verbal and documented Customer Complaints.

1.2. The way in which Customer Complaints are handled, processed and closed has a direct effect on the overall reputation of CCC; therefore all employees shall follow the directions and guidance provided by this procedure.

1.3. To summarise the scope of this procedure:

- Handling of verbal complaints
- Processing of written complaints

2. PURPOSE

2.1. The purpose of this procedure is to ensure that planned arrangements are implemented for communicating with COMPANY regarding Contract compliance, workmanship, materials handling, contractual and COMPANY feedback.

2.2. This procedure contributes to the overall objective of achieving conformance to requirements and assurance that the end product meets specified purchase requirements.

2.3. The application of this procedure shall provide information relating to COMPANY perception as to whether CCC has met all COMPANY requirements. This information shall be used as input to the periodic Management reviews.

3. REFERENCES

3.1.	ISO 9001:2008	Quality Management Systems – Requirement
3.2.	ISO10002:2004	Quality Management – Customer Satisfaction – Guidelines for complaints handling in Organisations
3.3.	PQP-GEN-001	Project Quality Plan
3.4.	QMP-GEN-003	Management Review
3.5.	QMP-GEN-017	Corrective & Preventive Action
3.6.		Relevant Project Contract Specifications

4. ABBREVIATIONS / DEFINITIONS

4.1.	Project	Project Name
4.2.	COMPANY	Project Owner / Customer
4.3.	CCC	Consolidated Contractors Company
4.4.	Complainant	Person, organisation or its representative making a complaint
4.5.	Customer Complaint	A contractual notification by the COMPANY that a Contract requirement or expectation is not being met. A Customer Complaint

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG)

also includes concerns expressed by the COMPANY or COMPANY representative in other forms such as NCR's, minutes of meeting, memos etc.

4.6. Customer Satisfaction — COMPANY perception of the degree to which the requirements have been fulfilled.

5. RESPONSIBILITIES

5.1. QA/QC MANAGER

5.1.1. The Project QA/QC Manager is responsible for:

- Ensuring that a complaints handling system is established on the Project;
- Identifying and allocating the management resources needed for the complaints handling processes;
- Ensuring that there is a process for rapid and effective notification to all Project management where there are significant complaints;
- Periodically reviewing the complaints handling process to ensure that it is effectively and efficiently maintained and continually improved;
- Responsible for promoting awareness of COMPANY requirements throughout the organization; and
- Establishing a process for performance monitoring, evaluation and reporting trend analysis.

5.2. OTHER MANAGERS

5.2.1. All other CCC Managers involved in the complaints handling process are responsible for:

- Ensuring that the complaints handling system is implemented;
- Ensuring that information regarding the complaints handling process is available and accessible;
- Reporting on actions and decisions with respect to complaints handling;
- Ensuring that action is taken to rectify a problem, prevent it happening in the future and that the event is recorded;
- Preserving data related to Customer Complaints for management review; and
- Forwarding relevant data to QA/QC Manager.

5.3. ALL CCC PERSONNEL

5.3.1. All personnel in contact with COMPANY are responsible for:

- Compliance with the requirements of this procedure;
- Treat COMPANY or their representatives in a courteous manner and promptly respond to their complaints or direct them to the appropriate person;
- Demonstrate good interpersonal and good communication skills;
- To follow this procedure with regards to the actions necessary to resolve Customer Complaints; and
- Highlight to other managerial staff any complaints that have a significant effect on the Project objectives.

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) TEYSEER CONTRACTING CO. W.L.L. - JV

6. PROCEDURE

6.1. GENERAL

6.1.1. While documented Customer Complaints leave behind an auditable paper trail and provide data for analysis, it is preferable for Customer Complaints to be handled verbally at the lowest possible level of the organisations (both CCC and COMPANY), this approach will filter complaints so that only the more serious are documented and also enhance working relationships. Additionally verbal complaints can be resolved much quicker and often more effectively than documented complaints. This procedure therefore encourages the receipt of verbal complaints from COMPANY representatives along with immediate (or quick) action to resolve the complaint at engineer / supervisor level or below.

6.1.2. Complaints received at the working level by clerks, mechanics, operators, drivers, welders etc. shall be passed to the responsible Foreman, Engineer or Supervisor for resolution.

6.2. VERBAL COMPLAINTS

6.2.1. A verbal complaint can be received by almost anyone in CCC organisation at any time and it is important to identify when a complaint is being made. What may appear to be a trivial complaint, if not addressed and closed, will often grow to become more serious complaint. When a complaint is received from the COMPANY an apology shall be made with a commitment to look into the complaint and resolve it as soon as possible. (Refer to Attachment 1 "CCC Complaints Policy")

6.2.2. The first stage of verbal complaint handling, (carried out by the person receiving the complaint or by the Supervisor of the area), is to gather together all the relevant facts and data surrounding the complaint. The more that is known about the complaint circumstances, the better the resolution will be.

6.2.3. Where there is sufficient information available and the action required is simple and obvious. The action shall be initiated, where further authority is required then the complaint shall be escalated in accordance with the graphic provided as Attachment 2 to this document

6.2.4. The objective is to resolve every complaint with the minimum of delay and to the satisfaction of the COMPANY or COMPANY representative.

6.2.5. Verbal complaints are not recorded and receive no formal registration. They follow the process described in this section (6.2); their resolution is no less important that a formal documented complaint.

6.3. DOCUMENTED CUSTOMER COMPLAINTS

6.3.1. Documented Customer Complaints may be received in a number of ways, such as a memo issued by the COMPANY, or as notes of meeting during which the COMPANY expresses complaints. All of these types of documented complaints shall be processed in accordance with this present procedure. In case, COMPANY may wish to describe the complaint in a CCC form, in which case the COMPANY shall be provided with the Complaint Form (example shown as Attachment 3). The COMPANY shall also be provided with a copy of the Complaints Policy – provided as Attachment 1 of this procedure.

6.3.2. The QA/QC Manager shall establish a Customer Complaints Register (see Attachment 4) that contains the following fields as a minimum:

- Reference No
- Date Received
- Time Received

- Medium
- Details of complaint
- Problem Category
- Assessment Done
- Investigation Complete
- Resolution
- Inform Complainant
- Correction
- Correction Verified
- Complaint Closed
- Remarks

6.3.3. On receipt of a documented Customer Complaint, it shall be forwarded to QA/QC Manager for internal registration in the complaints database. Initially the first six fields shall be completed that is "Reference No", "Date Received", "Time Received", "Medium", "Details of complaint", and "Problem Category". Additionally a Customer Complaint follow-up form shall be raised (see Attachment 4 of this procedure).

6.3.4. A copy of the Customer Complaint shall then be forwarded to the Supervisor or Supervisors of the area(s) concerned and the Project Manager for information.

6.3.5. The QA/QC Manager shall lead the assessment and investigation into the complaint by making sure that the complaint is fully understood, collecting evidence and data related to the complaint and analysing the circumstances leading up to the complaint. Further information from the COMPANY (if available) and discussion with the Supervisor concerned may provide important information.

6.3.6. Corrective action shall be identified (to correct any unacceptable situation). The corrective action shall normally be carried out by the Supervisor concerned, unless there is a need to adjust the project management systems, in which case the QA/QC Manager shall initiate corrective action. Occasionally the Project Manager may need to be involved. The corrective action shall be followed up by the QA/QC Manager to ensure that action has been effective and complete.

6.3.7. The Customer Complaint Register shall be updated as actions are taken to maintain accurate tracking of the complaint.

6.3.8. The QA/QC Manager shall determine whether there are any "Lessons Learnt" to be derived from the Customer Complaint, where there is a lesson to be learnt then the Project Manager shall be informed and the knowledge management system shall be updated.

6.3.9. When actions have been taken and are confirmed to be effective by the QA/QC Manager then the COMPANY shall be advised that corrective action has been taken and where appropriate the COMPANY shall be asked whether the action taken is considered to be satisfactory.

6.3.10. Where the COMPANY is not satisfied with the corrective action taken, the complaint shall remain "open" further discussion shall be sought and alternative actions decided. The objective shall always be to eliminate the cause for complaint.

6.3.11. Should the COMPANY remain unsatisfied then COMPANY shall be informed of any other internal or external recourse available. The QA/QC Manager shall monitor the progress of the complaint until all reasonable options of recourse are exhausted or the COMPANY is satisfied.

6.3.12. At all stages of the Customer Complaint process, the Customer Complaint Register shall be updated so that current status can be reported and the Customer Complaint follow-up form shall be completed as the complaint is processed.

6.4. ANALYSIS

6.4.1. Data related to Customer Complaints shall be retained and periodically analysed to detect any trends. Charts and graphs may be produced for input to the management review process. Where trends become apparent, root cause analysis shall be carried out and action(s) taken in proportion to the risks posed. Corrective and Preventive Action procedure (QMP-GEN-017) applies.

6.4.2. When conducting analysis it should be noted that Customer Complaints are a common indicator of low COMPANY satisfaction but their absence does not necessarily imply high COMPANY satisfaction.

6.4.3. Additionally it should be noted that even when COMPANY requirements have been agreed with the COMPANY and fulfilled, this does not necessarily ensure high COMPANY satisfaction.

7. ATTACHMENTS

7.1.	Attachment 1:		CCC Complaints Policy
7.2.	Attachment 2:		Customer (Verbal) Complaint Process and Escalation
7.3.	Attachment 3:	FM-021-001	Customer Complaint Form
7.4.	Attachment 4:	FM-021-002	Customer Complaint Register
7.5.	Attachment 5:		Customer Complaints Handling Process

Note: *The attached forms are sample forms and can be revised independently of the present procedure as required during Project execution.*

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ATTACHMENT No.1

CCC COMPLAINTS POLICY

CCC CUSTOMER COMPLAINTS POLICY

We aim to provide engineering, procurement and construction services that are in accordance with specified requirements and standards and in doing so we will endeavour to treat our customers and their representatives as we would wish to be treated ourselves.

We want to know when our work has gone wrong, to put things right and learn from our mistakes. If you have any cause for complaint, we shall apologise and will do our best to resolve it as quickly as possible.

How to complain

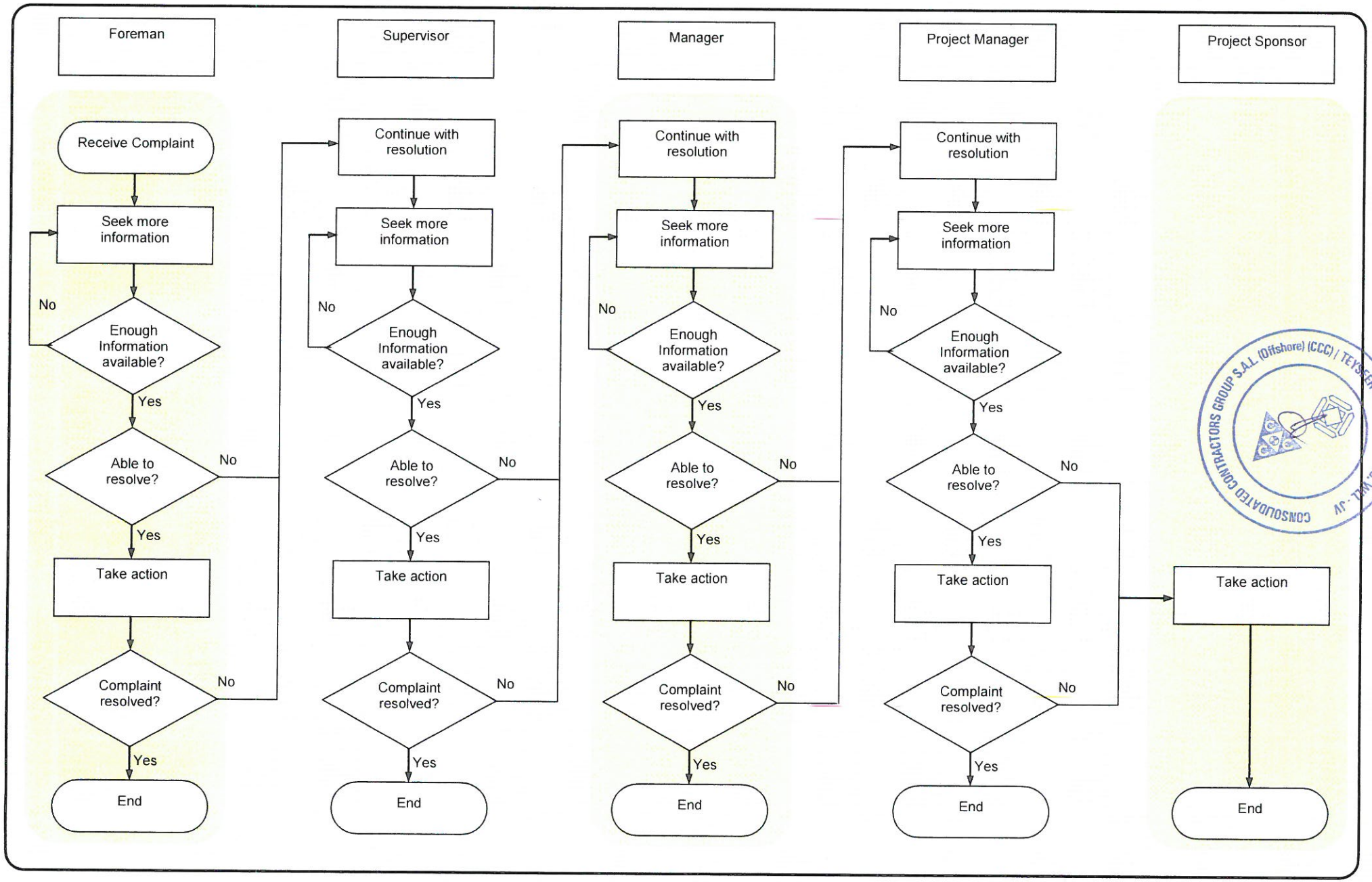
You should initially address your complaint to the supervisor responsible for the area concerned. Our supervisors are trained to handle Customer Complaints. All we ask is you allow sufficient time for the complaint to be properly investigated and any necessary corrective action to be taken.

Should you still not be satisfied or if the complaint is in regard to the performance of the supervisor concerned then you should complete page 1 of the attached complaint form and send it to our QA/QC Manager.

After you complain

You will be provided with a response within fifteen (15) working days or, if your complaint is complicated, you will be told when to expect our response. If you are still not happy after receiving our response, you should write directly to our Project Manager.

Attachment 2: Customer (Verbal) Complaint Process and Escalation (illustrative)



CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. JV

	CUSTOMER COMPLAINT	Form No: FM-021-001 Revision : B Page 1 of 2

Your details:

Name:	Job Title:
Telephone:	e-mail:

The details of your complaint:

Please include as many details as possible i.e. date, time, who was involved (names if known) and what action is being suggested.

What action did they take?

Why are you dissatisfied with the response you have received so far?

What do you think CCC should do to put things right?

Signed:	Date:

Please finish here and send this form to the CCC QA/QC Manager
Page 2 of this form is for CCC Follow-up activity

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) TEYSEER CONTRACTING CO. W.L.L. JV

	Consolidated Contractors Company **CUSTOMER COMPLAINT** (Form)	Form No: FM-021-001 Rev: B Page 2 of 2

Date of Complaint: Time of Complaint: Name of Recipient: Complaint Number:

Complaint Medium:	Date Complaint Received:

Problem Encountered:

Recurrent Problem? ☐ Yes ☐ No	Problem Category:

Additional Information:

Complaint Assessment:

Severity:	Complexity:	Impact:

Need for immediate action:	☐ Yes	☐ No
Availability of immediate action:	☐ Yes	☐ No
Likelihood of reparation:	☐ Yes	☐ No
Remedy requested:	☐ Yes	☐ No

Action to be taken

Complaint tracking:

Action Taken	Date	Name	Remarks
Complaint acknowledged			
Complaint assessment			
Investigation of complaint			
Resolution of complaint			
Information to complainant			
Correction			
Correction verified			
Complaint closed			

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) / TEYSEER CONTRACTING CO. WLL - JV

CONSOLIDATED CONTRACTORS COMPANY

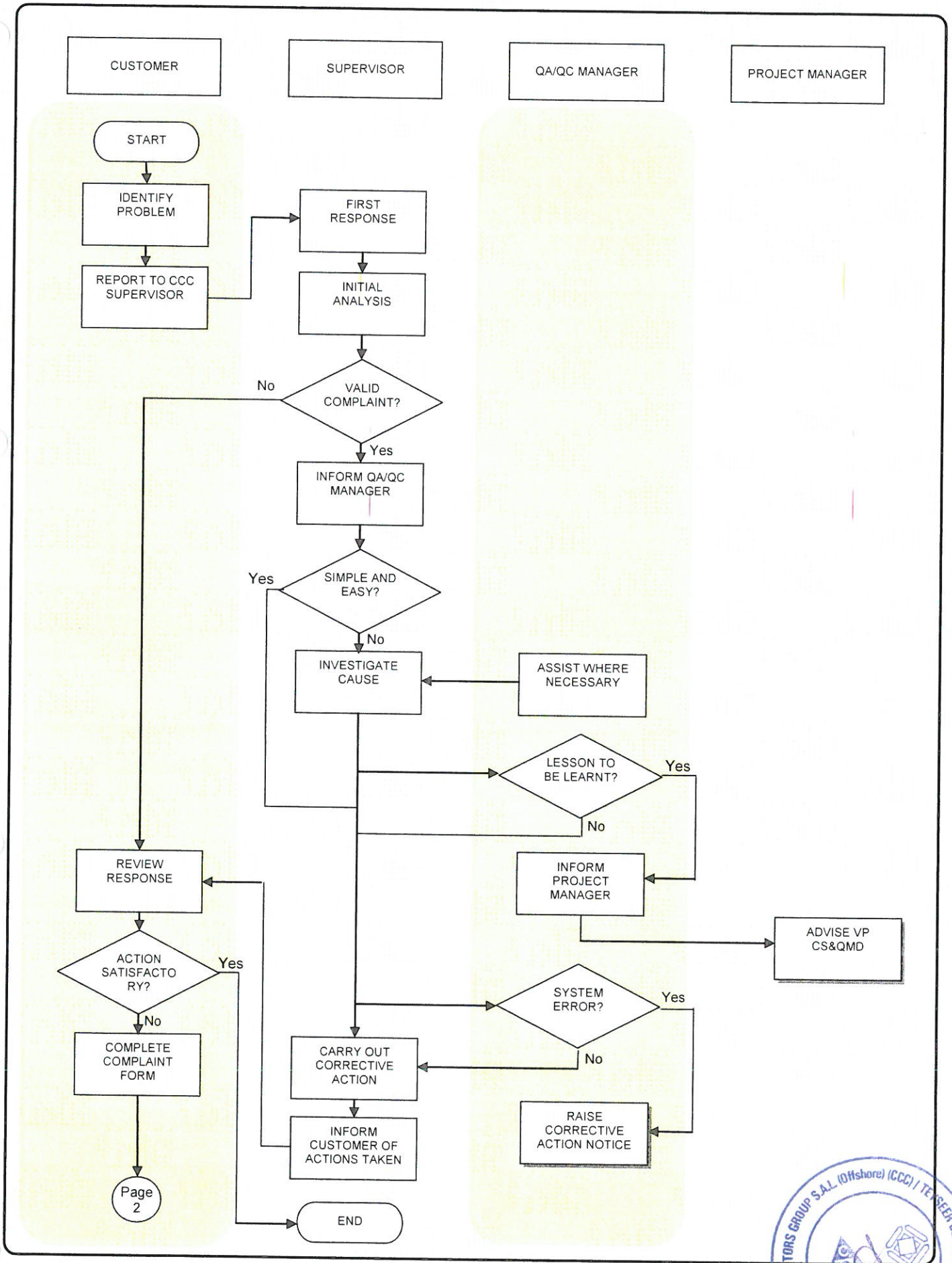
CUSTOMER COMPLAINT REGISTER

Form No: FM-021-002
Rev: B
Page 1 of

Complaint Receipt						Complaint Tracking				Complaint Resolution			
Reference No:	Date Received:	Time Received:	Medium:	Details of complaint:	Problem Category:	Assessment Done:	Investigation Complete:	Resolution:	Inform Complainant:	Correction:	Correction Verified:	Complaint Closed:	Remarks:

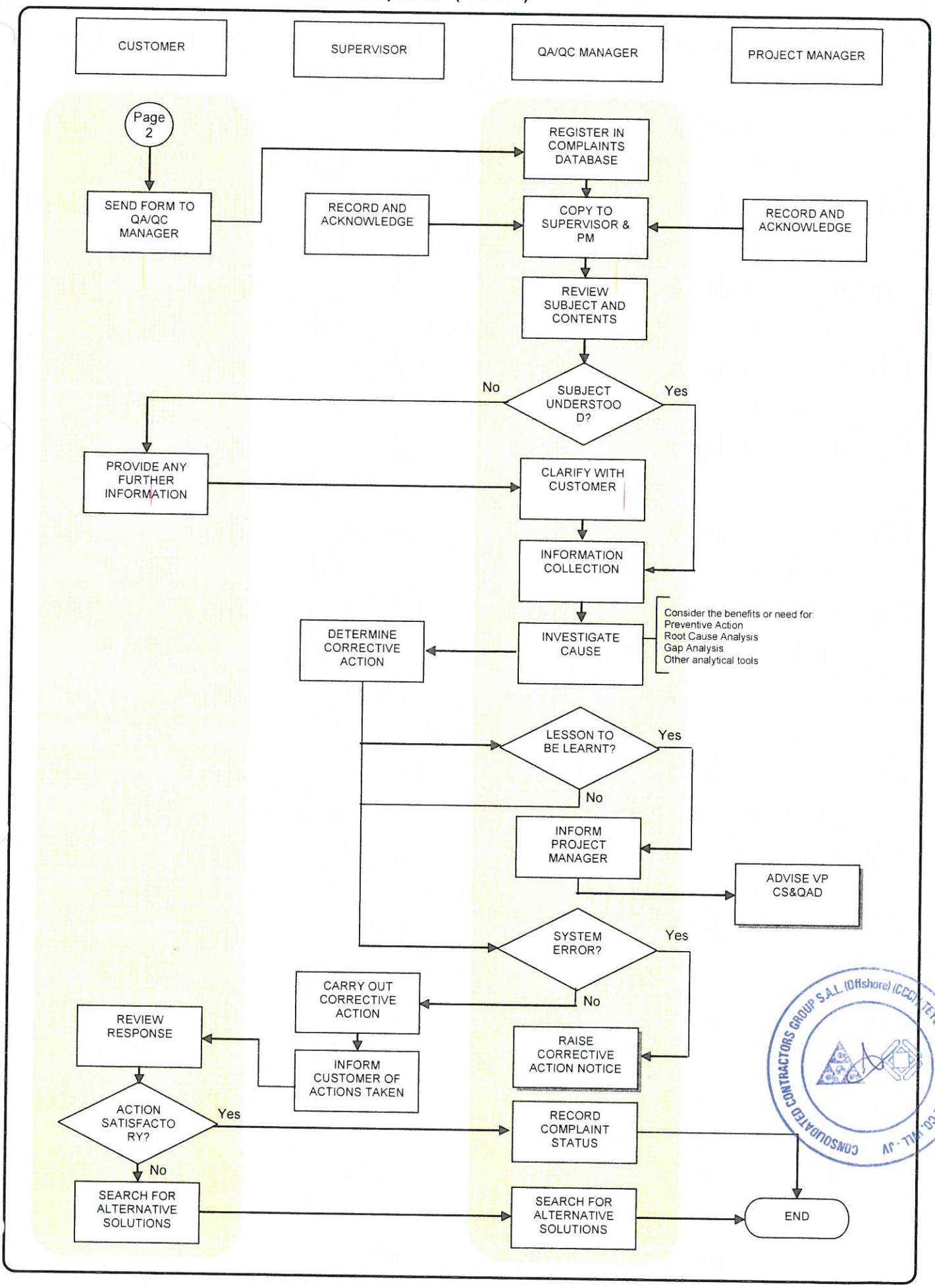
CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) | TEYSEER CONTRACTING CO. WLL - JV

Attachment 5 – Flowchart for Customer Complaints (- 1 / 2 -)



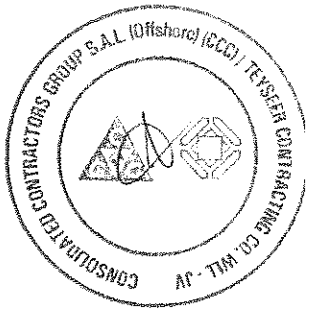
CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TENSEER CONTRACTING CO. W.L.L. - JV

Attachment 5 – Flowchart for Customer Complaints (- 2 / 2 -)



APPENDIX E – ANNEXURE 8

PROPOSED PROJECT QUALITY PLAN



p0	09/07/2014	Preliminary – Issued for Tender	AD	EK	HT
REV.	**DATE**	**DESCRIPTION**	**PREP. BY**	**REV. BY**	**APPR. BY**

EMPLOYER

Qatar General Electricity & Water Corporation (KAHRAMAA)

CONTRACTOR

Consolidated Contractors Group S.A.L (Offshore) and Teyseer Contracting Company W.L.L. Joint Venture (CCC-TCC JV)

PROJECT TITLE

Construction of Mega Reservoir PRPSs (Package A)

DOCUMENT TITLE

PROJECT QUALITY PLAN

EMPLOYER TENDER NO.	DOCUMENT NO.	REV. NO.	DATE	PAGE
GTC 626/2014	PQP-EST-17-1.4857	A	09/07/2014	1 of 27

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CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) / TEYSEER CO. WLL - JV

1. PREAMBLE

1.1 Introduction

This Quality Plan is the proposed principal quality document for the Project and plans and summarizes the quality system, resources and controls for its implementation on the Project. The Quality Plan has been prepared and reviewed by Construction Support & Quality Management Department and approved for issue by the Project Manager.

The Quality Plan is divided into a narrative and seven attachments:

1. Project Quality Policy
2. Project Key Performance Indices
3. Project Quality System Matrix
4. List of Quality Management Procedures
5. Indicative Quality System Audit Schedule
6. Preliminary list of applicable QCP's and ITP's
7. Project QA/QC Organization Chart

1.2 Scope

This Project Quality Plan sets out the specific quality practices, resources and sequence of activities appropriate to the ***Construction of Mega Reservoir PRPSs (Package A).***

The Project Quality Plan specifies the quality requirements for the Project, the procedures to be followed in meeting these requirements and the manner in which compliance with these requirements is verified.

The scope of the present Quality Plan is as follows:

- The ***Construction of Mega Reservoir PRPSs (Package A)*** as defined in the Tender Documents between CCC-TCC JV and Employer relative to the Contract and associated technical documents.
- Subjects included in ISO 9001:2008.
- CCC-TCC JV work as defined in purchase orders and subcontract agreements.

1.3 Purpose

The purpose of the Project Quality Plan is to ensure that:

- The requirements of ISO 9001:2008 and CCC-TCC JV corporate quality system are met.

- The Employer quality requirements to CCC-TCC JV are understood and met with particular reference to the Contract.

- CCC-TCC JV quality management system is planned, documented, communicated, understood by Project personnel, implemented and audited, and that the process conforms to the specified requirements of the Contract objectives and policy.

1.4 Quality Policy

CCC-TCC JV Project Quality Policy is issued under the signatures of CCC-TCC JV Project Manager and QA/QC Manager and will be prominently displayed at all Project Site offices.

As per clause 5.3 of ISO 9001:2008, the CCC-TCC JV Quality Policy will be communicated and understood by all CCC-TCC JV Project personnel and their Subcontractors and will be reviewed for continued suitability at scheduled Management Review Meetings.

A copy of CCC-TCC JV Project Quality Policy is provided in Attachment 1.

1.5 References

ISO 9000:2005	Quality Management Systems - Fundamentals and Vocabulary
ISO 9001:2008	Quality Management Systems - Requirements
ISO 10005:2005	Quality Management - Guidelines for Quality Plans
QM-CCC-001	CCC Corporate Quality Manual

1.6 Definitions and Abbreviations

Project	Construction of Mega Reservoir PRPSs (Package A)
Location	Doha, Qatar
Employer	Qatar General Electricity & Water Corporation (KAHRAMAA)
CCC-TCC JV	Consolidated Contractors Group S.A.L. (Offshore) & Teyseer Contracting Company W.L.L.
MOA	CCC Managing Office Athens
PQP	Project Quality Plan
QMP	Quality Management Procedure
ITP	Inspection & Test Plan - A document which defines or identifies in a tabulated form the inspection, test method(s), procedures and acceptance criteria to be utilized during procurement, construction,

pre-commissioning and commissioning.

QCP	Quality Control Procedure - A document that complements as and when required, the corresponding ITP, by defining in detail how the quality control inspection and tests are to be performed.
NCR	Non-Conformance Report - A form used to document a Non-Conformance relative to a deficiency in characteristic, documentation or procedure which renders the quality of a product or service unacceptable or indeterminate or not according to specified requirements.
CAN	Corrective Action Notice - A form used to identify and eliminate a non-conformity identified during a quality system audit.
CAR	Corrective Action Request - A form used to identify and to eliminate the cause of non-conformities identified as a result of trend analysis, customer dissatisfaction, or any other repeated undesirable condition.
PAR	Preventive Action Request - A form used to prevent the occurrence of potential non-conformity or any undesirable potential situation.
Customer Complaint	A contractual notification by the Employer that a contract requirement or expectation is not being met. A customer complaint also includes concerns expressed by the customer or customer's representative in other forms such as NCR's, minutes of meeting, memos etc.
VBC	Visual Byblos Cyberspace (Document control software)

Note 1: *All definitions concerning quality terms in this document are determinable from ISO 9000:2005 - Quality Management Systems - Fundamentals and Vocabulary.*

1.7 Revisions

This Project Quality Plan shall be revised to "issued-for-use" status and issued prior to commencement of the works.

This Project Quality Plan shall be revised and re-issued in accordance with the Project document control system.

MOA Construction Support & Quality Management Department is to be copied on all revised issues to this Project Quality Plan.

Revisions shall be the responsibility of the QA/QC Manager or his designee, and shall be made so as to constantly reflect the current Project quality system and Contract / statutory and regulatory requirements.

2. ORGANIZATION AND RESPONSIBILITIES

2.1 Project Organization

CCC-TCC JV organization for the Project including organizational interfaces, interrelationship lines of reporting / communication and hierarchical structure is documented on the Project Organization Chart (see Attachment 7).

Revisions to the Project Organization Chart shall be controlled independently of this Plan.

Table in Attachment 3 of this Quality Plan (Project Quality System Matrix) gives a brief overview of all the activities, responsibilities and procedures within the Project, and falls in line with the requirements of ISO 9001:2008.

Detailed responsibilities are also stated in the Quality Management Procedures (see Attachment 4 - List of Project Quality Management Procedures).

2.2 Roles & Responsibilities of Key Personnel

2.2.1 Project Manager

The Project Manager is ultimately responsible for the quality of the finished works. Specifically the Project Manager is responsible for the following:

- Ensuring that the Project quality objectives are met;
- Providing quality leadership and senior management commitment to enable the delivery of the Project quality outcomes;
- Ensuring that the requirements of this quality plan and associated quality documents are implemented throughout the Project;
- Providing adequate organizational resources and facilities to implement the requirements of this quality plan;
- Ensuring that CCC-TCC JV personnel are informed and fulfill their duties and responsibilities in relation to Quality; and

Ensuring adequate monitoring of Project activities through effective review, reporting and auditing in accordance with the requirements of this quality plan.

2.2.2 Department Managers

Within the quality system the Department Managers are responsible for the following:

- Implementing and maintaining the Project quality management system and ensuring personnel awareness and understanding of the Project quality management system;

- Maintaining and revising where necessary the procedures and plans relevant to their department;
- Ensuring that personnel is adequately qualified and experienced in their relevant discipline to perform the duties of their position in a satisfactory manner prior to deployment on the Project;
- Ensuring that the quality of work produced by all personnel within their departments meet the Project applicable codes, standards and specifications;
- Acting on Audit results and management reviews in conjunction with the QA/QC Manager / Engineers;
- Ensuring satisfactory resolution of any non-compliance in a timely manner; and
- Checking opportunities for improvement of the Project quality management system.

2.2.3 QA/QC Manager

The QA/QC Manager is independent of construction personnel, reporting to the Project Manager and Quality Manager - Group on all Project quality related issues. The QA/QC Manager is responsible for the management of all quality matters on the Project and is authorized to represent CCC-TCC JV with external parties on all Project quality related issues.

Specifically the QA/QC Manager is responsible for the following:

- Ensuring that the activities required for the effective operation of the Project quality management system are planned, implemented, controlled and their progress monitored;
- Communicating the Project quality requirements to all affected departments and functions, Suppliers and Subcontractors and resolving problems that arise at the interfaces between such groups;
- Chairing / attending meetings to discuss and review Project quality issues;
- Issuing monthly QA/QC report within the first week of the following month;
- Determining the sequence of interaction of the processes applicable to the Project;
- Liaising with the Employer and Suppliers' / Subcontractors' Quality representative(s) on issues concerning quality;
- Coordination of all Quality Engineers to ensure the effective implementation of the Project quality management system;
- Developing and reviewing quality procedures and plans as appropriate;

- Monitoring, measuring and reporting on the implementation of the Project quality objective and actual performance against the quality KPIs;
- Reviewing Suppliers' / Subcontractors' quality performance to ensure they fulfil their quality system obligations;
- Assisting Project quality personnel either directly or functionally;
- Developing and implementing training sessions on the Project quality management system;
- Leading the Project quality audit program;
- Raising and closing NCR, CAN, CAR and PAR in conjunction with QC Engineers;
- Ensuring that corrective / preventive actions are implemented and where necessary, stop the works if corrective / preventive measures are not being adequately implemented; and
- Collating, compiling, reporting and reviewing quality data, statistics and records for the respective Project areas.

2.2.4 Site Engineers and Supervisors

Within the quality system the Site Engineers and Supervisors are responsible for the following:

- Developing Method Statements as appropriate;
- Initiating the Inspection Request (IR) notice to QC department for all Hold and Witness points as per applicable ITP;
- Acting on audit results and management reviews in conjunction with the QA/QC Manager and/or QC Engineers; and
- Ensuring satisfactory resolution of any non-compliance in a timely manner.

2.2.5 QC Engineers

The QC Engineers are reporting to Project QA/QC Manager and are responsible for the following:

- Ensuring compliance of works with applicable codes, standards and Project specifications through suitable examinations and testing;
- Implement quality control activities on site in line with the established quality control program;
- Developing field inspection and testing procedures and plans;

- Preparing the overall inspection and testing schedule based on the construction schedule;
- Keeping close liaison with Employer/Engineer's representative(s) with regard to field inspection and test schedules;
- Initiating the Inspection Request (IR) notice to the Employer and/or Third Party representative as per applicable ITP;
- Implementation of inspection & test plan requirements and coordination with construction management to this end;
- Supervising the QC Inspectors in performing inspections and testing, compiling records and reporting with regard to all inspection and testing activities;
- Coordinating with external inspection agencies when required;
- Identifying and reporting quality system problems and solutions to the QA/QC Manager;
- Reviewing inspection and testing records to ensure any actions are carried out as required;
- Authorizing inspection and test reports to be submitted to the Employer/Engineer;
- Raising and closing NCR, CAN, CAR and PAR in conjunction with the QA/QC Manager;
- Ensuring that Project quality records and document deliverables are progressively compiled, finalized and included into the final Project handover records; and
- Monitoring the management of the IM&TE.

2.2.6 QC Inspectors

The QC Inspectors are responsible for the following:

- Carrying out inspections as per the inspection schedule and the latest approved ITPs;
- Ensuring that all inspected works are complying with applicable codes, standards and Project specifications;
- Identifying, documenting and reporting non-compliances to discipline QC Engineer;
- Generating all inspection and testing sheets required by the relevant ITP and ensuring that all approval signatures are acquired on a timely basis;

- Maintaining discipline files of Inspection and Test Plans per activity/discipline in progress and ensuring that their status is current with construction works; and
- Ensuring that Inspection, Measuring and Testing Equipment (IM&TE) used for inspection and testing has a valid calibration status and is fit for purpose.

2.2.7 CCC-TCC JV Suppliers and Subcontractors

The responsibility for compliance with the Project quality management system requirements shall be imposed on CCC-TCC JV Suppliers and Subcontractors, consistent with their scope of work, through the terms and conditions included in Purchase Orders and Subcontracts.

2.3 Management Review

The Quality Management System is reviewed regularly to ensure its continuing suitability, adequacy and effectiveness. The reviews are conducted by the Project Team in the Management Review meetings (in accordance with the requirements of procedure QMP-GEN-003), with the presence of the required disciplines / functions at defined intervals, to address whether the Quality System is being properly implemented and followed.

Management reviews shall be documented and used as part of the quality records and consist of structured and comprehensive evaluation of performance.

The management review meetings shall be scheduled at regular intervals (minimum once in every four months) from the effective date of the contract.

3. PROJECT APPROACH

3.1 General

The Project Quality System meets the requirements of:

- ISO 9001:2008 standard
- Contract Schedules (as applicable)
- Employer Specifications (as applicable)
- Local Rules and Statutory Regulations of the State of Qatar (as applicable)

In case of conflict between these documents, the matter shall be referred to the Employer representative for resolution.

The Project Quality System is implemented through two sets of governing documents:

- The Contract, specifications, procedures, local rules & regulations, etc.
- CCC-TCC JV Quality System documents based on CCC-TCC JV Corporate guidelines.

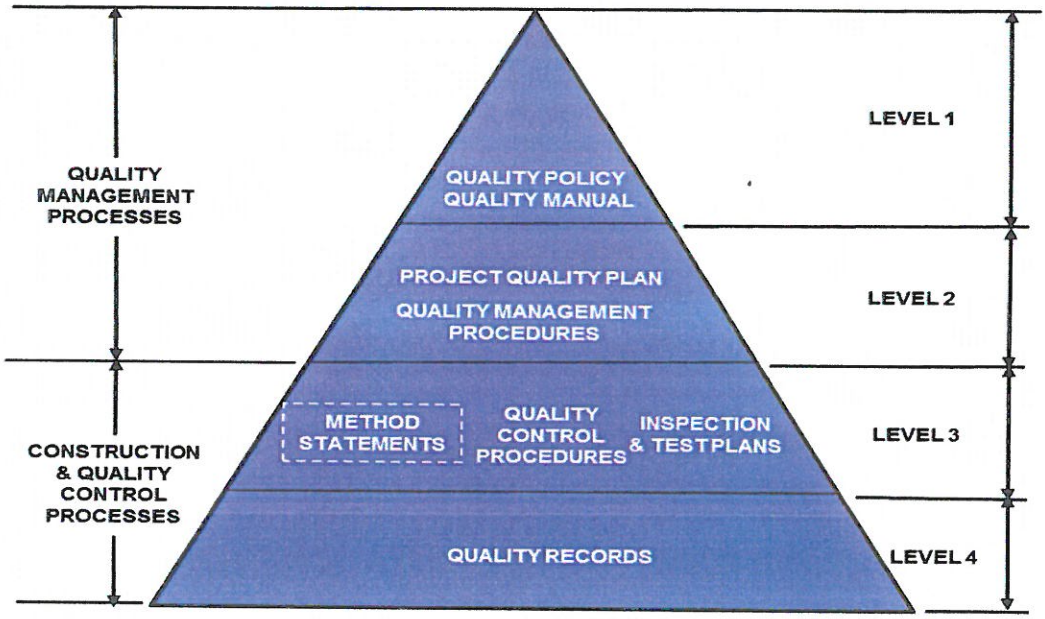
The CCC-TCC JV Quality System documents (listed below) provide a system of quality assurance and quality control to a level consistent with the requirements noted above.

Level 1: CCC Quality Manual, which define the corporate objectives and policies, and demonstrate how they are applied to comply with the requirements of ISO 9001:2008.

Level 2: This Project Quality Plan and Corporate and Project Quality Management Procedures which specify the management activities, responsibilities, quality standards and provide instructions necessary to meet the specified quality requirements of the Contract.

Level 3: Construction Method Statements, and quality control documentation such as Quality Control Procedures and Inspection & Test Plans which specify activities, responsibilities, specifications/standards and instructions necessary to meet the detailed specified quality requirements of the Contract.

Level 4: Quality Records generated throughout the Project.



Note 2: *The above figure represents the CCC-TCC JV Quality System Document Hierarchy Structure based on ISO 9001:2008 document control requirements.*

Revisions to Quality Management Procedures are originated by the Department Manager concerned, reviewed by the QA/QC Manager or his designee and approved by the Project Manager.

The Project quality philosophy and system of CCC-TCC JV embraces the activities of its suppliers who are required to conform either to their own existing quality system or to defined CCC-TCC JV procedures to ensure compliance to Project specifications. Where there is a difference between their own and CCC-TCC JV procedure the latter shall rule.

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3.2 Contract Review

The Estimation Department has performed initial review of the Contract documents prior to award. The minutes of the Tender Review Board Meeting constitute the record of Contract review prior to award of Contract.

Codes and standards to be applied for the Project shall be identified during the Contract documents review. Any unfamiliar codes and standards will be highlighted on its respective procedure.

Country Laws and Regulations applicable to the Project shall be identified during the Contract documents review, and these laws shall also be imposed on the Vendors and Subcontractors for the Project.

On award of Contract, all information on the Contract shall be transferred in accordance with documented procedures to CCC-TCC JV Project Team. CCC-TCC JV Project Team shall conclude review of the Contract, including applicable CCC-TCC JV and the Employer procedures and initiate the further development of the necessary execution plans, schedules and procedures to implement the Contract.

Contract review shall include all kick-off meetings and familiarization activities such as distribution of copies of the relevant parts of the Contract documents within CCC-TCC JV organization. Contract amendments-if any, shall be in the form of change orders or approved technical variances and shall be reviewed by appropriate Project management personnel and put into effect. Records of Contract review shall be separated and maintained.

Any amendments to the Contract shall be approved by the Employer first before proceeding.

The Contract review process is described in detail in procedure QMP-GEN-001 (Transfer of Contract Responsibility and Post Contract Review).

3.3 Coordination Procedure

Internal coordination of management decisions, information, documents, etc., within CCC-TCC JV on site and between CCC-TCC JV on site and CCC-TCC JV's Area Office is covered by the various sections of this PQP and associated documents.

Coordination between CCC-TCC JV and Employer shall be agreed during mobilization and specified in a procedure covering details such as: protocol for standard addressees for documents, standard form of transmittal, format, number and addressees of standard copies of documents/data, authority for approval, etc.

Coordination with Subcontractors shall be agreed before award of subcontract and shall cover details such as: addressees for documents, standard form of transmittal, format and number and addressees of copies of documents/data, authority for approval, etc.

Coordination with local and national Authorities shall be detailed at mobilization stage in full consultation with Employer/Engineer.

3.4 Project Control Procedure

Contract and final planning and scheduling documents shall be handed over to Project at mobilization stage.

Project Control Manager is responsible for the preparation and update of project schedules in accordance with Contract requirements. Progress shall be reported weekly and monthly in accordance with Contract requirements.

In agreement with the Construction Manager and prior to commencing work, Project Control Manager shall issue the Progress Monitoring procedure (QMP-GEN-022).

Project Control Manager shall transmit necessary planning and scheduling data to the Construction Manager who is then responsible for ensuring that the necessary materials, documents and other input resources are available at the jobsite before each item of work begins. Planning and scheduling will be in accordance with procedure QMP-GEN-015 (Planning & Scheduling).

3.5 Process Control

The process control will be planned for and implemented via the use of Quality Control Procedures (QCP's) and Inspection & Test Plans (ITP's). Supportive of the QCP's and ITP's are project specifications, codes, standards, method statements, etc.

Special Processes shall be controlled as per quality control procedures as listed in Attachment 6 of this PQP.

4. RESOURCES

4.1 Provision of resources

The requirements for materials, equipment, personnel and infrastructure shall be detailed in the project execution plan. Availability and scheduling of resources shall be planned at the start of the project and reviewed progressively throughout the project.

Where a particular resource has limited availability, arrangements for the provision of such resources shall be planned as early as possible in order to mitigate demand from competing projects or alternative usage.

4.2 Materials

All permanent project materials shall be provided in accordance with a specification or standard, confirmed and approved during the engineering phase of the project.

A procurement schedule shall be developed and implemented. The procurement schedule shall ensure that materials and equipment are procured and arrive at the worksite in sufficient time for them to be inspected and used / installed.

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4.3 Human resources

Human resources shall be provided in accordance with the project staffing plan. Sufficient time shall be allowed for selection and where applicable, recruitment and mobilization of personnel.

Project personnel shall undergo HSE induction training, unless such training has already been provided within the past year and where applicable quality management system familiarity training. Personnel newly recruited to CCC-TCC JV shall undergo CCC-TCC JV induction training.

The Project Manager shall determine the need or applicability of team development and motivational strategies and which, if any of these are suitable and beneficial to the project team.

4.4 Infrastructure and work environment

Project mobilization shall result in a work environment that is habitable, safe and promotes good standards of workmanship.

The construction phase of the project shall be managed from the site location where air conditioned site offices, (toilets included) shall be installed. Utility services (electricity and water) and any other necessary site buildings, structures, facilities, transport and support services shall be arranged.

Tools and equipment shall be provided by the "Plant Maintenance and Vehicle" (PMV) department, who shall arrange for the timely mobilization of any needed equipment or plant.

Communication and Information technology shall be provided by the "Information Services Department" (ISD), which will include the fitting and commissioning of all computer hardware and software necessary for communication, data analysis, calculation, modeling, and record keeping.

5. TRAINING

The standard policy is to employ Project personnel who have previous demonstrated experience in working with the standards and codes applicable to the subject Project. Any requirements for additional training shall be addressed as per Project specific quality management procedure QMP-GEN-005 "Training and Personnel Qualification". Project personnel shall be qualified for their function. Additional specific operator training will be provided if required. Procedure QMP-GEN-005 applies.

Training needs shall be the subject of discussion at management review meetings.

For all training provided by the Project, the syllabus shall be defined in writing, course notes shall be provided and attendees shall sign an attendance register.

The QA/QC Manager shall ensure that Managers, site senior staff and quality related personnel are familiarized with the:

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- Essentials of the ISO 9000 series of standards
- Project quality system as set out by this Project Quality Plan
- Quality Management Procedure applicable to each Manager's work and duties
- Implementation of detailed procedures such as QCP's, ITP's

6. DOCUMENT AND DATA CONTROL

6.1 Document and Data Approval and Control

The requirements of documentation are in line with ISO 9001:2008 clause 4.2 and are applicable to the whole scope.

The Project shall nominate a staff member to be responsible for document and data control.

All documents coming within the quality system as defined by this PQP shall be issued on controlled distribution.

The Document Control Schedule shall be prepared shortly after award of Contract and shall list all documents foreseen at the time and their target issue date.

All controlled documents shall be coded and have the revision status marked on them.

A distribution matrix shall be issued and maintained covering all addressees and types of controlled documents. Concerned Managers shall approve this document before issue.

The document control process shall ensure that any document changes will go through the same review and issue procedure, by the same people, as the original document which the document change replaces or modifies.

Copies of superseded documents shall be destroyed. Superseded masters shall be marked "Superseded" and archived separately.

A database (Visual BYBLOS) shall be maintained recording the revision status of all controlled documents. Print-outs of the database shall be issued regularly to heads of departments unless they have read-only access to the database.

A print-out of the database listing PQP, QMP's, ITP's, QCP's, and Method Statements shall be sent each month to Area Office.

All documentation shall be in English.

All documents shall be legible and of digital scanning quality.

Project Manager is responsible for liaising with IT Engineer and for agreeing computerized document control requirements including:

- Directory organization
- Master-file directories
- Restricted access to data files

The IT Engineer is responsible for setting up the system and for training document control clerks in use of application software.

For document coding and control procedure QMP-GEN-002 shall apply.

7. CONTROL OF QUALITY RECORDS

7.1 Quality Records

QA/QC Manager is responsible for ensuring that all necessary documentation is compiled to complete the handover data package.

The verification, compiling and packaging of all quality records that are required to be submitted to the Employer at the time of Project Handover will be according to the QMP for Handover (Handover Procedure).

An Electronic Document Management System (EDMS) (if applicable), shall be implemented for all drawings and quality records from initial stage through to final Document Handover.

Quality records shall normally be kept for a minimum of five years from date of final handover of Project to the Employer unless otherwise specified in the Contract. Hard-copies shall be stored in weather proof room or container, fire protected and environmentally controlled if necessary. Contents shall be indexed. Soft copies will be stored, if required, on back-up tapes held in Area Office.

Quality records shall be prepared and maintained in accordance with procedure QMP-GEN-004 (Quality Records).

8. DESIGN CONTROL

The Engineering design control is not included in CCC-TCC JV's scope of work.

8.1 Field Engineering

The function of Field Engineering is to provide drawing and document production services needed on Site, process "Field Change Requests" and "Technical Queries" as well as to document the "As-Built" status on construction drawings.

8.2.1 Technical Queries

A Technical Query (TQ) is a question of technical nature raised by one party to another party, usually related to construction work. Technical Query is usually related to a contractual issue that requires a formal reply. Technical Query must be registered within DCG and must follow official review, approval and distribution process.

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Technical Queries will be initiated, documented, processed, verified and actioned in accordance with QMP-GEN-019.

8.2.2 Field Change Requests

During construction many decisions have to be made that may affect the design or the methodology of execution of a certain part of the project that may lead to a field change.

The potential Field Change Request (FCR) will be subject to discussion between Field Engineering personnel and the originator (Section Engineer) before being documented. A Field Change Request will be avoided wherever possible. Where there is a clear need for a Field Change Request, it will be the responsibility of the Section Engineer to raise the FCR in conjunction with Field Engineering.

Field Change Requests will be initiated, documented, processed, verified and actioned in accordance with QMP-GEN-019.

8.2.3 As-built Document Processing

The As-built drawings reflects all changes made in the specifications or drawing during construction work, they show the exact dimensions, location, levels, and all elements of the completed work.

Redline Mark-ups will be produced immediately after construction is complete. A qualified technician from the Construction Department in coordination with the Site Engineer in charge of construction work will collect accurate data and redline the construction drawing.

Redline Mark-up drawings will, when finalized, be passed to the Field Engineering Department and the Certification Department (who need them for test packs and completion certification).

The "As-Built" drawing will be returned from the Employer either "approved" or "not approved", not approved as-built drawings will be discussed, drawings revised and resubmitted until all drawings reach "approved" status. Once approved, As-built drawings will be issued by DCG, in accordance with the DDM.

As-built drawings will be initiated, documented, processed, verified and actioned in accordance with QMP-GEN-019.

9. CONCESSION / INFORMATION REQUEST

Requests for Information are used if, during review of technical requirements, CCC-TCC JV discovers an anomaly, conflict or lack of clarity which could prejudice the construction process.

Concession requests are used if CCC-TCC JV desires a relaxation to a technical requirement (specification, drawing, procedure or other) resulting from a construction non-conformance or similar.

Requests for Information and Concession Requests will be initiated, documented, processed, verified and actioned in accordance with procedure QMP-GEN-013.

10. PROCUREMENT

10.1 Procurement Plan

The requirements of this section follow ISO 9001:2008 clause 7.4.

Vendor list of prospective Suppliers shall be prepared after taking into consideration their Quality Systems, product standards, documented experiences or by carrying out Supplier evaluations.

Quality requirements shall be clearly specified in all purchase orders or Subcontract Agreements.

Purchasing of all permanent works materials will be carried out in accordance with procedure QMP-GEN-006, and all subcontracts will be issued as per procedure QMP-GEN-012.

10.2 Evaluation of Subcontractors and Vendors

The assessment and qualification of Vendors and Subcontractors are carried out in accordance with the following criteria:

- Subcontractors / Vendors specified by Employer/Engineer
- Subcontractors / Vendors selected on previously demonstrated experience
- Satisfactory assessment of Subcontractors / Vendors quality system
- Experience of Vendor's product by other companies.

Where a Vendor can demonstrate that his product meets a product standard (e.g. BS, ASME etc.) there will not normally be any need to investigate the Vendor's quality system.

10.3 Purchasing Data and Verification

Purchasing data is identified after the material take off has been done. The inquiry document incorporates full specification and it shall specify the schedule requirements, identification of product, packaging, handling and protection, purchasing authority and availability of a Quality Management System.

During progress of the subcontracted work, the QA/QC Manager shall audit the Subcontractor's compliance with the quality system as appropriate. In parallel, the Project QC department shall expedite notification points of inspection and test witnessing as appropriate, based on mutual agreement between CCC-TCC JV, Employer and Vendors / Subcontractors.

Quality records generated by the Subcontractor's shall be systematically reviewed by the Project QC department to ensure their accuracy and timely production as the work progresses.

In the case where Subcontractors' and Vendors' facilities are geographically distant from the Project or procurement offices, monitoring of the works is done through regular visits by QA/QC personnel.

Purchasing products will be subjected to receiving inspection before offload to site as detailed in procedure QMP-GEN-007. Material Inspection shall be performed to ensure the received material meet required specification and shall have all required documentation.

10.4 Control of Customer Supplied Product

Employer supplied products will be controlled using the same systems as are used for CCC-TCC JV products unless otherwise specified in the Contract specifications. Upon receipt, accompanying documentation shall be checked for correctness and any deficiencies shall be processed through the system and the Employer shall be advised.

CCC-TCC JV shall identify, verify, protect and safeguard the Employer supplied products provided for use or incorporation into the product as detailed in procedure QMP-GEN-007.

10.5 Product Identification and Traceability

All materials shall be uniquely identified and inspected at appropriate stages to ensure that they conform to requirements, have the necessary certification where applicable and have been installed in accordance with drawings and specifications.

Procedure QMP-GEN-009 defines the approach that is followed for all types of materials used from the purchasing stage, and the construction processes, to ensure that the correct materials are used.

Where traceability is a contractual requirement, certification shall be as specified in the Contract documents.

Unless otherwise specified certification shall be in English.

Only original or true verified copies of certificates are acceptable.

10.6 Handling, Storage, Packaging, Preservation and Delivery

Project specifications and instructions shall identify any special requirements. Procedures for handling, storage, packaging and delivery shall be such as to ensure they are suitable to prevent damage or deterioration. Employer reserves the right to monitor activities.

Handling, Storage, Packaging, Preservation and Delivery is addressed and controlled in accordance with procedure QMP-GEN-007 and issued to Vendors as part of the Procurement documents.

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11. INSPECTION AND TESTING

11.1 General

All incoming products and materials are subject to receiving inspection as detailed in procedure QMP-GEN-007, and in-process inspection shall be carried out in accordance with approved ITPs and QCPs, as applicable.

Inspection and testing personnel shall be assigned based on their qualifications and previous experiences for similar Projects.

11.2 Inspection and Test Plans

The ITP shall set out in matrix form the sequence of inspection steps, the governing document (specification, standard, etc.), the standard to be achieved, the persons witnessing and the supporting documents to be produced. QCP's shall be produced in addition to ITP's if complexity or specific inspection instructions so demand.

CCC-TCC JV QC department shall prepare an ITP for review and agreement by the Employer for each work activity a minimum of six weeks prior to scheduled start date for the specific activity.

The ITP will indicate the QC intervention points during the execution of the works as follows:

H	Hold Point:	QC must be notified and the work can proceed only after the QC release is clearly put on the respective inspection form.
W	Witness Point:	QC must be notified to witness the construction activity or testing. If not show, work can proceed. In that case, the preferred practice is QC to review of inspection & test results for acceptance.
S	Surveillance Point:	Construction does not have to notify QC.
R	Document Review:	Review of QC inspection & test results for acceptance.

CCC-TCC JV QC intervention points shall be equivalent or higher than the Employer/Engineer's.

The latest revision of the ITP shall be available at CCC-TCC JV main office, site offices and all fabrication and construction locations as applicable.

Inspection reports shall be completed as work proceeds and shall not be left until the end of the job. The ITP is to be used as a plan only and acceptance signatures shall be obtained on the forms. Sign off and submission to Employer (if required) shall follow as soon as possible after the work is completed.

CCC-TCC JV QC department shall give Employer twenty-four (24) hours' notice of any required Hold or Witness points.

11.3 Inspection and Test Records

Inspection and test records shall be controlled in accordance with the QMP for Quality Records (QMP-GEN-004).

Inspection and test records shall provide sufficient evidence of conformity to Project requirements and be subject to review by Employer/Engineer, as applicable.

11.4 Inspection and Test Status

The inspection and test status of all materials and work within the Contract scope shall be known and verifiable at all times as per the QMP for Inspection and Testing (QMP-GEN-011).

11.5 ITP Tracking Control Software

CCC-TCC JV's Mechanical Completion and Pre-commissioning activities will be tracked and verified using VBC and/or the "ATLAS" Project Completion and Certification Tracking System. ATLAS is a completion and tracking system developed by CCC-TCC JV and successfully implemented on other Projects.

11.6 Control of Inspection, Measuring and Test Equipment

All inspection, measuring and test equipment used on the Project will be controlled and calibrated in accordance with procedure QMP-GEN-010.

Suppliers and Subcontractors (including test and inspection houses) shall be responsible for controlling their own inspection, measuring and test equipment used in the performance of their work.

All test and inspection equipment will have a valid calibration certificate. If this certificate is missing or out of date the equipment must be removed and re-calibrated.

12. CONTROL OF NON-CONFORMING PRODUCT

12.1 Non-conformance System

The non-conformance system is under the responsibility of the QA/QC Manager who carries out trend analysis of the non-conformances raised. The QA/QC Manager is responsible for implementing the non-conformance system in accordance with procedure QMP-GEN-008.

The QA/QC Manager shall establish and maintain an up to date log of all non-conformances, which is to be submitted at the regular progress meetings.

Repair of non-conforming material and product shall be in accordance with documented procedures approved by Employer/Engineer.

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After reviewing the records, the QA/QC Manager shall initiate and monitor corrective and preventive actions as necessary to prevent recurrence of serious nonconformity, in accordance with procedure QMP-GEN-017. Actions shall be in co-ordination with the Project Management.

12.2 Corrective Actions

Corrective Actions comprise of the following 'action tools' that are used in order to improve the quality management system as a whole, by analyzing non-conformances, by investigating the root cause of incidents, and by reporting on observable deficiencies:

- Trend Analysis
- Root-Cause-Analysis

Corrective Action may be recommended by any person at construction site, following discussion and approval by Department Manager a Corrective Action Request (CAR) may be issued, a copy of the CAR shall be forwarded to QA/QC Manager. QA/QC Manager shall keep a register for CAR.

12.3 Preventive Actions

Preventive Action shall place more emphasis on the process rather than the product. Preventive actions are used in order to improve the quality management system as a whole by feeding back experience into the quality system to prevent incident recurrence. Procedure QMP-GEN-017 applies.

Preventive Action may be recommended by any person at construction site, following discussion and approval by Department Manager a Preventive Action Request (PAR) may be issued, a copy of the PAR shall be forwarded to QA/QC Manager. QA/QC Manager shall keep a register for PAR.

13. QUALITY AUDITS

13.1 Audit Plan & Execution

Internal audits and reviews are to be carried out to verify the implementation, compliance and effectiveness of the Project Quality System in relation to the scope of work.

A Project specific audit and review schedule shall be developed based on the guideline shown in Attachment 5, to address the full scope of work including any Subcontracts. This schedule shall be subject to Employer review and comment prior to formal approval and issue.

The Employer Representative shall be invited to participate in all quality audits. Audit notifications and agenda shall be submitted to Employer Representative minimum fourteen (14) calendar days in advance of the audit dates.

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Employer appointed Third party, if applicable, may also perform a program of quality and compliance audits. CCC-TCC JV shall provide assistance and access to its system as required. Any deficiencies will be rectified by CCC-TCC JV in a timely manner.

The QA/QC Manager is responsible for carrying out audits in accordance with the Project audit schedule and in accordance with QMP-GEN-016 "Quality System Audits".

Audits shall be undertaken by experienced and qualified personnel who are not directly responsible for any of the work in the area audited.

All audit reports shall be addressed to the Project Manager and copied to the Manager of the area or element audited plus any other concerned parties. A copy of the audit report shall also be sent to the Employer within fifteen (15) calendar days of the completion of each audit.

A Corrective Action Notice (CAN) shall be issued to identify and eliminate any non-conformity identified during quality system audits.

The QA/QC Manager or his designee shall establish and maintain a log of Corrective Action Notices (CANs).

14. PERFORMANCE IMPROVEMENT AND KEY PERFORMANCE INDICATORS

14.1 Introduction

Two types of benchmarking are available and shall be used for measuring performance and improvement. These are known as "qualitative comparison" and "quantitative comparison".

14.2 Qualitative Comparison

"Qualitative Comparison" is one of the two major approaches to benchmarking. It involves investigating opinions, behaviors and experiences from other Projects. It is contrasted with "Quantitative Comparison" in that it does not rely on quantitative measurement and mathematical models, but instead uses logical deductions to decipher gathered data. Its downside, compared to quantitative comparison, is that it is more prone to personal opinion, has smaller sample sizes and is harder to measure.

"Qualitative Comparison" shall be made using information gained from Project personnel who either visit or communicate with other CCC-TCC JV partner Projects.

Personnel shall actively seek out new, alternative or novel approaches to similar Project tasks and by comparing the results with current practice.

The subject matter should be reviewed for basic processes in operation (an example may be the Quality Awareness training of new recruits or the expediting of scheduled activities). It is these processes that should be reviewed to determine the rating of the process.

14.3 Quantitative Comparison

"Quantitative Comparison" relies mainly on quantitative measurement and mathematical models.

Key Performance Indicators (KPI's) shall be used for the approach of "Quantitative comparison" and measurement for the Project and shall be measured on a monthly basis.

The KPI targets shown in Attachment 2 are based on CCC-TCC JV experience from historical (and current) Projects - plus a 10% increase in performance requirements.

14.4 Performance Improvement

The QA/QC Manager is responsible to determine, collect and analyze data to demonstrate the suitability and effectiveness of the Project Quality Management System.

He is also responsible for identifying areas for improvement and coordinating quality improvement projects in close coordination with the Project Management Team. Quality improvement Projects shall be initiated and implemented as per the QMP for Corrective and Preventive Action (QMP-GEN-017).

CCC-TCC JV Project Management shall monitor the degree of effectiveness of the Project Quality Management System and shall strive for its improvement through the following sources of information:

- Quality objectives (Quality KPIs)
- Audit results, including Corrective Action Requests
- Customer complaints
- Non-conformance reports
- Status and effectiveness of corrective and preventive actions
- Proposals for improvement
- Quality alerts
- Analysis of Project data
- Lessons learned from previous Projects
- Previous management reviews.

Furthermore, the Corporate QMP for Quality Measurement and Improvement (QMP-MOA-018) describes the methodology applied for assessing the level of the Employer satisfaction and the process for its improvement. The tools to accomplish the above include:

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- Balanced Scorecards
  - Project Operational Excellence Balanced Scorecard
  - Corporate Scorecard
  - Technical and Commercial Audit Scorecard
  - Project Quality Scorecard
  - EMPLOYER Satisfaction Questionnaire
- Key Performance Indicators (KPI)
- Statistical techniques

15. COMPANY COMPLAINTS

15.1 Documented Company Complaints

Documented Employer complaints may be received in a number of ways, such as a memo issued by the Employer/Engineer, or as notes of meeting during which the Employer expresses complaints. All of these types of documented complaints shall be processed in accordance with the QMP for Customer Complaints (QMP-GEN-021).

15.2 Verbal Complaints

A verbal complaint can be received by almost anyone in the CCC-TCC JV organization at any time and it is important to identify when a complaint is being made. What may appear to be a trivial complaint, if not addressed and closed, will often grow to become a more serious complaint. Verbal complaints shall be processed in accordance with the QMP for Customer Complaints (QMP-GEN-021).

15.3 Analysis

Data related to customer complaints shall be retained and periodically analyzed to detect any trends. Where trends become apparent, because analysis shall be carried out and action(s) taken in proportion to the risks posed. The QMP for Corrective and Preventive Action (QMP-GEN-017) applies.

16. PRECOMMISSIONING / COMMISSIONING

16.1 General

Pre-commissioning and commissioning activities shall be carried out in accordance with system procedure QMP-MOA-027.

Individual activities such as hydro testing, electrical continuity, etc. shall be controlled by pre-commissioning and commissioning control procedures which shall be reviewed and concurred by the Employer/Engineer, and issued at least 30 days before the activity starts.

An overall schedule of pre-commissioning and commissioning activities, identifying the relevant procedure, method statement, etc. for each activity, shall be developed well before the activity starts.

Commissioning systems and priorities will be established and followed to give emphasis on safety systems being in operation as early as possible in the Project. These priorities will 'filter' down through pre-commissioning and construction to facilitate early completion and Ready for Commissioning (RFC) of key systems.

17. REPORTING

Reporting to Employer shall be as per Contract requirements or as agreed with Employer during the mobilization stage.

18. ATTACHMENTS

Attachment 1 Project Quality Policy

Attachment 2 Project Key Performance Indices

Attachment 3 Project Quality System Matrix

Attachment 4 List of Quality Management Procedures

Attachment 5 Indicative Quality System Audit Schedule

Attachment 6 Preliminary list of applicable QCP's and ITP's

Attachment 7 Project Organization Chart

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ATTACHMENT 1

PROJECT QUALITY POLICY

Policy:

- To establish, implement and maintain an efficient and effective quality system that meets the requirements of the ISO 9001:2008 for application to the Project works including the control verifications to be put in place to assure quality during each stage of the work.

- To ensure that products are supplied, constructed and commissioned in accordance with Employer requirements as stated in the Contract, and to ensure that Employer requirements are determined, fulfilled and where practical exceeded to enhance the Employersatisfaction.

- To implement, by all Project personnel, and by Vendors / Subcontractors and sub-tiers thereof, the quality system on all activities and operations that affect the quality of the products and services provided under the Contract.

- To review and monitor the quality system at regular intervals throughout the Contract period both to continually improve the system and its effectiveness and to detect and correct any adverse trends by taking the necessary executive action.

Objectives:

- To provide products and services for the realization of a successful Project that meets the Contract and Project requirements to the mutual satisfaction of the Employer/Engineer.

- To meet or exceed all quality requirements and technical performance criteria for the project.

- To meet all commercial performance criteria (namely schedule and cost) by efficient utilization of technological, human and material resources.

Specific procedures, such as quality management procedures, quality control procedures, inspection & test plans, and method statements will be developed and implemented to ensure that all quality aspects of the work are addressed.

This quality policy is issued by the undersigned Project Manager and the QA/QC Manager on behalf of CCC-TCC JV for the Project.

Project Manager:	***QA/QC Manager :***
Signature:	Signature:
Date:	Date:

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) / TEYSEER CONTRACTING CO. W.L.L. - JV

ATTACHMENT 2

PROJECT KEY PERFORMANCE INDICES

QUALITY TARGETS	TYPE OF PROJECT / WORK	ACCEPTABLE LEVEL
Ratio of Rejected IR's to total number of IR's issued	Construction (Overall)	Equal or less than **3%** of IRs issued
Ratio of NCR's to total number of IR's issued	Construction (Overall)	Equal or less than **0.35%** of IRs issued

Note 2: ***NCR:*** *Non-Conformance Report* ***IR:*** *Inspection Request*

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ATTACHMENT 3

PROJECT QUALITY SYSTEM MATRIX

ISO 9001 Clause	ACTIVITY	PROCEDURE	VERIFYING DOCUMENT DELIVERABLES	RESPONSIBLE PERSON	REMARKS
4	**QUALITY MANAGEMENT SYSTEM**				
4.1	*General Requirements*	PQP-EST-17-1.4857	Documented Quality System	Project Manager	
4.2	*Documentation Requirements*	PQP-EST-17-1.4857	Documented Quality System	Project Manager Project Control Manager Construction Manager QA/QC Manager	
4.2.1	General	PQP-EST-17-1.4857	Documented Quality System	Project Manager QA/QC Manager	
4.2.2	Quality Manual	PQP-EST-17-1.4857	Project Quality Plan (PQP-EST-4851-001) and its supporting documentation	Project Manager QA/QC Manager	
4.2.3	Control of Documents	QMP-GEN-002	Documents issued by controlled distribution system, distribution records.	Project Control Manager Snr. Document Controller	
4.2.4	Control of Records-Identification, Storage, Protection, Retrieval, retention and Disposition of Records	QMP-GEN-004 QMP-GEN-018	All records proving operation of the quality management system	Department Managers Project Control Manager QA/QC Manager	
5	**MANAGEMENT RESPONSIBILITY**				
5.1	*Management Commitment*	PQP-EST-17-1.4857	Quality Policy distributed to Project personnel. Records of management review. Established quality objectives	Project Manager Project Control Manager Construction Manager QA/QC Manager	
5.2	*Customer Focus*	PQP-EST-17-1.4857 QMP-GEN-001	Documented Quality System	Project Manager QA/QC Manager	
5.3	*Quality Policy*	PQP-EST-17-1.4857	Statement distributed to all appropriate levels of Project personnel	Project Manager QA/QC Manager	

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ATTACHMENT 3

PROJECT QUALITY SYSTEM MATRIX

ISO 9001 Clause	ACTIVITY	PROCEDURE	VERIFYING DOCUMENT DELIVERABLES	RESPONSIBLE PERSON	REMARKS
5.4	*Planning*				
5.4.1	Quality Objectives	PQP-EST-17-1.4857	Documented Quality System	Project Manager	
5.4.2	Quality Management System Planning	PQP-EST-17-1.4857	Documented Quality System	Project Manager QA/QC Manager	
5.5	*Responsibility, authority and communication*				
5.5.1	Responsibility and authority	PQP-EST-17-1.4857 & supporting quality system documentation	Organization Chart, Job Descriptions	Project Manager Department Heads Construction Manager	
5.5.2	Management representative	PQP-EST-17-1.4857	Organization Chart	QA/QC Manager	
5.5.3	Internal Communication	PQP-EST-17-1.4857			
5.6	Management Review	QMP-GEN-003	Management Review records	Project Manager Project Control Manager Construction Manager QA/QC Manager	
6	**RESOURCE MANAGEMENT**				
6.1	*Provision of Resources*	PQP-EST-17-1.4857	Organization Chart, Job Descriptions	Project Manager Construction Manager QA/QC Manager	
6.2	*Human Resources*	PQP-EST-17-1.4857 QMP-GEN-005	Training/Qualification records, Personnel Appraisal records	Project Manager Project Control Manager Construction Manager QA/QC Manager Department Heads	

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PROJECT QUALITY PLAN

ATTACHMENT 3

PROJECT QUALITY SYSTEM MATRIX

ISO 9001 Clause	ACTIVITY	PROCEDURE	VERIFYING DOCUMENT DELIVERABLES	RESPONSIBLE PERSON	REMARKS
6.3	*Infrastructure*	List of QMP-PP's (PMV related QMP's)	PMV records	Plant Mechanical Engineer	
6.4	*Work Environment*	PQP-EST-17-1.4857			
7	**PRODUCT REALIZATION**				
7.1	Planning	PQP-EST-17-1.4857 QMP-GEN-015 QMP-GEN-022	QMP's, QCP's, ITP's	Project Manager Project Control Manager Construction Manager QA/QC Manager	
7.2	*Customer-related processes*	QMP-GEN-001			
7.2.1	Determination of requirements related to the product	Contract Project Specification	Project Specification QCP's, ITP's	Construction Manager Department Heads QA/QC Manager	
7.2.2	Review of requirements	PQP-EST-17-1.4857 QMP-GEN-004	Contract review records	Estimation & Proposals Dept. Project Manager QA/QC Manager	
7.2.3	Customer communication	PQP-EST-17-1.4857 QMP-GEN-004 QMP-GEN-013 QMP-GEN-017	Project correspondence Technical Queries	Project Manager Construction Manager Project Control Manager QA/QC Manager	
7.3	Design and Development (N/A)	QMP-GEN-019	Field Engineering	Engineering Manager	

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ATTACHMENT 3

PROJECT QUALITY SYSTEM MATRIX

ISO 9001 Clause	ACTIVITY	PROCEDURE	VERIFYING DOCUMENT DELIVERABLES	RESPONSIBLE PERSON	REMARKS
7.4	*Purchasing (of product supplied by CCC-TCC JV)*	PQP-EST-17-1.4857			
7.4.1	Purchasing Process	QMP-GEN-006 QMP-GEN-012	Supplier/Subcontractor records Supplier quality system data (ITP's) Product required certificates Assessment reports Subcontract Agreement	Project Manager QA/QC Manager Material Engineer	
7.4.2	Purchasing Information	QMP-GEN-006 QMP-GEN-012	P.O. and Subcontract data	QA/QC Manager Material Engineer	
7.4.3	Verification of Purchased Product	QMP-GEN-006 QMP-GEN-007	Inspection reports	QA/QC Manager	
7.5	Production and Service provision				
7.5.1	Control of production and service provision	PQP-EST-17-1.4857 QMP-GEN-011 ITP's , QCP's and Method Statements	IFC Drawings and Specification PMV Records Inspection and testing records	Construction Manager Project Engineer QA/QC Manager	
7.5.2	Validation of processes for production and service provision (Special Processes)	QCP's and Method Statements (e.g. Concrete QCPs)	Approval of QCP's and Method Statements (e.g. Concrete Trial mix design and test report approval, etc.)	QA/QC Manager Construction Manager	
7.5.3	Identification and traceability	QMP-GEN-009, ITP's and QCP's	Identification marks and stamps Traceability maps/diagrams	Project Manager Construction Manager Project Engineer QA/QC Manager	

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING S.S. W.L.L. JV

ATTACHMENT 3

PROJECT QUALITY SYSTEM MATRIX

ISO 9001 Clause	ACTIVITY	PROCEDURE	VERIFYING DOCUMENT DELIVERABLES	RESPONSIBLE PERSON	REMARKS
7.5.4	Customer Property	QMP-GEN-007 (Control of CCC-TCC JV's Material) QMP-GEN-002 (Control of Intellectual Property, i.e. drawings, specs, manuals)	Material inspection records, Material preservation records	Project Manager Construction Manager Snr. Document Controller	
7.5.5	Preservation of Product	QMP-GEN-007 - Purchaser & Equipment Supplier Requirements	Preservation reports Routine inspection reports	Project Manager Construction Manager	
7.6	*Control of monitoring and measuring devices*	QMP-GEN-010	Monitoring and Measuring Equipment lists Verification/Calibration records	QA/QC Manager	
8	**MEASUREMENT, ANALYSIS AND IMPROVEMENT**				
8.1	General	PQP-EST-17-1.4857			
8.2	*Monitoring and measurement*	PQP-EST-17-1.4857			
8.2.1	Customer satisfaction	PQP-EST-17-1.4857 QMP-GEN-021 QMP-MOA-018	Project Correspondence QA/QC Meeting records Employer Non-conformities Letters of appreciation Employer Audit Reports Customer Satisfaction Assessment Questionnaire	Project Manager Construction Manager QA/QC Manager	
8.2.2	Internal audit	PQP-EST-17-1.4857 QMP-GEN-016	Audit schedule Audit reports Corrective Action Notice (CAN)	QA/QC Manager	
8.2.3	Monitoring and measurement of processes	QMP-GEN-016	Audit reports Statistical analysis	QA/QC Manager	
8.2.4	Monitoring and measurement of product	QMP-GEN-011	Inspection and testing records	QA/QC Manager	

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TESSER CONTRACTING CO. W.L.L. JV

ATTACHMENT 3

PROJECT QUALITY SYSTEM MATRIX

ISO 9001 Clause	ACTIVITY	PROCEDURE	VERIFYING DOCUMENT DELIVERABLES	RESPONSIBLE PERSON	REMARKS
8.3	Control of Non-conforming product	QMP-GEN-009	NCR Log, NCR's	QA/QC Manager	
8.4	*Analysis of data*	QMP-MOA-018	Project Correspondence QA/QC Meeting records Employer Non-conformities Letters of appreciation Audit reports Statistical analysis	Project Manager Construction Manager QA/QC Manager	
8.5	*Improvement*				
8.5.1	Continual improvement	QMP-GEN-003 QMP-GEN-017 QMP-MOA-018	Quality objectives, audit results, analysis of data, corrective & preventative action, management review records	Project Manager, Department Heads	
8.5.2	Corrective action	QMP-GEN-017	Corrective Action Report (CAR)	Project Manager Project Control Manager Construction Manager QA/QC Manager	
8.5.3	Preventive action	QMP-GEN-017	Preventive Action Report (PAR)	Project Manager Project Control Manager Construction Manager QA/QC Manager	

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ATTACHMENT 4

QUALITY MANAGEMENT PROCEDURES

Internal Code No.	Document Title
QMP-GEN-001	Transfer of Contract Responsibility And Post Contract Review
QMP-GEN-002	Document & Data Control
QMP-GEN-003	Management Review
QMP-GEN-004	Quality Records
QMP-GEN-005	Training & Personnel Qualifications
QMP-GEN-006	Purchasing
QMP-GEN-007	Material Control
QMP-GEN-008	Control of Non-Conforming Products
QMP-GEN-009	Material Certification & Traceability
QMP-GEN-010	Inspection, Measurement & Testing Equipment
QMP-GEN-011	Inspection and Testing
QMP-GEN-012	Subcontracting
QMP-GEN-013	Concession & Information Request
QMP-GEN-015	Planning & Scheduling
QMP-GEN-016	Quality System Audits
QMP-GEN-017	Corrective & Preventive Action
QMP-GEN-018	Handover Procedure
QMP-GEN-019	Field Engineering
QMP-GEN-021	Customer Complaints
QMP-GEN-022	Progress Monitoring
QMP-MOA-018	Quality Measurement & Improvement
QMP-MOA-027	Precommissioning / Commissioning

NOTE 3: *The QMP-MOA-XXX procedures form part of CCC corporate Quality System and can only be revised under the authority of the Construction Support & Quality Management Dept. at MOA and with the consent of the certifying authority.*

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ATTACHMENT 5

INDICATIVE QUALITY AUDIT SCHEDULE

Audit Group	Audit Activity	Time Span of Project
1	All ISO 9001:2008 Section 4, 5, 6, 7 and 8	At 15%, 45% and 70% of completion stage for the construction work phase. Surveillance audits may be carried out depending on Project needs and performance on site.
2	Suppliers and Subcontractors	As required by Purchase Order / Subcontract Agreement, applicable procedure. Where concerns or criticality warrant.
3	Third Party Contract Compliance Audits (External to Project)	As per Contract Requirements.

Note 4: *The QA/QC Manager shall develop and maintain a full quality audit schedule based on these guidelines.*

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ATTACHMENT 6

PRELIMINARY LIST OF APPLICABLE QCP'S & ITP'S (CONSTRUCTION PHASE)

Note 5: *All procedures and plans mentioned here below are Contract specific QCP's and ITP's required to be developed for this Project. QA/QC Manager is responsible for preparation of the documents. This list is indicative and shows procedures that are planned at the time of preparation of this PQP. The list may be revised as and when required to cater for Project requirements without revising this PQP.*

INTERNAL CODING	DOCUMENT TITLE
1. Mechanical Quality Procedures	
QCP-GEN-136	Pressure Testing of Piping
QCP-GEN-140	Preservation of Materials and Equipment
ITP-GEN-136	Pressure Testing of Piping
ITP-GEN-143	Structural Steel Erection
ITP-GEN-145	Shop & Field Painting
ITP-GEN-162	Installation of Static Equipment
ITP-GEN-163	Installation of Horizontal & Vertical pumps
2. Civil Quality Procedures	
QCP-GEN-200	Earthworks
QCP-GEN-230	Concrete Works
ITP-GEN-200	Earthworks
ITP-GEN-206	Installation of Sewer and Drainage
ITP-GEN-231	Pre-cast Concrete
ITP-GEN-233	Structural Concrete
ITP-GEN-239	Grouting
ITP-GEN-251	Paving
ITP-GEN-252	Asphalt Roads
ITP-GEN-271	Installation of Fencing
3. Electrical Quality Procedures	
QCP-GEN-301	Installation of Cables
QCP-GEN-302	Installation of Cable Racks, Trays & Conduit Systems
QCP-GEN-303	Installation of Power Transformers
QCP-GEN-304	Installation of Generators
QCP-GEN-305	Installation of Switchgear & Motor Control Center

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QCP-GEN-307	Installation of Batteries, Chargers & U.P.S.
QCP-GEN-308	Installation of Lighting Systems
QCP-GEN-309	Installation of Earthing & Lightning Protection Systems
QCP-GEN-311	Installation of Communication Systems
QCP-GEN-316	Installation of Fire Alarm Systems
QCP-GEN-317	Installation of Security Access System
ITP-GEN-301	Installation of Cables
ITP-GEN-302	Installation of Cable Racks, Trays & Conduit Systems
ITP-GEN-303	Installation of Power Transformers
ITP-GEN-304	Installation of Generators
ITP-GEN-305	Installation of Switchgear & Motor Control Center
ITP-GEN-307	Installation of Batteries, Chargers & U.P.S.
ITP-GEN-308	Installation of Lighting Systems
ITP-GEN-309	Installation of Earthing & Lightning Protection Systems
ITP-GEN-311	Installation of Communication Systems
ITP-GEN-316	Installation of Fire Alarm Systems
ITP-GEN-317	Installation of Security Access System
4. Building Quality Procedures	
ITP-GEN-553	Internal Building Finishes
ITP-GEN-554	Inspection of Doors, Windows & Glazing
ITP-GEN-555	Inspection of Miscellaneous Finish Items
ITP-GEN-556	Inspection of HVAC Systems in Buildings
ITP-GEN-557	Inspection of Plumbing Works Installation for Buildings
ITP-GEN-563	Inspection of Fire & Gas Detectors
ITP-GEN-584	External Building Finishes
ITP-GEN-585	Landscaping Works

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ATTACHMENT 7

PROJECT ORGANIZATION CHART

- *TO BE FOUND IN MAIN TECHNICAL BID DOCUMENT*

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p0	09/07/2014	Preliminary – Issued for Tender	AD	EK	HT
REV.	**DATE**	**DESCRIPTION**	**PREP. BY**	**REV. BY**	**APPR. BY**

EMPLOYER

Qatar General Electricity & Water Corporation (KAHRAMAA)

CONTRACTOR

Consolidated Contractors Group S.A.L (Offshore) and Teyseer Contracting Company W.L.L. Joint Venture (CCC-TCC JV)

PROJECT TITLE

Construction of Mega Reservoir PRPSs (Package A)

DOCUMENT TITLE

PROJECT QUALITY PLAN

EMPLOYER TENDER NO.	DOCUMENT NO.	REV. NO.	DATE	PAGE
GTC 626/2014	PQP-EST-17-1.4857	A	09/07/2014	1 of 27

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1. PREAMBLE

1.1 Introduction

This Quality Plan is the proposed principal quality document for the Project and plans and summarizes the quality system, resources and controls for its implementation on the Project. The Quality Plan has been prepared and reviewed by Construction Support & Quality Management Department and approved for issue by the Project Manager.

The Quality Plan is divided into a narrative and seven attachments:

1. Project Quality Policy
2. Project Key Performance Indices
3. Project Quality System Matrix
4. List of Quality Management Procedures
5. Indicative Quality System Audit Schedule
6. Preliminary list of applicable QCP's and ITP's
7. Project QA/QC Organization Chart

1.2 Scope

This Project Quality Plan sets out the specific quality practices, resources and sequence of activities appropriate to the ***Construction of Mega Reservoir PRPSs (Package A).***

The Project Quality Plan specifies the quality requirements for the Project, the procedures to be followed in meeting these requirements and the manner in which compliance with these requirements is verified.

The scope of the present Quality Plan is as follows:

- The ***Construction of Mega Reservoir PRPSs (Package A)*** as defined in the Tender Documents between CCC-TCC JV and Employer relative to the Contract and associated technical documents.
- Subjects included in ISO 9001:2008.
- CCC-TCC JV work as defined in purchase orders and subcontract agreements.

1.3 Purpose

The purpose of the Project Quality Plan is to ensure that:

- The requirements of ISO 9001:2008 and CCC-TCC JV corporate quality system are met.

- The Employer quality requirements to CCC-TCC JV are understood and met with particular reference to the Contract.

- CCC-TCC JV quality management system is planned, documented, communicated, understood by Project personnel, implemented and audited, and that the process conforms to the specified requirements of the Contract objectives and policy.

1.4 Quality Policy

CCC-TCC JV Project Quality Policy is issued under the signatures of CCC-TCC JV Project Manager and QA/QC Manager and will be prominently displayed at all Project Site offices.

As per clause 5.3 of ISO 9001:2008, the CCC-TCC JV Quality Policy will be communicated and understood by all CCC-TCC JV Project personnel and their Subcontractors and will be reviewed for continued suitability at scheduled Management Review Meetings.

A copy of CCC-TCC JV Project Quality Policy is provided in Attachment 1.

1.5 References

ISO 9000:2005	Quality Management Systems - Fundamentals and Vocabulary
ISO 9001:2008	Quality Management Systems - Requirements
ISO 10005:2005	Quality Management - Guidelines for Quality Plans
QM-CCC-001	CCC Corporate Quality Manual

1.6 Definitions and Abbreviations

Project	Construction of Mega Reservoir PRPSs (Package A)
Location	Doha, Qatar
Employer	Qatar General Electricity & Water Corporation (KAHRAMAA)
CCC-TCC JV	Consolidated Contractors Group S.A.L. (Offshore) & Teyseer Contracting Company W.L.L.
MOA	CCC Managing Office Athens
PQP	Project Quality Plan
QMP	Quality Management Procedure
ITP	Inspection & Test Plan - A document which defines or identifies in a tabulated form the inspection, test method(s), procedures and acceptance criteria to be utilized during procurement, construction,

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pre-commissioning and commissioning.

QCP	Quality Control Procedure - A document that complements as and when required, the corresponding ITP, by defining in detail how the quality control inspection and tests are to be performed.
NCR	Non-Conformance Report - A form used to document a Non-Conformance relative to a deficiency in characteristic, documentation or procedure which renders the quality of a product or service unacceptable or indeterminate or not according to specified requirements.
CAN	Corrective Action Notice - A form used to identify and eliminate a non-conformity identified during a quality system audit.
CAR	Corrective Action Request - A form used to identify and to eliminate the cause of non-conformities identified as a result of trend analysis, customer dissatisfaction, or any other repeated undesirable condition.
PAR	Preventive Action Request - A form used to prevent the occurrence of potential non-conformity or any undesirable potential situation.
Customer Complaint	A contractual notification by the Employer that a contract requirement or expectation is not being met. A customer complaint also includes concerns expressed by the customer or customer's representative in other forms such as NCR's, minutes of meeting, memos etc.
VBC	Visual Byblos Cyberspace (Document control software)

Note 1: *All definitions concerning quality terms in this document are determinable from ISO 9000:2005 - Quality Management Systems - Fundamentals and Vocabulary.*

1.7 Revisions

This Project Quality Plan shall be revised to "issued-for-use" status and issued prior to commencement of the works.

This Project Quality Plan shall be revised and re-issued in accordance with the Project document control system.

MOA Construction Support & Quality Management Department is to be copied on all revised issues to this Project Quality Plan.

Revisions shall be the responsibility of the QA/QC Manager or his designee, and shall be made so as to constantly reflect the current Project quality system and Contract / statutory and regulatory requirements.

2. ORGANIZATION AND RESPONSIBILITIES

2.1 Project Organization

CCC-TCC JV organization for the Project including organizational interfaces, interrelationship lines of reporting / communication and hierarchical structure is documented on the Project Organization Chart (see Attachment 7).

Revisions to the Project Organization Chart shall be controlled independently of this Plan.

Table in Attachment 3 of this Quality Plan (Project Quality System Matrix) gives a brief overview of all the activities, responsibilities and procedures within the Project, and falls in line with the requirements of ISO 9001:2008.

Detailed responsibilities are also stated in the Quality Management Procedures (see Attachment 4 - List of Project Quality Management Procedures).

2.2 Roles & Responsibilities of Key Personnel

2.2.1 Project Manager

The Project Manager is ultimately responsible for the quality of the finished works. Specifically the Project Manager is responsible for the following:

- Ensuring that the Project quality objectives are met;
- Providing quality leadership and senior management commitment to enable the delivery of the Project quality outcomes;
- Ensuring that the requirements of this quality plan and associated quality documents are implemented throughout the Project;
- Providing adequate organizational resources and facilities to implement the requirements of this quality plan;
- Ensuring that CCC-TCC JV personnel are informed and fulfill their duties and responsibilities in relation to Quality; and

Ensuring adequate monitoring of Project activities through effective review, reporting and auditing in accordance with the requirements of this quality plan.

2.2.2 Department Managers

Within the quality system the Department Managers are responsible for the following:

- Implementing and maintaining the Project quality management system and ensuring personnel awareness and understanding of the Project quality management system;

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- Maintaining and revising where necessary the procedures and plans relevant to their department;
- Ensuring that personnel is adequately qualified and experienced in their relevant discipline to perform the duties of their position in a satisfactory manner prior to deployment on the Project;
- Ensuring that the quality of work produced by all personnel within their departments meet the Project applicable codes, standards and specifications;
- Acting on Audit results and management reviews in conjunction with the QA/QC Manager / Engineers;
- Ensuring satisfactory resolution of any non-compliance in a timely manner; and
- Checking opportunities for improvement of the Project quality management system.

2.2.3 QA/QC Manager

The QA/QC Manager is independent of construction personnel, reporting to the Project Manager and Quality Manager - Group on all Project quality related issues. The QA/QC Manager is responsible for the management of all quality matters on the Project and is authorized to represent CCC-TCC JV with external parties on all Project quality related issues.

Specifically the QA/QC Manager is responsible for the following:

- Ensuring that the activities required for the effective operation of the Project quality management system are planned, implemented, controlled and their progress monitored;
- Communicating the Project quality requirements to all affected departments and functions, Suppliers and Subcontractors and resolving problems that arise at the interfaces between such groups;
- Chairing / attending meetings to discuss and review Project quality issues;
- Issuing monthly QA/QC report within the first week of the following month;
- Determining the sequence of interaction of the processes applicable to the Project;
- Liaising with the Employer and Suppliers' / Subcontractors' Quality representative(s) on issues concerning quality;
- Coordination of all Quality Engineers to ensure the effective implementation of the Project quality management system;
- Developing and reviewing quality procedures and plans as appropriate;

- Monitoring, measuring and reporting on the implementation of the Project quality objective and actual performance against the quality KPIs;
- Reviewing Suppliers' / Subcontractors' quality performance to ensure they fulfil their quality system obligations;
- Assisting Project quality personnel either directly or functionally;
- Developing and implementing training sessions on the Project quality management system;
- Leading the Project quality audit program;
- Raising and closing NCR, CAN, CAR and PAR in conjunction with QC Engineers;
- Ensuring that corrective / preventive actions are implemented and where necessary, stop the works if corrective / preventive measures are not being adequately implemented; and
- Collating, compiling, reporting and reviewing quality data, statistics and records for the respective Project areas.

2.2.4 Site Engineers and Supervisors

Within the quality system the Site Engineers and Supervisors are responsible for the following:

- Developing Method Statements as appropriate;
- Initiating the Inspection Request (IR) notice to QC department for all Hold and Witness points as per applicable ITP;
- Acting on audit results and management reviews in conjunction with the QA/QC Manager and/or QC Engineers; and
- Ensuring satisfactory resolution of any non-compliance in a timely manner.

2.2.5 QC Engineers

The QC Engineers are reporting to Project QA/QC Manager and are responsible for the following:

- Ensuring compliance of works with applicable codes, standards and Project specifications through suitable examinations and testing;
- Implement quality control activities on site in line with the established quality control program;
- Developing field inspection and testing procedures and plans;

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- Preparing the overall inspection and testing schedule based on the construction schedule;
- Keeping close liaison with Employer/Engineer's representative(s) with regard to field inspection and test schedules;
- Initiating the Inspection Request (IR) notice to the Employer and/or Third Party representative as per applicable ITP;
- Implementation of inspection & test plan requirements and coordination with construction management to this end;
- Supervising the QC Inspectors in performing inspections and testing, compiling records and reporting with regard to all inspection and testing activities;
- Coordinating with external inspection agencies when required;
- Identifying and reporting quality system problems and solutions to the QA/QC Manager;
- Reviewing inspection and testing records to ensure any actions are carried out as required;
- Authorizing inspection and test reports to be submitted to the Employer/Engineer;
- Raising and closing NCR, CAN, CAR and PAR in conjunction with the QA/QC Manager;
- Ensuring that Project quality records and document deliverables are progressively compiled, finalized and included into the final Project handover records; and
- Monitoring the management of the IM&TE.

2.2.6 QC Inspectors

The QC Inspectors are responsible for the following:

- Carrying out inspections as per the inspection schedule and the latest approved ITPs;
- Ensuring that all inspected works are complying with applicable codes, standards and Project specifications;
- Identifying, documenting and reporting non-compliances to discipline QC Engineer;
- Generating all inspection and testing sheets required by the relevant ITP and ensuring that all approval signatures are acquired on a timely basis;

- Maintaining discipline files of Inspection and Test Plans per activity/discipline in progress and ensuring that their status is current with construction works; and
- Ensuring that Inspection, Measuring and Testing Equipment (IM&TE) used for inspection and testing has a valid calibration status and is fit for purpose.

2.2.7 CCC-TCC JV Suppliers and Subcontractors

The responsibility for compliance with the Project quality management system requirements shall be imposed on CCC-TCC JV Suppliers and Subcontractors, consistent with their scope of work, through the terms and conditions included in Purchase Orders and Subcontracts.

2.3 Management Review

The Quality Management System is reviewed regularly to ensure its continuing suitability, adequacy and effectiveness. The reviews are conducted by the Project Team in the Management Review meetings (in accordance with the requirements of procedure QMP-GEN-003), with the presence of the required disciplines / functions at defined intervals, to address whether the Quality System is being properly implemented and followed.

Management reviews shall be documented and used as part of the quality records and consist of structured and comprehensive evaluation of performance.

The management review meetings shall be scheduled at regular intervals (minimum once in every four months) from the effective date of the contract.

3. PROJECT APPROACH

3.1 General

The Project Quality System meets the requirements of:

- ISO 9001:2008 standard
- Contract Schedules (as applicable)
- Employer Specifications (as applicable)
- Local Rules and Statutory Regulations of the State of Qatar (as applicable)

In case of conflict between these documents, the matter shall be referred to the Employer representative for resolution.

The Project Quality System is implemented through two sets of governing documents:

- The Contract, specifications, procedures, local rules & regulations, etc.
- CCC-TCC JV Quality System documents based on CCC-TCC JV Corporate guidelines.

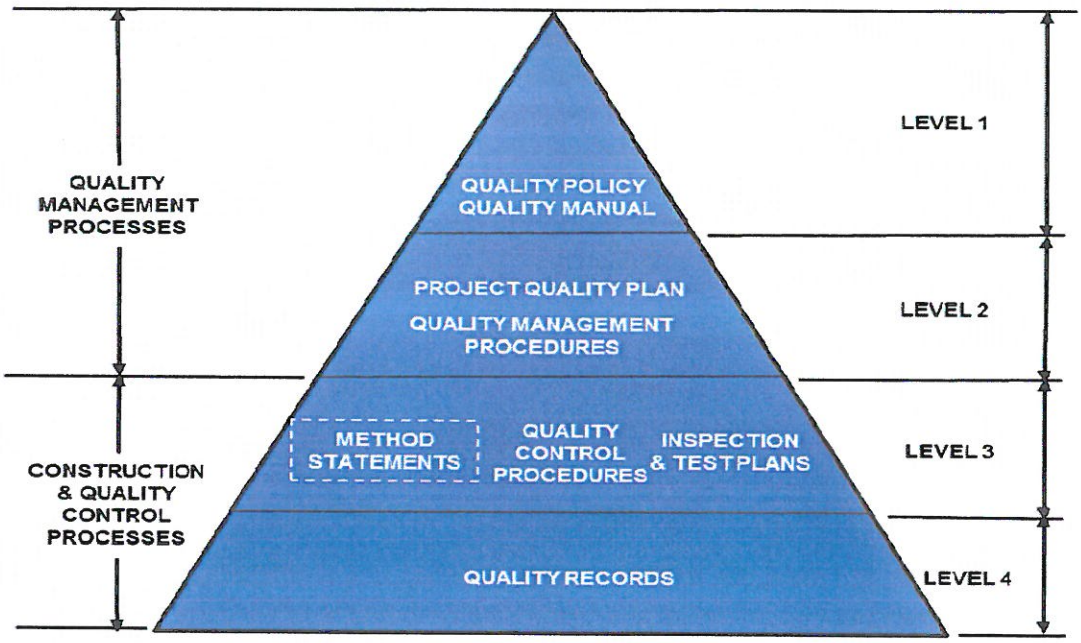
The CCC-TCC JV Quality System documents (listed below) provide a system of quality assurance and quality control to a level consistent with the requirements noted above.

Level 1: CCC Quality Manual, which define the corporate objectives and policies, and demonstrate how they are applied to comply with the requirements of ISO 9001:2008.

Level 2: This Project Quality Plan and Corporate and Project Quality Management Procedures which specify the management activities, responsibilities, quality standards and provide instructions necessary to meet the specified quality requirements of the Contract.

Level 3: Construction Method Statements, and quality control documentation such as Quality Control Procedures and Inspection & Test Plans which specify activities, responsibilities, specifications/standards and instructions necessary to meet the detailed specified quality requirements of the Contract.

Level 4: Quality Records generated throughout the Project.



Note 2: *The above figure represents the CCC-TCC JV Quality System Document Hierarchy Structure based on ISO 9001:2008 document control requirements.*

Revisions to Quality Management Procedures are originated by the Department Manager concerned, reviewed by the QA/QC Manager or his designee and approved by the Project Manager.

The Project quality philosophy and system of CCC-TCC JV embraces the activities of its suppliers who are required to conform either to their own existing quality system or to defined CCC-TCC JV procedures to ensure compliance to Project specifications. Where there is a difference between their own and CCC-TCC JV procedure the latter shall rule.

3.2 Contract Review

The Estimation Department has performed initial review of the Contract documents prior to award. The minutes of the Tender Review Board Meeting constitute the record of Contract review prior to award of Contract.

Codes and standards to be applied for the Project shall be identified during the Contract documents review. Any unfamiliar codes and standards will be highlighted on its respective procedure.

Country Laws and Regulations applicable to the Project shall be identified during the Contract documents review, and these laws shall also be imposed on the Vendors and Subcontractors for the Project.

On award of Contract, all information on the Contract shall be transferred in accordance with documented procedures to CCC-TCC JV Project Team. CCC-TCC JV Project Team shall conclude review of the Contract, including applicable CCC-TCC JV and the Employer procedures and initiate the further development of the necessary execution plans, schedules and procedures to implement the Contract.

Contract review shall include all kick-off meetings and familiarization activities such as distribution of copies of the relevant parts of the Contract documents within CCC-TCC JV organization. Contract amendments-if any, shall be in the form of change orders or approved technical variances and shall be reviewed by appropriate Project management personnel and put into effect. Records of Contract review shall be separated and maintained.

Any amendments to the Contract shall be approved by the Employer first before proceeding.

The Contract review process is described in detail in procedure QMP-GEN-001 (Transfer of Contract Responsibility and Post Contract Review).

3.3 Coordination Procedure

Internal coordination of management decisions, information, documents, etc., within CCC-TCC JV on site and between CCC-TCC JV on site and CCC-TCC JV's Area Office is covered by the various sections of this PQP and associated documents.

Coordination between CCC-TCC JV and Employer shall be agreed during mobilization and specified in a procedure covering details such as: protocol for standard addressees for documents, standard form of transmittal, format, number and addressees of standard copies of documents/data, authority for approval, etc.

Coordination with Subcontractors shall be agreed before award of subcontract and shall cover details such as: addressees for documents, standard form of transmittal, format and number and addressees of copies of documents/data, authority for approval, etc.

Coordination with local and national Authorities shall be detailed at mobilization stage in full consultation with Employer/Engineer.

3.4 Project Control Procedure

Contract and final planning and scheduling documents shall be handed over to Project at mobilization stage.

Project Control Manager is responsible for the preparation and update of project schedules in accordance with Contract requirements. Progress shall be reported weekly and monthly in accordance with Contract requirements.

In agreement with the Construction Manager and prior to commencing work, Project Control Manager shall issue the Progress Monitoring procedure (QMP-GEN-022).

Project Control Manager shall transmit necessary planning and scheduling data to the Construction Manager who is then responsible for ensuring that the necessary materials, documents and other input resources are available at the jobsite before each item of work begins. Planning and scheduling will be in accordance with procedure QMP-GEN-015 (Planning & Scheduling).

3.5 Process Control

The process control will be planned for and implemented via the use of Quality Control Procedures (QCP's) and Inspection & Test Plans (ITP's). Supportive of the QCP's and ITP's are project specifications, codes, standards, method statements, etc.

Special Processes shall be controlled as per quality control procedures as listed in Attachment 6 of this PQP.

4. RESOURCES

4.1 Provision of resources

The requirements for materials, equipment, personnel and infrastructure shall be detailed in the project execution plan. Availability and scheduling of resources shall be planned at the start of the project and reviewed progressively throughout the project.

Where a particular resource has limited availability, arrangements for the provision of such resources shall be planned as early as possible in order to mitigate demand from competing projects or alternative usage.

4.2 Materials

All permanent project materials shall be provided in accordance with a specification or standard, confirmed and approved during the engineering phase of the project.

A procurement schedule shall be developed and implemented. The procurement schedule shall ensure that materials and equipment are procured and arrive at the worksite in sufficient time for them to be inspected and used / installed.

4.3 Human resources

Human resources shall be provided in accordance with the project staffing plan. Sufficient time shall be allowed for selection and where applicable, recruitment and mobilization of personnel.

Project personnel shall undergo HSE induction training, unless such training has already been provided within the past year and where applicable quality management system familiarity training. Personnel newly recruited to CCC-TCC JV shall undergo CCC-TCC JV induction training.

The Project Manager shall determine the need or applicability of team development and motivational strategies and which, if any of these are suitable and beneficial to the project team.

4.4 Infrastructure and work environment

Project mobilization shall result in a work environment that is habitable, safe and promotes good standards of workmanship.

The construction phase of the project shall be managed from the site location where air conditioned site offices, (toilets included) shall be installed. Utility services (electricity and water) and any other necessary site buildings, structures, facilities, transport and support services shall be arranged.

Tools and equipment shall be provided by the "Plant Maintenance and Vehicle" (PMV) department, who shall arrange for the timely mobilization of any needed equipment or plant.

Communication and Information technology shall be provided by the "Information Services Department" (ISD), which will include the fitting and commissioning of all computer hardware and software necessary for communication, data analysis, calculation, modeling, and record keeping.

5. TRAINING

The standard policy is to employ Project personnel who have previous demonstrated experience in working with the standards and codes applicable to the subject Project. Any requirements for additional training shall be addressed as per Project specific quality management procedure QMP-GEN-005 "Training and Personnel Qualification". Project personnel shall be qualified for their function. Additional specific operator training will be provided if required. Procedure QMP-GEN-005 applies.

Training needs shall be the subject of discussion at management review meetings.

For all training provided by the Project, the syllabus shall be defined in writing, course notes shall be provided and attendees shall sign an attendance register.

The QA/QC Manager shall ensure that Managers, site senior staff and quality related personnel are familiarized with the:

- Essentials of the ISO 9000 series of standards
- Project quality system as set out by this Project Quality Plan
- Quality Management Procedure applicable to each Manager's work and duties
- Implementation of detailed procedures such as QCP's, ITP's

6. DOCUMENT AND DATA CONTROL

6.1 Document and Data Approval and Control

The requirements of documentation are in line with ISO 9001:2008 clause 4.2 and are applicable to the whole scope.

The Project shall nominate a staff member to be responsible for document and data control.

All documents coming within the quality system as defined by this PQP shall be issued on controlled distribution.

The Document Control Schedule shall be prepared shortly after award of Contract and shall list all documents foreseen at the time and their target issue date.

All controlled documents shall be coded and have the revision status marked on them.

A distribution matrix shall be issued and maintained covering all addressees and types of controlled documents. Concerned Managers shall approve this document before issue.

The document control process shall ensure that any document changes will go through the same review and issue procedure, by the same people, as the original document which the document change replaces or modifies.

Copies of superseded documents shall be destroyed. Superseded masters shall be marked "Superseded" and archived separately.

A database (Visual BYBLOS) shall be maintained recording the revision status of all controlled documents. Print-outs of the database shall be issued regularly to heads of departments unless they have read-only access to the database.

A print-out of the database listing PQP, QMP's, ITP's, QCP's, and Method Statements shall be sent each month to Area Office.

All documentation shall be in English.

All documents shall be legible and of digital scanning quality.

Project Manager is responsible for liaising with IT Engineer and for agreeing computerized document control requirements including:

- Directory organization
- Master-file directories
- Restricted access to data files

The IT Engineer is responsible for setting up the system and for training document control clerks in use of application software.

For document coding and control procedure QMP-GEN-002 shall apply.

7. CONTROL OF QUALITY RECORDS

7.1 Quality Records

QA/QC Manager is responsible for ensuring that all necessary documentation is compiled to complete the handover data package.

The verification, compiling and packaging of all quality records that are required to be submitted to the Employer at the time of Project Handover will be according to the QMP for Handover (Handover Procedure).

An Electronic Document Management System (EDMS) (if applicable), shall be implemented for all drawings and quality records from initial stage through to final Document Handover.

Quality records shall normally be kept for a minimum of five years from date of final handover of Project to the Employer unless otherwise specified in the Contract. Hard-copies shall be stored in weather proof room or container, fire protected and environmentally controlled if necessary. Contents shall be indexed. Soft copies will be stored, if required, on back-up tapes held in Area Office.

Quality records shall be prepared and maintained in accordance with procedure QMP-GEN-004 (Quality Records).

8. DESIGN CONTROL

The Engineering design control is not included in CCC-TCC JV's scope of work.

8.1 Field Engineering

The function of Field Engineering is to provide drawing and document production services needed on Site, process "Field Change Requests" and "Technical Queries" as well as to document the "As-Built" status on construction drawings.

8.2.1 Technical Queries

A Technical Query (TQ) is a question of technical nature raised by one party to another party, usually related to construction work. Technical Query is usually related to a contractual issue that requires a formal reply. Technical Query must be registered within DCG and must follow official review, approval and distribution process.

Technical Queries will be initiated, documented, processed, verified and actioned in accordance with QMP-GEN-019.

8.2.2 Field Change Requests

During construction many decisions have to be made that may affect the design or the methodology of execution of a certain part of the project that may lead to a field change.

The potential Field Change Request (FCR) will be subject to discussion between Field Engineering personnel and the originator (Section Engineer) before being documented. A Field Change Request will be avoided wherever possible. Where there is a clear need for a Field Change Request, it will be the responsibility of the Section Engineer to raise the FCR in conjunction with Field Engineering.

Field Change Requests will be initiated, documented, processed, verified and actioned in accordance with QMP-GEN-019.

8.2.3 As-built Document Processing

The As-built drawings reflects all changes made in the specifications or drawing during construction work, they show the exact dimensions, location, levels, and all elements of the completed work.

Redline Mark-ups will be produced immediately after construction is complete. A qualified technician from the Construction Department in coordination with the Site Engineer in charge of construction work will collect accurate data and redline the construction drawing.

Redline Mark-up drawings will, when finalized, be passed to the Field Engineering Department and the Certification Department (who need them for test packs and completion certification).

The "As-Built" drawing will be returned from the Employer either "approved" or "not approved", not approved as-built drawings will be discussed, drawings revised and resubmitted until all drawings reach "approved" status. Once approved, As-built drawings will be issued by DCG, in accordance with the DDM.

As-built drawings will be initiated, documented, processed, verified and actioned in accordance with QMP-GEN-019.

9. CONCESSION / INFORMATION REQUEST

Requests for Information are used if, during review of technical requirements, CCC-TCC JV discovers an anomaly, conflict or lack of clarity which could prejudice the construction process.

Concession requests are used if CCC-TCC JV desires a relaxation to a technical requirement (specification, drawing, procedure or other) resulting from a construction non-conformance or similar.

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Requests for Information and Concession Requests will be initiated, documented, processed, verified and actioned in accordance with procedure QMP-GEN-013.

10. PROCUREMENT

10.1 Procurement Plan

The requirements of this section follow ISO 9001:2008 clause 7.4.

Vendor list of prospective Suppliers shall be prepared after taking into consideration their Quality Systems, product standards, documented experiences or by carrying out Supplier evaluations.

Quality requirements shall be clearly specified in all purchase orders or Subcontract Agreements.

Purchasing of all permanent works materials will be carried out in accordance with procedure QMP-GEN-006, and all subcontracts will be issued as per procedure QMP-GEN-012.

10.2 Evaluation of Subcontractors and Vendors

The assessment and qualification of Vendors and Subcontractors are carried out in accordance with the following criteria:

- Subcontractors / Vendors specified by Employer/Engineer
- Subcontractors / Vendors selected on previously demonstrated experience
- Satisfactory assessment of Subcontractors / Vendors quality system
- Experience of Vendor's product by other companies.

Where a Vendor can demonstrate that his product meets a product standard (e.g. BS, ASME etc.) there will not normally be any need to investigate the Vendor's quality system.

10.3 Purchasing Data and Verification

Purchasing data is identified after the material take off has been done. The inquiry document incorporates full specification and it shall specify the schedule requirements, identification of product, packaging, handling and protection, purchasing authority and availability of a Quality Management System.

During progress of the subcontracted work, the QA/QC Manager shall audit the Subcontractor's compliance with the quality system as appropriate. In parallel, the Project QC department shall expedite notification points of inspection and test witnessing as appropriate, based on mutual agreement between CCC/TCC JV, Employer and Vendors / Subcontractors.

Quality records generated by the Subcontractor's shall be systematically reviewed by the Project QC department to ensure their accuracy and timely production as the work progresses.

In the case where Subcontractors' and Vendors' facilities are geographically distant from the Project or procurement offices, monitoring of the works is done through regular visits by QA/QC personnel.

Purchasing products will be subjected to receiving inspection before offload to site as detailed in procedure QMP-GEN-007. Material Inspection shall be performed to ensure the received material meet required specification and shall have all required documentation.

10.4 Control of Customer Supplied Product

Employer supplied products will be controlled using the same systems as are used for CCC-TCC JV products unless otherwise specified in the Contract specifications. Upon receipt, accompanying documentation shall be checked for correctness and any deficiencies shall be processed through the system and the Employer shall be advised.

CCC-TCC JV shall identify, verify, protect and safeguard the Employer supplied products provided for use or incorporation into the product as detailed in procedure QMP-GEN-007.

10.5 Product Identification and Traceability

All materials shall be uniquely identified and inspected at appropriate stages to ensure that they conform to requirements, have the necessary certification where applicable and have been installed in accordance with drawings and specifications.

Procedure QMP-GEN-009 defines the approach that is followed for all types of materials used from the purchasing stage, and the construction processes, to ensure that the correct materials are used.

Where traceability is a contractual requirement, certification shall be as specified in the Contract documents.

Unless otherwise specified certification shall be in English.

Only original or true verified copies of certificates are acceptable.

10.6 Handling, Storage, Packaging, Preservation and Delivery

Project specifications and instructions shall identify any special requirements. Procedures for handling, storage, packaging and delivery shall be such as to ensure they are suitable to prevent damage or deterioration. Employer reserves the right to monitor activities.

Handling, Storage, Packaging, Preservation and Delivery is addressed and controlled in accordance with procedure QMP-GEN-007 and issued to Vendors as part of the Procurement documents.

11. INSPECTION AND TESTING

11.1 General

All incoming products and materials are subject to receiving inspection as detailed in procedure QMP-GEN-007, and in-process inspection shall be carried out in accordance with approved ITPs and QCPs, as applicable.

Inspection and testing personnel shall be assigned based on their qualifications and previous experiences for similar Projects.

11.2 Inspection and Test Plans

The ITP shall set out in matrix form the sequence of inspection steps, the governing document (specification, standard, etc.), the standard to be achieved, the persons witnessing and the supporting documents to be produced. QCP's shall be produced in addition to ITP's if complexity or specific inspection instructions so demand.

CCC-TCC JV QC department shall prepare an ITP for review and agreement by the Employer for each work activity a minimum of six weeks prior to scheduled start date for the specific activity.

The ITP will indicate the QC intervention points during the execution of the works as follows:

H	Hold Point:	QC must be notified and the work can proceed only after the QC release is clearly put on the respective inspection form.
W	Witness Point:	QC must be notified to witness the construction activity or testing. If not show, work can proceed. In that case, the preferred practice is QC to review of inspection & test results for acceptance.
S	Surveillance Point:	Construction does not have to notify QC.
R	Document Review:	Review of QC inspection & test results for acceptance.

CCC-TCC JV QC intervention points shall be equivalent or higher than the Employer/Engineer's.

The latest revision of the ITP shall be available at CCC-TCC JV main office, site offices and all fabrication and construction locations as applicable.

Inspection reports shall be completed as work proceeds and shall not be left until the end of the job. The ITP is to be used as a plan only and acceptance signatures shall be obtained on the forms. Sign off and submission to Employer (if required) shall follow as soon as possible after the work is completed.

CCC-TCC JV QC department shall give Employer twenty-four (24) hours' notice of any required Hold or Witness points.

11.3 Inspection and Test Records

Inspection and test records shall be controlled in accordance with the QMP for Quality Records (QMP-GEN-004).

Inspection and test records shall provide sufficient evidence of conformity to Project requirements and be subject to review by Employer/Engineer, as applicable.

11.4 Inspection and Test Status

The inspection and test status of all materials and work within the Contract scope shall be known and verifiable at all times as per the QMP for Inspection and Testing (QMP-GEN-011).

11.5 ITP Tracking Control Software

CCC-TCC JV's Mechanical Completion and Pre-commissioning activities will be tracked and verified using VBC and/or the "ATLAS" Project Completion and Certification Tracking System. ATLAS is a completion and tracking system developed by CCC-TCC JV and successfully implemented on other Projects.

11.6 Control of Inspection, Measuring and Test Equipment

All inspection, measuring and test equipment used on the Project will be controlled and calibrated in accordance with procedure QMP-GEN-010.

Suppliers and Subcontractors (including test and inspection houses) shall be responsible for controlling their own inspection, measuring and test equipment used in the performance of their work.

All test and inspection equipment will have a valid calibration certificate. If this certificate is missing or out of date the equipment must be removed and re-calibrated.

12. CONTROL OF NON-CONFORMING PRODUCT

12.1 Non-conformance System

The non-conformance system is under the responsibility of the QA/QC Manager who carries out trend analysis of the non-conformances raised. The QA/QC Manager is responsible for implementing the non-conformance system in accordance with procedure QMP-GEN-008.

The QA/QC Manager shall establish and maintain an up to date log of all non-conformances, which is to be submitted at the regular progress meetings.

Repair of non-conforming material and product shall be in accordance with documented procedures approved by Employer/Engineer.

After reviewing the records, the QA/QC Manager shall initiate and monitor corrective and preventive actions as necessary to prevent recurrence of serious nonconformity, in accordance with procedure QMP-GEN-017. Actions shall be in co-ordination with the Project Management.

12.2 Corrective Actions

Corrective Actions comprise of the following 'action tools' that are used in order to improve the quality management system as a whole, by analyzing non-conformances, by investigating the root cause of incidents, and by reporting on observable deficiencies:

- Trend Analysis
- Root-Cause-Analysis

Corrective Action may be recommended by any person at construction site, following discussion and approval by Department Manager a Corrective Action Request (CAR) may be issued, a copy of the CAR shall be forwarded to QA/QC Manager. QA/QC Manager shall keep a register for CAR.

12.3 Preventive Actions

Preventive Action shall place more emphasis on the process rather than the product. Preventive actions are used in order to improve the quality management system as a whole by feeding back experience into the quality system to prevent incident recurrence. Procedure QMP-GEN-017 applies.

Preventive Action may be recommended by any person at construction site, following discussion and approval by Department Manager a Preventive Action Request (PAR) may be issued, a copy of the PAR shall be forwarded to QA/QC Manager. QA/QC Manager shall keep a register for PAR.

13. QUALITY AUDITS

13.1 Audit Plan & Execution

Internal audits and reviews are to be carried out to verify the implementation, compliance and effectiveness of the Project Quality System in relation to the scope of work.

A Project specific audit and review schedule shall be developed based on the guideline shown in Attachment 5, to address the full scope of work including any Subcontracts. This schedule shall be subject to Employer review and comment prior to formal approval and issue.

The Employer Representative shall be invited to participate in all quality audits. Audit notifications and agenda shall be submitted to Employer Representative minimum fourteen (14) calendar days in advance of the audit dates.

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Employer appointed Third party, if applicable, may also perform a program of quality and compliance audits. CCC-TCC JV shall provide assistance and access to its system as required. Any deficiencies will be rectified by CCC-TCC JV in a timely manner.

The QA/QC Manager is responsible for carrying out audits in accordance with the Project audit schedule and in accordance with QMP-GEN-016 "Quality System Audits".

Audits shall be undertaken by experienced and qualified personnel who are not directly responsible for any of the work in the area audited.

All audit reports shall be addressed to the Project Manager and copied to the Manager of the area or element audited plus any other concerned parties. A copy of the audit report shall also be sent to the Employer within fifteen (15) calendar days of the completion of each audit.

A Corrective Action Notice (CAN) shall be issued to identify and eliminate any non-conformity identified during quality system audits.

The QA/QC Manager or his designee shall establish and maintain a log of Corrective Action Notices (CANs).

14. PERFORMANCE IMPROVEMENT AND KEY PERFORMANCE INDICATORS

14.1 Introduction

Two types of benchmarking are available and shall be used for measuring performance and improvement. These are known as "qualitative comparison" and "quantitative comparison".

14.2 Qualitative Comparison

"Qualitative Comparison" is one of the two major approaches to benchmarking. It involves investigating opinions, behaviors and experiences from other Projects. It is contrasted with "Quantitative Comparison" in that it does not rely on quantitative measurement and mathematical models, but instead uses logical deductions to decipher gathered data. Its downside, compared to quantitative comparison, is that it is more prone to personal opinion, has smaller sample sizes and is harder to measure.

"Qualitative Comparison" shall be made using information gained from Project personnel who either visit or communicate with other CCC-TCC JV partner Projects.

Personnel shall actively seek out new, alternative or novel approaches to similar Project tasks and by comparing the results with current practice.

The subject matter should be reviewed for basic processes in operation (an example may be the Quality Awareness training of new recruits or the expediting of scheduled activities). It is these processes that should be reviewed to determine the rating of the process.

14.3 Quantitative Comparison

"Quantitative Comparison" relies mainly on quantitative measurement and mathematical models.

Key Performance Indicators (KPI's) shall be used for the approach of "Quantitative comparison" and measurement for the Project and shall be measured on a monthly basis.

The KPI targets shown in Attachment 2 are based on CCC-TCC JV experience from historical (and current) Projects - plus a 10% increase in performance requirements.

14.4 Performance Improvement

The QA/QC Manager is responsible to determine, collect and analyze data to demonstrate the suitability and effectiveness of the Project Quality Management System.

He is also responsible for identifying areas for improvement and coordinating quality improvement projects in close coordination with the Project Management Team. Quality improvement Projects shall be initiated and implemented as per the QMP for Corrective and Preventive Action (QMP-GEN-017).

CCC-TCC JV Project Management shall monitor the degree of effectiveness of the Project Quality Management System and shall strive for its improvement through the following sources of information:

- Quality objectives (Quality KPIs)
- Audit results, including Corrective Action Requests
- Customer complaints
- Non-conformance reports
- Status and effectiveness of corrective and preventive actions
- Proposals for improvement
- Quality alerts
- Analysis of Project data
- Lessons learned from previous Projects
- Previous management reviews.

Furthermore, the Corporate QMP for Quality Measurement and Improvement (QMP-MOA-018) describes the methodology applied for assessing the level of the Employer satisfaction and the process for its improvement. The tools to accomplish the above include:

- Balanced Scorecards
  - Project Operational Excellence Balanced Scorecard
  - Corporate Scorecard
  - Technical and Commercial Audit Scorecard
  - Project Quality Scorecard
  - EMPLOYER Satisfaction Questionnaire
- Key Performance Indicators (KPI)
- Statistical techniques

15. COMPANY COMPLAINTS

15.1 Documented Company Complaints

Documented Employer complaints may be received in a number of ways, such as a memo issued by the Employer/Engineer, or as notes of meeting during which the Employer expresses complaints. All of these types of documented complaints shall be processed in accordance with the QMP for Customer Complaints (QMP-GEN-021).

15.2 Verbal Complaints

A verbal complaint can be received by almost anyone in the CCC-TCC JV organization at any time and it is important to identify when a complaint is being made. What may appear to be a trivial complaint, if not addressed and closed, will often grow to become a more serious complaint. Verbal complaints shall be processed in accordance with the QMP for Customer Complaints (QMP-GEN-021).

15.3 Analysis

Data related to customer complaints shall be retained and periodically analyzed to detect any trends. Where trends become apparent, because analysis shall be carried out and action(s) taken in proportion to the risks posed. The QMP for Corrective and Preventive Action (QMP-GEN-017) applies.

16. PRECOMMISSIONING / COMMISSIONING

16.1 General

Pre-commissioning and commissioning activities shall be carried out in accordance with system procedure QMP-MOA-027.

Individual activities such as hydro testing, electrical continuity, etc. shall be controlled by pre-commissioning and commissioning control procedures which shall be reviewed and concurred by the Employer/Engineer, and issued at least 30 days before the activity starts.

An overall schedule of pre-commissioning and commissioning activities, identifying the relevant procedure, method statement, etc. for each activity, shall be developed well before the activity starts.

Commissioning systems and priorities will be established and followed to give emphasis on safety systems being in operation as early as possible in the Project. These priorities will 'filter' down through pre-commissioning and construction to facilitate early completion and Ready for Commissioning (RFC) of key systems.

17. REPORTING

Reporting to Employer shall be as per Contract requirements or as agreed with Employer during the mobilization stage.

18. ATTACHMENTS

Attachment 1 Project Quality Policy

Attachment 2 Project Key Performance Indices

Attachment 3 Project Quality System Matrix

Attachment 4 List of Quality Management Procedures

Attachment 5 Indicative Quality System Audit Schedule

Attachment 6 Preliminary list of applicable QCP's and ITP's

Attachment 7 Project Organization Chart

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCCI) / TEYSEER CONTRACTING CO. WLL - JV

ATTACHMENT 1

PROJECT QUALITY POLICY

Policy:

- To establish, implement and maintain an efficient and effective quality system that meets the requirements of the ISO 9001:2008 for application to the Project works including the control verifications to be put in place to assure quality during each stage of the work.
- To ensure that products are supplied, constructed and commissioned in accordance with Employer requirements as stated in the Contract, and to ensure that Employer requirements are determined, fulfilled and where practical exceeded to enhance the Employersatisfaction.
- To implement, by all Project personnel, and by Vendors / Subcontractors and sub-tiers thereof, the quality system on all activities and operations that affect the quality of the products and services provided under the Contract.
- To review and monitor the quality system at regular intervals throughout the Contract period both to continually improve the system and its effectiveness and to detect and correct any adverse trends by taking the necessary executive action.

Objectives:

- To provide products and services for the realization of a successful Project that meets the Contract and Project requirements to the mutual satisfaction of the Employer/Engineer.
- To meet or exceed all quality requirements and technical performance criteria for the project.
- To meet all commercial performance criteria (namely schedule and cost) by efficient utilization of technological, human and material resources.

Specific procedures, such as quality management procedures, quality control procedures, inspection & test plans, and method statements will be developed and implemented to ensure that all quality aspects of the work are addressed.

This quality policy is issued by the undersigned Project Manager and the QA/QC Manager on behalf of CCC-TCC JV for the Project.

Project Manager:

Signature:

Date:

QA/QC Manager :

Signature:

Date:

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) LTD. - JVC CO. WLL - JV

ATTACHMENT 2

PROJECT KEY PERFORMANCE INDICES

QUALITY TARGETS	TYPE OF PROJECT / WORK	ACCEPTABLE LEVEL
Ratio of Rejected IR's to total number of IR's issued	Construction (Overall)	Equal or less than **3%** of IRs issued
Ratio of NCR's to total number of IR's issued	Construction (Overall)	Equal or less than **0.35%** of IRs issued

Note 2: ***NCR:*** *Non-Conformance Report* ***IR:*** *Inspection Request*

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) / TEC... CONSTRUCTING CO. W.L.L. - JV

ATTACHMENT 3

PROJECT QUALITY SYSTEM MATRIX

ISO 9001 Clause	ACTIVITY	PROCEDURE	VERIFYING DOCUMENT DELIVERABLES	RESPONSIBLE PERSON	REMARKS
4	**QUALITY MANAGEMENT SYSTEM**				
4.1	*General Requirements*	PQP-EST-17-1.4857	Documented Quality System	Project Manager	
4.2	*Documentation Requirements*	PQP-EST-17-1.4857	Documented Quality System	Project Manager Project Control Manager Construction Manager QA/QC Manager	
4.2.1	General	PQP-EST-17-1.4857	Documented Quality System	Project Manager QA/QC Manager	
4.2.2	Quality Manual	PQP-EST-17-1.4857	Project Quality Plan (PQP-EST-4851-001) and its supporting documentation	Project Manager QA/QC Manager	
4.2.3	Control of Documents	QMP-GEN-002	Documents issued by controlled distribution system, distribution records.	Project Control Manager Snr. Document Controller	
4.2.4	Control of Records-Identification, Storage, Protection, Retrieval, retention and Disposition of Records	QMP-GEN-004 QMP-GEN-018	All records proving operation of the quality management system	Department Managers Project Control Manager QA/QC Manager	
5	**MANAGEMENT RESPONSIBILITY**				
5.1	*Management Commitment*	PQP-EST-17-1.4857	Quality Policy distributed to Project personnel. Records of management review. Established quality objectives	Project Manager Project Control Manager Construction Manager QA/QC Manager	
5.2	*Customer Focus*	PQP-EST-17-1.4857 QMP-GEN-001	Documented Quality System	Project Manager QA/QC Manager	
5.3	*Quality Policy*	PQP-EST-17-1.4857	Statement distributed to all appropriate levels of Project personnel	Project Manager QA/QC Manager	

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / EYSEER CONTRACTING CO. W.L.L. - JV

ATTACHMENT 3

PROJECT QUALITY SYSTEM MATRIX

ISO 9001 Clause	ACTIVITY	PROCEDURE	VERIFYING DOCUMENT DELIVERABLES	RESPONSIBLE PERSON	REMARKS
5.4	*Planning*				
5.4.1	Quality Objectives	PQP-EST-17-1.4857	Documented Quality System	Project Manager	
5.4.2	Quality Management System Planning	PQP-EST-17-1.4857	Documented Quality System	Project Manager QA/QC Manager	
5.5	*Responsibility, authority and communication*				
5.5.1	Responsibility and authority	PQP-EST-17-1.4857 & supporting quality system documentation	Organization Chart, Job Descriptions	Project Manager Department Heads Construction Manager	
5.5.2	Management representative	PQP-EST-17-1.4857	Organization Chart	QA/QC Manager	
5.5.3	Internal Communication	PQP-EST-17-1.4857			
5.6	Management Review	QMP-GEN-003	Management Review records	Project Manager Project Control Manager Construction Manager QA/QC Manager	
6	**RESOURCE MANAGEMENT**				
6.1	*Provision of Resources*	PQP-EST-17-1.4857	Organization Chart, Job Descriptions	Project Manager Construction Manager QA/QC Manager	
6.2	*Human Resources*	PQP-EST-17-1.4857 QMP-GEN-005	Training/Qualification records, Personnel Appraisal records	Project Manager Project Control Manager Construction Manager QA/QC Manager Department Heads	

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

ATTACHMENT 3

PROJECT QUALITY SYSTEM MATRIX

ISO 9001 Clause	ACTIVITY	PROCEDURE	VERIFYING DOCUMENT DELIVERABLES	RESPONSIBLE PERSON	REMARKS
6.3	*Infrastructure*	List of QMP-PP's (PMV related QMP's)	PMV records	Plant Mechanical Engineer	
6.4	*Work Environment*	PQP-EST-17-1.4857			
7	**PRODUCT REALIZATION**				
7.1	Planning	PQP-EST-17-1.4857 QMP-GEN-015 QMP-GEN-022	QMP's, QCP's, ITP's	Project Manager Project Control Manager Construction Manager QA/QC Manager	
7.2	*Customer-related processes*	QMP-GEN-001			
7.2.1	Determination of requirements related to the product	Contract Project Specification	Project Specification QCP's, ITP's	Construction Manager Department Heads QA/QC Manager	
7.2.2	Review of requirements	PQP-EST-17-1.4857 QMP-GEN-004	Contract review records	Estimation & Proposals Dept. Project Manager QA/QC Manager	
7.2.3	Customer communication	PQP-EST-17-1.4857 QMP-GEN-004 QMP-GEN-013 QMP-GEN-017	Project correspondence Technical Queries	Project Manager Construction Manager Project Control Manager QA/QC Manager	
7.3	Design and Development (N/A)	QMP-GEN-019	Field Engineering	Engineering Manager	

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) TURKISH CONTRACTING CO. WLL - JV

ATTACHMENT 3

PROJECT QUALITY SYSTEM MATRIX

ISO 9001 Clause	ACTIVITY	PROCEDURE	VERIFYING DOCUMENT DELIVERABLES	RESPONSIBLE PERSON	REMARKS
7.4	*Purchasing (of product supplied by CCC-TCC JV)*	PQP-EST-17-1.4857			
7.4.1	Purchasing Process	QMP-GEN-006 QMP-GEN-012	Supplier/Subcontractor records Supplier quality system data (ITP's) Product required certificates Assessment reports Subcontract Agreement	Project Manager QA/QC Manager Material Engineer	
7.4.2	Purchasing Information	QMP-GEN-006 QMP-GEN-012	P.O. and Subcontract data	QA/QC Manager Material Engineer	
7.4.3	Verification of Purchased Product	QMP-GEN-006 QMP-GEN-007	Inspection reports	QA/QC Manager	
7.5	Production and Service provision				
7.5.1	Control of production and service provision	PQP-EST-17-1.4857 QMP-GEN-011 ITP's , QCP's and Method Statements	IFC Drawings and Specification PMV Records Inspection and testing records	Construction Manager Project Engineer QA/QC Manager	
7.5.2	Validation of processes for production and service provision (Special Processes)	QCP's and Method Statements (e.g. Concrete QCPs)	Approval of QCP's and Method Statements (e.g. Concrete Trial mix design and test report approval, etc.)	QA/QC Manager Construction Manager	
7.5.3	Identification and traceability	QMP-GEN-009, ITP's and QCP's	Identification marks and stamps Traceability maps/diagrams	Project Manager Construction Manager Project Engineer QA/QC Manager	

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCG) / TECHNICAL CONTRACTING CO. W.L.L. - JV

ATTACHMENT 3

PROJECT QUALITY SYSTEM MATRIX

ISO 9001 Clause	ACTIVITY	PROCEDURE	VERIFYING DOCUMENT DELIVERABLES	RESPONSIBLE PERSON	REMARKS
7.5.4	Customer Property	QMP-GEN-007 (Control of CCC-TCC JV's Material) QMP-GEN-002 (Control of Intellectual Property, i.e. drawings, specs, manuals)	Material inspection records, Material preservation records	Project Manager Construction Manager Snr. Document Controller	
7.5.5	Preservation of Product	QMP-GEN-007 - Purchaser & Equipment Supplier Requirements	Preservation reports Routine inspection reports	Project Manager Construction Manager	
7.6	*Control of monitoring and measuring devices*	QMP-GEN-010	Monitoring and Measuring Equipment lists Verification/Calibration records	QA/QC Manager	
8	**MEASUREMENT, ANALYSIS AND IMPROVEMENT**				
8.1	General	PQP-EST-17-1.4857			
8.2	*Monitoring and measurement*	PQP-EST-17-1.4857			
8.2.1	Customer satisfaction	PQP-EST-17-1.4857 QMP-GEN-021 QMP-MOA-018	Project Correspondence QA/QC Meeting records Employer Non-conformities Letters of appreciation Employer Audit Reports Customer Satisfaction Assessment Questionnaire	Project Manager Construction Manager QA/QC Manager	
8.2.2	Internal audit	PQP-EST-17-1.4857 QMP-GEN-016	Audit schedule Audit reports Corrective Action Notice (CAN)	QA/QC Manager	
8.2.3	Monitoring and measurement of processes	QMP-GEN-016	Audit reports Statistical analysis	QA/QC Manager	
8.2.4	Monitoring and measurement of product	QMP-GEN-011	Inspection and testing records	QA/QC Manager	

CONSOLIDATED CONTRACTORS GROUP S.A.L (Offshore) / TECHNER CONTRACTING CO. W.L.L JV

ATTACHMENT 3

PROJECT QUALITY SYSTEM MATRIX

ISO 9001 Clause	ACTIVITY	PROCEDURE	VERIFYING DOCUMENT DELIVERABLES	RESPONSIBLE PERSON	REMARKS
8.3	Control of Non-conforming product	QMP-GEN-009	NCR Log, NCR's	QA/QC Manager	
8.4	*Analysis of data*	QMP-MOA-018	Project Correspondence QA/QC Meeting records Employer Non-conformities Letters of appreciation Audit reports Statistical analysis	Project Manager Construction Manager QA/QC Manager	
8.5	*Improvement*				
8.5.1	Continual improvement	QMP-GEN-003 QMP-GEN-017 QMP-MOA-018	Quality objectives, audit results, analysis of data, corrective & preventative action, management review records	Project Manager, Department Heads	
8.5.2	Corrective action	QMP-GEN-017	Corrective Action Report (CAR)	Project Manager Project Control Manager Construction Manager QA/QC Manager	
8.5.3	Preventive action	QMP-GEN-017	Preventive Action Report (PAR)	Project Manager Project Control Manager Construction Manager QA/QC Manager	

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ATTACHMENT 4

QUALITY MANAGEMENT PROCEDURES

Internal Code No.	Document Title
QMP-GEN-001	Transfer of Contract Responsibility And Post Contract Review
QMP-GEN-002	Document & Data Control
QMP-GEN-003	Management Review
QMP-GEN-004	Quality Records
QMP-GEN-005	Training & Personnel Qualifications
QMP-GEN-006	Purchasing
QMP-GEN-007	Material Control
QMP-GEN-008	Control of Non-Conforming Products
QMP-GEN-009	Material Certification & Traceability
QMP-GEN-010	Inspection, Measurement & Testing Equipment
QMP-GEN-011	Inspection and Testing
QMP-GEN-012	Subcontracting
QMP-GEN-013	Concession & Information Request
QMP-GEN-015	Planning & Scheduling
QMP-GEN-016	Quality System Audits
QMP-GEN-017	Corrective & Preventive Action
QMP-GEN-018	Handover Procedure
QMP-GEN-019	Field Engineering
QMP-GEN-021	Customer Complaints
QMP-GEN-022	Progress Monitoring
QMP-MOA-018	Quality Measurement & Improvement
QMP-MOA-027	Precommissioning / Commissioning

NOTE 3: *The QMP-MOA-XXX procedures form part of CCC corporate Quality System and can only be revised under the authority of the Construction Support & Quality Management Dept. at MOA and with the consent of the certifying authority.*

ATTACHMENT 5

INDICATIVE QUALITY AUDIT SCHEDULE

Audit Group	Audit Activity	Time Span of Project
1	All ISO 9001:2008 Section 4, 5, 6, 7 and 8	At 15%, 45% and 70% of completion stage for the construction work phase. Surveillance audits may be carried out depending on Project needs and performance on site.
2	Suppliers and Subcontractors	As required by Purchase Order / Subcontract Agreement, applicable procedure. Where concerns or criticality warrant.
3	Third Party Contract Compliance Audits (External to Project)	As per Contract Requirements.

Note 4: *The QA/QC Manager shall develop and maintain a full quality audit schedule based on these guidelines.*

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ATTACHMENT 6

PRELIMINARY LIST OF APPLICABLE QCP'S & ITP'S (CONSTRUCTION PHASE)

Note 5: *All procedures and plans mentioned here below are Contract specific QCP's and ITP's required to be developed for this Project. QA/QC Manager is responsible for preparation of the documents. This list is indicative and shows procedures that are planned at the time of preparation of this PQP. The list may be revised as and when required to cater for Project requirements without revising this PQP.*

INTERNAL CODING	DOCUMENT TITLE
1. Mechanical Quality Procedures	
QCP-GEN-136	Pressure Testing of Piping
QCP-GEN-140	Preservation of Materials and Equipment
ITP-GEN-136	Pressure Testing of Piping
ITP-GEN-143	Structural Steel Erection
ITP-GEN-145	Shop & Field Painting
ITP-GEN-162	Installation of Static Equipment
ITP-GEN-163	Installation of Horizontal & Vertical pumps
2. Civil Quality Procedures	
QCP-GEN-200	Earthworks
QCP-GEN-230	Concrete Works
ITP-GEN-200	Earthworks
ITP-GEN-206	Installation of Sewer and Drainage
ITP-GEN-231	Pre-cast Concrete
ITP-GEN-233	Structural Concrete
ITP-GEN-239	Grouting
ITP-GEN-251	Paving
ITP-GEN-252	Asphalt Roads
ITP-GEN-271	Installation of Fencing
3. Electrical Quality Procedures	
QCP-GEN-301	Installation of Cables
QCP-GEN-302	Installation of Cable Racks, Trays & Conduit Systems
QCP-GEN-303	Installation of Power Transformers
QCP-GEN-304	Installation of Generators
QCP-GEN-305	Installation of Switchgear & Motor Control Center

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QCP-GEN-307	Installation of Batteries, Chargers & U.P.S.
QCP-GEN-308	Installation of Lighting Systems
QCP-GEN-309	Installation of Earthing & Lightning Protection Systems
QCP-GEN-311	Installation of Communication Systems
QCP-GEN-316	Installation of Fire Alarm Systems
QCP-GEN-317	Installation of Security Access System
ITP-GEN-301	Installation of Cables
ITP-GEN-302	Installation of Cable Racks, Trays & Conduit Systems
ITP-GEN-303	Installation of Power Transformers
ITP-GEN-304	Installation of Generators
ITP-GEN-305	Installation of Switchgear & Motor Control Center
ITP-GEN-307	Installation of Batteries, Chargers & U.P.S.
ITP-GEN-308	Installation of Lighting Systems
ITP-GEN-309	Installation of Earthing & Lightning Protection Systems
ITP-GEN-311	Installation of Communication Systems
ITP-GEN-316	Installation of Fire Alarm Systems
ITP-GEN-317	Installation of Security Access System
4. Building Quality Procedures	
ITP-GEN-553	Internal Building Finishes
ITP-GEN-554	Inspection of Doors, Windows & Glazing
ITP-GEN-555	Inspection of Miscellaneous Finish Items
ITP-GEN-556	Inspection of HVAC Systems in Buildings
ITP-GEN-557	Inspection of Plumbing Works Installation for Buildings
ITP-GEN-563	Inspection of Fire & Gas Detectors
ITP-GEN-584	External Building Finishes
ITP-GEN-585	Landscaping Works

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ATTACHMENT 7

PROJECT ORGANIZATION CHART

- *TO BE FOUND IN MAIN TECHNICAL BID DOCUMENT*

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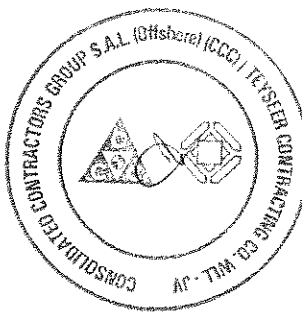
APPENDIX E – ANNEXURE 8

CCC QUALITY MANUAL



Consolidated Contractors Group S.A.L.
(Holding Company)

Corporate Quality Manual

QM-CCC-001

Striving For Business Excellence

CONSOLIDATED CONTRACTORS GROUP S.A.L. (HOLDING COMPANY)
ATHENS OFFICE, GREECE
TEL.: (+30) 210 618 2000 / 210 619 9200 . FAX: (+30) 210 619 9224 . E-MAIL: CCCMOAMAIL@CCC.GR

Consolidated Contractors Company

Policy Statement

CCC Quality Policy is based on the basic principles and values established for the organization and can be summarized in the following items:

- *In recognition to our valuable customers we are committed to meet customer requirements on time and within budget, meet their expectations, increase their satisfaction, and gain their commitment.*
- *We will deliver projects to our customers to the highest standard of quality, functionality and durability in a framework of sustainable solutions that meet all the environmental requirements. We will ensure that resources are used to the maximum efficiency, enhancing company image and profile in the market place by addressing corporate and social responsibility.*
- *We will apply the best possible technology in the industry to comply with the agreed requirements and continually to improve the effectiveness of the quality management system. We will create enabling structure for continual improvement by involving employees at all levels of the organization.*
- *We recognize the importance of our employees and their contribution for the achievement of our goals and objectives; we shall strive to increase their competence, involvement and motivation.*
- *We recognize the importance of our partners, society, and other interested parties in the business and we are committed to achieve the highest level of cooperation.*
- *We will continue to expand our business in all fields to achieve recognition as one of the best EPC Contractor or General Contractor.*
- *We are committed to be transparent in all phases of our operation that include engineering, procurement and construction.*
- *We will value and plan our work in a way to become industry benchmarked for quality and safety standards.*
- *Quality objectives are established with a framework for reviewing and measurement.*

This Policy shall be reviewed for continuing suitability and shall be followed by all employees of Consolidated Contractors Company.

Said Khoury
Chairman

February 2012

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / TEYSEER CONTRACTING CO. W.L.L. - JV

BUREAU VERITAS

Consolidated Contractors Group S.A.L
(Holding Company)

CORPORATE
QUALITY MANUAL

Revision Sheet

10	Revised as Noted	Feb. 2012	M.S.	E.K.	H.T.	S.S.K.
9	Revision in line with ISO 9001: 2008 standard	Sept. 2009	M.S.	E.K.	H.T.	S.S.K.
8	Revised as noted	Nov. 2007	L.A.	E.K.	H.T.	S.S.K
7	Internal changes	March 2007	M.S.	E.K.	H.T.	S.S.K
6	Inclusion of revised scope	Oct. 2004	M.L.G.	E.K.	H.T	S.S.K
5	Reissued Incorporating Internal Comments	April 2003	L.A.	E.K.	H.T.	S.S.K
Rev.	**Comments**	**Date**	**Prepared by**	**QA Review**	**Reviewed by VP CS & QM**	**Approved by President Engineering & Construction**

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Holding) (CCG) / TEYSEER CONTRACTING CO. W.L.L.

BUREAU VERITAS

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CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) / FEYSEER CONTRACTING CO. WLL

1. INTRODUCTION

1.1 General

The quality manual was first issued in May 1993, for immediate implementation by CCC personnel. Since its introduction, it was revised to follow the 1994 edition of the ISO 9001 standard and revised once again to be in line with the 2000 edition of the ISO 9001 standard. This revision (10) has incorporated recent Group organizational changes. 10

The Corporate QM is issued in order to:

a) *Communicate CCC policies and objectives;*

b) *Integrate working processes within an overall quality management system in line with ISO 9001: 2008 standard;*

b) *Demonstrate compliance of the CCC quality management system with ISO 9001:2008;*

c) *Give confidence to CCC customers of the company's ability to deliver and maintain the desired quality in design, construction and installation services;*

d) *Familiarize personnel with the CCC quality management system and processes;*

e) *Use it as a tool by CCC management for overall performance measurement, evaluation and initiation of quality and continual improvement efforts to enhance customer satisfaction.*

1.2 Company History

The Consolidated Contractors Group, known as CCC, is one of the largest Engineering, Procurement and Construction companies in the Middle East, was originally established in 1952 in Lebanon as a partnership. Subsequently, over the years, its operations grew steadily and it established its position as a recognized and versatile contractor.

Engineering News Record "ENR" magazine has named CCC the Top Construction Contractor for the Middle East Region for the past 10 years and as 18th Top International Contractor Worldwide for the year 2011 and 2nd in the Middle East. 10

Today, the CCC group, through its member companies, has established a strong market presence in the Middle East, Africa, CIS countries, as well as the Americas. Each member of the CCC Group has been successful in the highly competitive construction industry by drawing on the unique experience, skills and knowledge of all the other members of the group. Through over than five decades of growth, the substantial experience and the inter-group support has firmly entrenched the CCC group as a leader in the construction world.

The CCC Managing Office "CCC-MOA" is located in Athens, Greece and the Engineering, Procurement and Support Office "EPSO" is located in Abu Dhabi, U.A.E. Both offices provide support, guidance and monitoring to the area operations.

CONSOLIDATED CONTRACTORS GROUP S.A.L. (Offshore) (CCC) TEYSEER CONTRACTING CO. W.L.L. - JV

1.3 Scope

This CCC quality manual (QM) is the main document that describes CCC's quality management system. It serves as a permanent reference in the implementation and maintenance of the system which is set up generally throughout the company to meet the requirements of CCC operation in line with ISO 9001:2008. The quality management system of CCC is certified (see certificate in appendix 9.4) and is continuously assessed by the certification body for the maintenance and renewal of the certification.

The field of application of the QM covers Project Management, Engineering, Procurement, Construction, Installation & Commissioning activities "appendix 9.1". It also covers the support activities at Managing Office Athens (MOA) and areas, since these also contribute to project performance.

These activities are directed to provision of products and services to the oil and gas related industry as well as the provision of industrial plants, buildings and civil structures, infrastructure works, marine works, housing and office complexes.

The quality management system and scope of the certification is applicable to all the areas/countries, geographical locations and corporate entities of CCC, as listed below (this list will be controlled and updated as necessary, independently of this quality manual: 10

- *Managing Office Athens (MOA), Greece*
- *Engineering, Procurement and Support Office (EPSO), Abu Dhabi, U.A.E.*
- *Projects that fall under the scope of the certificate in all Areas / Countries*
- *Area Offices (local registered companies)*
- *Consolidated Contractors AFRICA S.A.L.*
- *Consolidated Contractors (EPC) Company S.A.L.*
- *Consolidated Contractors Group S.A.L. (Offshore)*

The application of the QM to projects, shall be defined through specific project quality management systems, which fulfil and operate in accordance with all requirements of ISO 9001:2008, as well as contractual, statutory and regulatory requirements, and are assessed by the certification body as part of the CCC certification.

CCC may execute projects jointly with other companies, under various contractual relationships. In these situations, CCC will still apply its quality management system. It is however anticipated that, in such cases, the system may be modified as necessary to accommodate the system of the other company. In some cases, the quality management system of a partner may be used, however, such management system must be certified to ISO 9001: 2008 standard.

1.4 Main Fields of Activities

The fields of activity covered by this QM for which the ISO 9001:2008 quality management system applies are as listed below:

- *Petrochemical plants and refineries*
- *Pipelines*
- *Heavy and light industrial plants*
- *Civil structures*
- *Desalination plants*

- *Power plants*
- *Buildings and structures for industrial plants and oil and gas related process industry.*
- *Infrastructure works.*
- *Marine works.*
- *Housing and office complexes.*
- *Process plants*
- *Offshore structures and underwater works*
- *Water treatment plants, reservoirs and distribution systems*
- *Sewage treatment plants and collection networks*
- *Marine docks, harbours, deep sea berths and refinery terminals*
- *Roads, highways, bridges and fly overs*
- *Sports complexes*
- *Housing and high quality buildings including hotels, office blocks, hospitals and educational institutions*
- *Airports*

2. REFERENCES

2.1	ISO 9000:2005	Quality Management Systems - Fundamentals and Vocabulary	
2.2	ISO 9001:2008	Quality Management Systems - Requirements	
2.3	ISO 9004:2009	Managing for the Sustained Success of an Organisation – A Quality Management Approach	10
2.4	ISO 10005:2005	Quality Management Systems – Guidelines for Quality Plans	
2.5	ISO/TR 10013:2001	Guidelines for Quality Management System Documentation	
2.6	ISO 19011:2011	Guidelines for Auditing Management Systems	10

3. DEFINITIONS

For the purpose of this manual, the definitions given in ISO 9000:2008 apply, together with the following:

3.1 CCC : Consolidated Contractors Group S.A.L. (Holding Company) or any of the Area offices or corporate entities registered under the Holding Company.

3.2 MOA: Managing Office Athens

3.3 EPSO: Engineering-Procurement, and Support Office, Abu Dhabi, UAE

3.4 CS & QM: Construction Support and Quality Management Department - MOA

3.5 PMV: Plant, Machinery and Vehicles Department - MOA

3.6 ISD: Information Systems Department - MOA

3.7 PEC: President - Engineering & Construction 10

3.8 GVP: Group Vice President

3.9 VP: Vice President

3.10 AVP: Assistant Vice President

3.11 QM: Quality Manual, the present document

3.12 IM & TE: Inspection, Measuring and Test Equipment

3.13 QMP: Quality Management Procedure
A methodological statement defining managerial responsibilities and authorities related to the management of the company's quality management system. Defining the process, who is doing what, how, where and when and with whom they interface.

3.14 PQP: Project Quality Plan
A document setting out the specific processes, quality practices, resources and sequence of activities relevant to a particular project prepared in accordance to each contract requirements.

3.15 MS: Method Statement
A project document that defines detailed activities, the procedure to be followed, the specialized tooling, safety requirements applicable to the execution of construction and installation work in a correct, efficient and safe manner.

3.16 ITP: Inspection and Test Plan
A document that defines the activities requiring inspection or tests (witness and hold points), the controlling specifications, the acceptance criteria, the persons responsible and the records to be produced. The presentation of the ITP is in tabular form and the title used depends on contractual requirements.

3.17 QCP: Quality Control Procedure
A procedure that compliments, (as and when required) the ITP, by providing information related to QC activities of specific process such methodology of inspection and testing, responsibilities, references and forms used for recording inspection and testing activities. QCP's are also issued when international standards or contract specifications do not contain sufficient information on how to control the quality of an activity or how to perform the required inspections or tests.

3.18 DI: Department Instruction
Specific Instructions issued and controlled by the individual MOA / Project Departments.

4. QUALITY MANAGEMENT SYSTEMS

4.1 Quality Management System of CCC

The quality management system of CCC is an established system that documents, implements and continually improves its effectiveness in accordance with the requirements of the standard. A Project Realization Workflow "Appendix 9.2", A business processes flowchart (Appendix 9.1) and a list of CCC's quality management system processes against the requirements of ISO 9001:2008 (Appendix 9.5) are attached to the QM.

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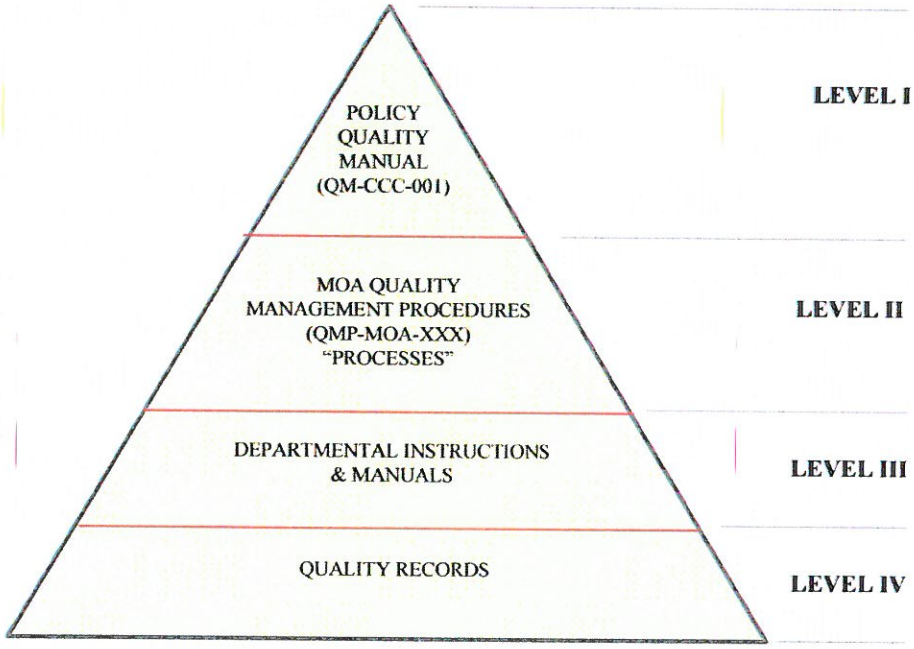
This quality management system is tiered as shown in the pyramid below:



4.1.1 Level I

The QM defines the quality policy, and quality management system in accordance with ISO 9001:2008 requirements, and states the objectives for relevant functions of the organization, serving as a quick reference for its operation and maintenance. The QM assures that processes and construction work at CCC and projects are performed by qualified personnel following written procedures and specifications as appropriate.

4.1.2 Level II

Quality management procedures (QMP's) are prepared and issued to define MOA departmental or project management responsibilities with respect to the processes of the quality management system and their interactions. QMP's are prepared and controlled as specified by QMP-MOA-001. QMP-MOA's series of management procedures can only be revised by or in co-ordination with CS & QM.

4.1.3 Level III

Departmental instructions and manuals define how specific operations are carried within a CCC MOA department.

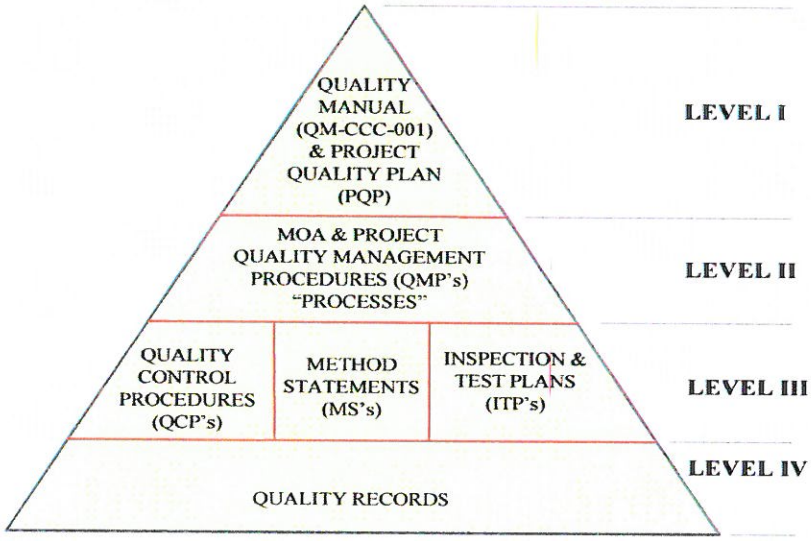
4.1.4 Level IV

Quality Records generated during execution of work such as:

- *Management Review*
- *Audit Reports*
- *Lessons Learned*

4.2 Quality Management System of CCC Projects

The quality management system for CCC projects is tiered as shown in the pyramid below:



4.2.1 Level I

The first level documents include the quality manual that is the highest-level document of the CCC quality management system and the project quality plan defining the project quality management system in accordance with the specific contract requirements.

4.2.2 Level II

Project specific quality management procedures (QMP's) define project departmental management responsibilities, their processes and the interactions between the processes with respect to the implementation of each element of the quality management system in the project. MOA - QMP's are valid as well for projects concerning certain system elements.

4.2.3 Level III

Inspection and test plans (ITP's) as defined in paragraph 3.16 of this QM, address the "activity", "who", "in what sequence" and "in accordance with what" construction activities and inspections and tests are carried out.

Quality control procedures (QCP's) as defined in paragraph 3.17 of this QM and address the "how to" element for processes, construction activities and inspection, measurement and test activities as required for CCC projects.

Method statements (MS) as defined in paragraph 3.15 of this QM and address details, procedure to be followed, tools to be used, and safety requirements during the execution of specific activity.

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4.2.4 Level IV

Quality Records generated during the execution of works required for certification and handing over.

4.3 Documentation Requirements

4.3.1 Control of Quality Manual

a) The QM is prepared by an MOA/EPSO Quality Specialist, reviewed by the Quality Manager - Group and VP CS & QM, and approved prior to issue by the President - Engineering & Construction (the "Management Representative" for quality). 10

b) Following approval, the QM is distributed by the Document Controller of CS & QM, in a controlled manner and in accordance with the distribution list retained by the Document Controller of CS & QM Dept. Uncontrolled copies of the QM may also be distributed for proposal purposes, customer offsite usage and other reasons. Control of such copies shall not be maintained. 10

c) Only controlled copies are used by CCC personnel.

d) Revisions to the QM shall take place to meet respective changes in applicable standards, administrative changes in CCC as well as improvements in the quality system.

- Any QM user within CCC may propose changes to the QM. Changes shall be communicated to the Quality Manager - Group or his designee or minuted in management review meetings.
- Revised sections shall be marked by a vertical line on the right hand side of each page under the "REV" column. The new revision number shall be marked within this column as appropriate.
- The Quality Manager - Group or his designee is responsible for receipt, assessment and processing of proposed changes.
- When the number of changes necessitates so, the QM shall be revised and re-issued.

4.3.2 Document & Data Control

Document and data control is carried out in accordance with documented procedure that covers as a minimum the following items:

- *Receipt and registration*
- *Issue and distribution*
- *Filing*
- *Coding and numbering*
- *Storage and security*
- *Control of computerized data*
- *Incoming and outgoing correspondence*
- *Archiving*

Document control is the responsibility of the following:

- *Department Managers controlling documents within their departments.*

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- *Users for maintaining their controlled documents file.*
- *Project Managers for ensuring that document control system is established & implemented.*
- *The VP Corporate Affairs & IT or designee is responsible for setting up document control software and for maintaining procedures on its use.*

k) Quality management system procedures issued that are related to document control:

QMP-MOA-001 :	Quality Management Procedures, Preparation of
QMP-MOA-003 :	Document Control
QMP-MOA-006 :	Control of Quality Records
QMP-MOA-013 :	Preparation of Method Statements
QMP-MOA-060 :	Information Systems Department Functions
QMP-GEN-002 :	Document and Data Control

4.4 Control of Quality Records

Quality records are controlled in the following manner:

b) All quality records are maintained under controlled conditions i.e. safely stored, readily identifiable and retrievable and in a proper environment for specified periods of time.

c) For MOA, the responsibility of quality records maintained in a hard copy is identified in the relevant QMP. The departmental Document Controller is responsible for the departmental library where quality records are maintained and co-ordinating the transfer of quality records to the central archiving library. Quality records remain in the central archiving library under controlled conditions for a period of five (5) years or otherwise as per applicable quality management system procedure.

d) For MOA quality records maintained in electronic form, the Departmental Managers are responsible to develop departmental instructions as necessary for the back up and authorisation levels.

e) Project quality records form part of the handover documentation to the customer upon completion of the project. Project specific quality management system procedure also states how quality records for handover are prepared, filed, indexed and handed over.

f) Quality management system procedures issued that are related to quality records:

QMP-MOA-006:	Control of Quality Records
QMP-GEN-004 :	Control of Quality Records

4.5 Certificate of Authorization

CCC is also accredited by the American Society of Mechanical Engineers (ASME) for the assembly of Power Boilers at site locations and for applying the "A" stamp, and for manufacturing of pressure vessel in accordance with the ASME code "U Stamp". It is also accredited by the National Board of Boiler and Pressure Vessel Inspectors (NBBI) for metallic repairs and/or alterations at site locations and for applying the (R) stamp. In addition to the quality control manual for the assembly of power boilers or pressure vessels, the requirements of the quality management system are also implemented.

5. MANAGEMENT RESPONSIBILITY

5.1 Management Commitment

a) **In recognition of the importance of implementing an effective quality management system in its** operations and concurrently to satisfy customer, statutory and regulatory requirements and quality objectives, CCC encourages all employees to propose modifications of the system or specific processes within the system, in order to ensure continual improvement.

b) The overall quality policy and commitment is expressed by the Chairman of CCC (refer to front sheet of this QM). It is the responsibility of the CS & QM. to co-ordinate its implementation and to communicate this policy to all levels of the organisation in the most effective way. 10

c) The CCC quality policy is expressed at the projects level as follows:

The project managers have the overall responsibility on a project for quality of the finished product. This responsibility is also delegated to the Project Quality Manager / Engineer and to Department Managers. Quality Manager / Engineer has the organisational freedom and authority to initiate action to prevent the occurrence of product nonconformity. He/she also has the necessary resources to verify quality by inspections, tests and monitoring of the construction activities.

5.2 Customer Focus

a) **Customer requirements are determined in the relevant project documents. Any implied requirements** are investigated and determined during the process of, or before, contract award.

b) Customer complaints are one way of determining degree of customer satisfaction. Customer complaints are dealt with on a continuous basis, usually as a result of the customer presence during project execution. Depending on the nature and severity of the complaint, the customer may channel the complaint through one of the following means:

- *Official letter*
- *During meetings*
- *By issuing a non-conformance report*
- *Direct contact with the Project Manager or the CCC Area Management or MOA Management*

CCC Project, Area and MOA management are authorized to respond to these complaints in accordance to their level of authority. Beyond that, CCC Project and Area Management coordinate the necessary actions with MOA management, to secure the necessary authorization and advice in order to eliminate these complaints.

5.3 Planning

5.3.1 Quality Objectives

The main quality objectives is to continually improve and meet product and customer requirements by complying with defined plans and procedures that are consistent with the quality policy. Quality

objectives shall be reviewed under changing circumstances and shall be measurable. Key project execution related objectives are defined below:

Engineering Department
Engineering department objective is to obtain customers' approval of all deliverables in timely manner in accordance with specified requirements.

Procurement Department
Procurement Department objective is to deliver materials in timely manner in accordance with approved materials request. 10

Construction & Commissioning Department
Construction & Commissioning Department objective is to complete and commission installation works on time in accordance with acceptance quality criteria, engineering instructions and applicable codes and standards.

Quality Objectives shall be monitored through Key Performance Indicators (KPIs) as set out in respective Quality Management documents.

5.3.2 Quality Management System Planning

a) The quality management system is planned in order to meet quality requirements and objectives, and to manage processes to ensure efficient performance. When the objectives are reviewed and revised for any reason as to reflect customer needs, the level of integrity of the quality management system will be maintained. Applicable procedure "QMP-MOA-018".

c) For each project, a project quality plan, PQP-GEN-001 shall be issued to describe the project quality management system including contract requirements, objectives, etc.

5.4 Responsibility, Authority and Communication

5.4.1 CCC Organisation

a) CCC recognises that in order to implement a quality management system and meet its customer's requirements adequately and efficiently, every employee is encouraged to recommend changes to processes within his/her responsibility. Detailed authorities and responsibilities of MOA management and CCC project managers and project teams are defined and communicated in the relevant quality management procedures and project quality plans within the organisation.

b) Issuance of the CCC group organisation chart (Appendix 9.3) is the responsibility of the Board of Directors and thereafter the Manager Corporate Planning (Group) is responsible for its distribution and maintenance.

c) Responsibility for generating and maintaining the CCC operations are divided into geographical areas as shown on the corporate quality management organisation chart (9.3). For each area (country), a Managing Director (MD) and/or an Area Manager is assigned who is responsible for all the day-to-day operations of the respective area. 10

Each project is managed by a Project Manager or Director who directly reports to the respective MD or Area Manager.

MDs and Area Managers report to MOA as outlined in the attached organization chart (Appendix 9.3).

d) MOA provides estimation, construction support, quality management, administration, personnel, PMV, design, IT and equipment administration services to the projects. Other departments and services, such as corporate accounts, insurance and legal are also provided to the projects. These however, are outside the scope of this QM and consequently the quality management system.

e) Engineering and procurement services are performed mainly through the EPSO - CCC offices in the U.A.E.

5.4.2 Responsibility and Authority

a) Group Vice Presidents, area management and project management are responsible for the implementation of the quality management system in their area of responsibility and have to ensure that their staff is aware of the system requirements and understand what is required of them. Department managers are responsible for the development and implementation of procedures by their department staff as appropriate.

b) Managing personnel may delegate work or responsibilities to appropriately qualified and experienced subordinates but the overall responsibility remains with the managing personnel.

c) MOA CS & QM Dept. provides planning, scheduling, construction support, project co-ordination, quality management, monitoring and technical services for the projects including pre-commissioning and commissioning.

d) Project co-ordinators assist the projects in all phases starting with their presence at EP office at the initial phase of the project, and coordinate with other MOA departments as well as with third parties as necessary. They are responsible for coordinating all the services provided by the CS & QM Dept. to the projects. Project co-ordinators report to the VP CS & QM, and liaise closely with project management.

e) Project managers or directors are responsible for ensuring that the respective project team implements adequately and effectively the specified project quality plan in line with CCC's quality management system and customer requirements.

5.4.3 Management Representative

a) The appointed Management Representative in accordance with the requirements of ISO 9001:2008 section 5.5.2, is the President - Engineering & Construction, who reports directly to the Chairman. This position carries the authority to ensure that the requirements of ISO 9001:2008 and the CCC QM are adequately and effectively addressed, and that processes needed for the quality management system are established, implemented and maintained. The President - Engineering & Construction will also ensure that the necessary quality improvements are initiated and implemented and promote the awareness of customer's requirements throughout the organisation. 10 10

b) The President - Engineering & Construction is supported in his function by the Quality Manager - Group, through the VP CS & QM. (See corporate organisation chart in Appendix 9.3). 10

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5.4.4 Quality Functions and Responsibilities

a) The Quality Manager - Group with the assistance of the quality specialists/engineers and the CS & QM Document Controller is responsible for:

- Maintaining the QMS documentation and ensuring that they meet the requirements specified in ISO 9001 standard, preparing project quality plans, interpreting ISO 9008 series of standards requirements and their applicability within the CCC quality management system.
- Scheduling and implementing the MOA internal and external audits on CCC projects and CCC suppliers as appropriate, and as specified in relevant QMP's and measuring performance and improvement of processes.
- Scheduling and participating in the preparation of MOA management review meetings as specified in the relevant QMP.
- Providing indoctrination and specific quality management system training services to CCC MOA and project teams as appropriate and promoting awareness of customers' requirements.
- Interviewing project QA/QC personnel as required.
- Input to estimation & proposals.
- Receiving and analysing project monthly QA/QC reports and customer reports/complaints, evaluating those and the corrective actions taken by project teams and/or MOA departments.

b) Project Quality Managers on site or at MOA, depending on time constraints and availability of the project staff, shall draw up project quality plans as necessary. Where project quality plans are prepared by the project, this will be done in co-ordination with CS & QM Dept. Project Quality Managers shall verify the implementation of the project quality plan and report the results of internal audits to the project management and CS & QM Dept.

c) Project Quality Manager on site is responsible for verifying product quality and reports to the respective Project Manager. He/She shall be responsible for developing quality control procedures and inspection and test plans as appropriate for each project, and is responsible for:

- Supervising and co-ordinating the project team of quality control engineers and inspectors as appropriate.
- Monitoring implementation of the ITPs and QCPs and coordinating with construction management to this end.

5.4.5 Internal Communication

a) Effective internal communication is established within CCC. Communication of the quality management system and the quality objectives is the responsibility of all CCC employees, especially

top management. Good internal communication results in better achievements, meeting customer's requirements and CCC objectives more efficiently and thus satisfying customer needs.

b) The appropriateness and effectiveness of internal communication is ensured via a combination of tools and controls, which are subject to periodic monitoring by the higher management. Such tools and controls are:

- *Business processes flowchart describes the interface between CCC work processes.*
- *Organization charts that describe the communication and reporting lines among the various departments and individual employees.*
- *Circulars sent to a defined list of recipients concerning important information on projects or MOA and EPSO operations.*
- *Providing the necessary infrastructure to effect internal communication such as internet connections, computer networks, and telecommunication systems.*
- *Convening regular meetings at projects, MOA and EPSO, and at various levels of authority.*
- *Participating in Knowledge Management communities of practice through internal professional networking systems* 10

5.5 Management Review

5.5.1 One of the most important points addressed by the management of CCC is the need to continually improve the quality management system and ensure its effectiveness. Preventive actions and "lessons learned" are the main "vehicles" for such improvement.

The tool that the highest management of CCC and projects has available to review the system adequacy and efficiency is "management review" as defined in section 5.6 of ISO 9001:2008.

5.5.2 Management review is the responsibility of the following:

- The VP CS & QM, with the assistance of the Quality Manager - Group, is responsible for the preparation and co-ordination of the management review meetings. They are held with the participation of the President - Engineering & Construction, the President and senior Management staff from MOA and the operations areas involved in the implementation of the quality management system. 10
- The Quality Managers of the projects are responsible for the preparation and co-ordination of project management review meetings with the participation of the Project Manager. However, the Project Manager is fully responsible for conducting the management review meetings.

5.5.3 Quality management system procedures issued that are related to management review are:

QMP-MOA-005:	Management Review for CCC MOA
QMP-GEN-003:	Management Review for projects.

5.5.4 Input & Output Reviews

Management review meetings are held at planned intervals and the records of these meetings are maintained. The outcome of the meetings shall include an action list with recommendations, decisions and actions required to improve the effectiveness of the quality management system and of products related to Customer requirements and CCC objectives, as defined in ISO 9001:2008 sections 5.6.2 & 5.6.3.

6. RESOURCE MANAGEMENT

6.1 Provision of Resources

CCC determines the resources needed by projects at the earlier stage. This is achieved by effective planning and proper resource allocation to implement and maintain the quality management system. The quality management system procedure related to provision of resources is:

QMP-MOA-010: Mobilization

6.2 Human Resources

6.2.1 Competence, Awareness and Training

a) CCC personnel with responsibilities affecting the quality of work shall be competent on the basis of appropriate education, training, skills and experience.

b) Projects normally require personnel with specific acquired skills of various levels. The required training skills are identified, and the personnel performing these specific jobs are suitably trained and qualified in accordance to the requirements of ISO 9001:2008 section 6.2.2. Typical examples are QC inspectors, welders, NDT personnel, auditors etc.

c) CCC personnel attend quality awareness seminars to ensure their understanding and the importance of the quality management system and how their activities contribute to the achievement of the quality objectives.

d) Evaluation of each CCC employee is carried out at planned intervals by the responsible department managers in order to determine their competence, rate their advancements and achievements and provide them with the relevant training necessary.

e) Records of personnel education, training and competence, skills and experience are maintained. These records also include qualification test results where appropriate.

f) Competence, awareness and training is the responsibility of the following:

- The department managers of MOA and projects are responsible to identify the disciplines that need appropriate education, training or experience, and implement the required actions.
- The CS & QM and Project Quality Managers are responsible for indoctrination, by training or other means, personnel to the quality management system.

- The President, Human Resources, and the appointed designees are responsible for co-ordinating all training. 10

g) The quality management system procedures related to human resources and training is:

QMP-MOA-040	HR Management
QMP-GEN-005	Training and Personnel Qualifications

6.3 Infrastructure and Work Environment

a) **CCC determines, provides and maintains the relevant infrastructure required to achieve conformity.** Infrastructure includes the appropriate plant, workspace, process equipment (both hardware and software), communication and transport services and facilities.

b) To achieve product requirements, CCC ensures that the work environment is one that combines human and physical factors. Work environments are safe and satisfying to personnel in order to motivate and improve performance and achieve the quality requirements.

c) Once a contract is awarded, CCC activities cover the phases of project mobilization, project execution and project demobilization under controlled conditions satisfying the requirements of ISO 9001:2008 sections 6.3 & 6.4.

d) The quality management system procedures related to infrastructure are:
Plant Operating Manual
QMP-MOA-050: Plant Department Functions, Managing Office

7. PRODUCT REALIZATION

7.1 Planning of Product Realization

CCC has established processes and developed accordingly project specific procedures that are consistent with the requirements of each process. The requirements are set in accordance with contract specifications, criticality of activity, engineering standards, construction standards and CCC quality requirements and objectives. Inspection and testing is performed at predetermined points in accordance to the requirements of QCP and ITP's for verification, validation and monitoring of activities. The following items represent CCC principal processes used for Project Realization:

Process Description	**Process Classification**
Development of Business Plan	*Business Process*
Tender and Contract Processing	*Business Process*
Transfer of Contract Responsibility	*Business Process*
Organization	*Supporting Process*
Resources	*Supporting Process*
Mobilization	*Supporting Process*
Engineering	*Primary Process*
Procurement	*Primary Process*
Construction	*Primary Process*
Pre-commissioning	*Supporting Process*
Commissioning	*Supporting Process*
Certification / Handing Over	*Supporting Process*

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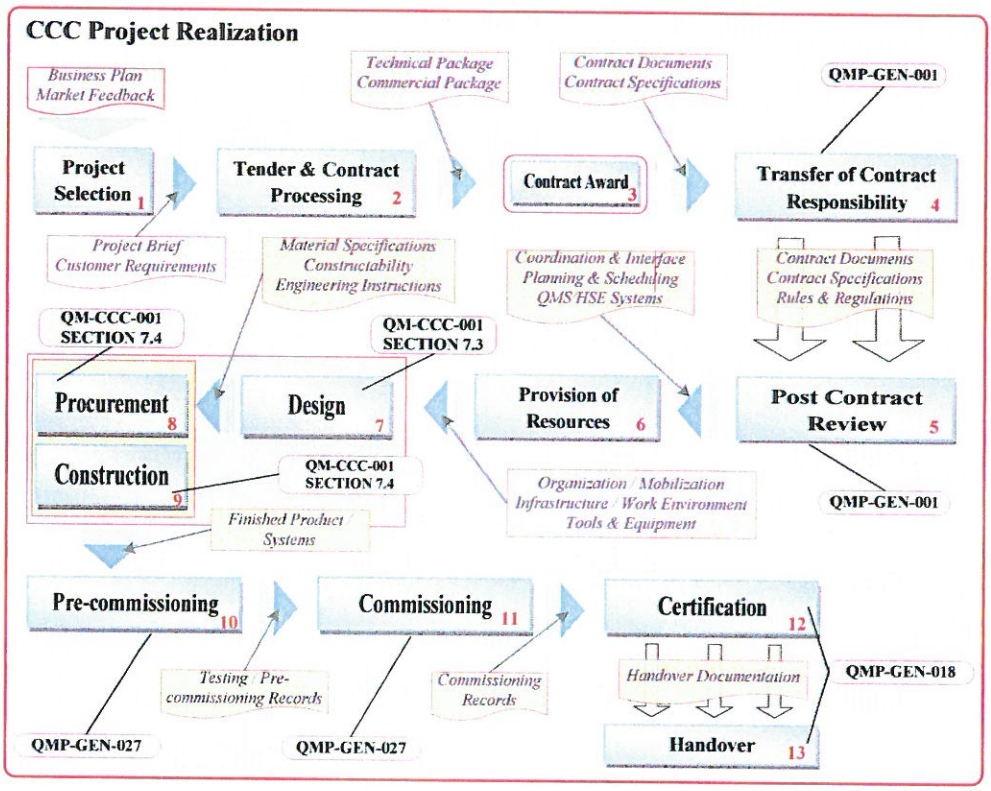
For Product Realization the following Primary Processes are identified:

Engineering Procurement Construction

Appendix 9.1 represents CCC working processes flowchart.

Appendix 9.2 represents a graphical display of CCC workflow for Project Realization.

CCC Project Realization is illustrated in the following chart:



7.1.1 Development of Business Plan

The business plan is developed in conjunction with Senior Management Presidents. The business plan shall consider type of projects for the coming period, geographic locations, customers, partners, etc. 10

Business Development in Cooperation with Sales, Estimations and Proposals Department, under the direction of the Presidents are responsible for selection of projects for bidding purpose. 10

7.1.2 Tender and Contract Processing

Tender and Contract Processing is carried out by Proposal Team upon receiving the Project Brief and other related information from Business Development Department. The Proposal Team is responsible for studying project requirements and generating a technical and commercial package. If Tender and Contract Processing inputs from other departments is required, this is illustrated in the following chart:

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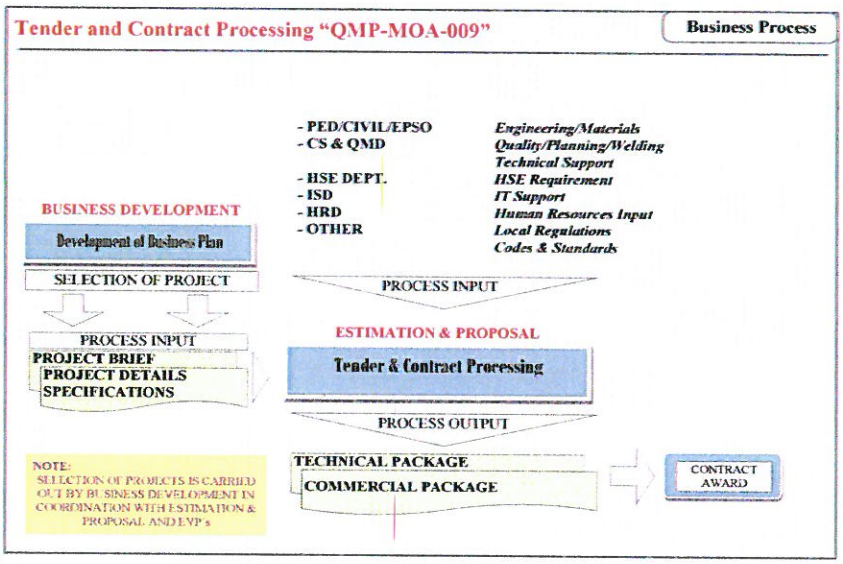


Tender and Contract Processing is covered by: QMP-MOA-009

7.1.3 Transfer of Contract Responsibility

Upon contract award Transfer of Contract Responsibility to the Project Team is carried out by Estimation and Proposal Department in a handover meeting. CS & QM participates in handing over process and assigns a Project Coordinator. Representatives of Area / Project Management and other departments also attend this meeting.

The following issues as a minimum shall be considered during the meeting:

- *Project Scope*
- *Key Dates*
- *Work Packages*
- *Organization Chart*
- *Key Personnel*
- *Engineering Plan*
- *Procurement Plan*
- *Quality Plan*
- *HSE Plan*
- *Contract Documents*
- *Contract Specifications*

Transfer of Contract Responsibility is illustrated in the following chart "QMP-GEN-001":

7.1.4 Organization

The highest level of the organization is CCC Corporate Organization Structure, this is covered in paragraph 5.4.1 of this manual, Responsibility and Authority is covered in paragraph 5.4.2.

For each Project, Estimation and Proposal shall forward to the Project Team a proposed organization chart developed during tendering stage. The Project Manager in consultation with Project Team and other relevant departments shall further develop a specific organization chart for the project. The specific organization chart may be updated as necessary.

7.1.5 Mobilization

It is necessary for CCC to mobilize to site manpower, plant, equipment and materials. Infrastructure has to be provided in order to create proper work environment. For this purpose supporting processes are deployed such as organization, resources and mobilization. At mobilization stage, Project Manager in conjunction with Project Team shall evaluate the requirements for resources and to compare it to resource requirements established at estimation stage. Recourse requirements may be adjusted and revised by Project Team in line with the requirements for the project.

The quality management procedure implemented for mobilization process is QMP-MOA-010.

7.2 Customer Related Processes

7.2.1 Determination and Review of Requirements

a) Contract review is recognised as the primary stage of requirement determination that leads to the satisfactory completion of a project. All requirements are considered and may vary from customer or non-customer related requirements to statutory and regulatory requirements.

b) The major steps taken that lead to submission of the tender documentation may include the following: partner selection, appointment of estimate leader, decision "go- no go", preparation of tender information documents, review and inputs from concerned departments, pre-tender and tender review board meetings leading to the preparation and submittal of the tender documentation.

   The tender review board is responsible for final policy decisions concerning the estimate and proposal.

c) Requirements are reviewed prior to any CCC commitment with its customer to ensure that product requirements are clearly defined and that CCC has the ability to meet the defined requirements.

d) Upon award of a contract all the information on the particular contract is transferred in accordance with documented procedures to the CS & QM Dept. and the project team.

e) As the contract is executed, any amendments are reviewed during scheduled project review meetings, by the project management team. The necessary decisions and actions are taken to accommodate the implications of these amendments.

f) Records of contract reviews are kept at all stages to ensure that all technical and commercial information is available for review by all personnel as applicable.

g) Contract review is the responsibility of the following:

- *The GVP Sales, Proposals and Support has the main responsibility for the co-ordination of the contract review procedure at pre-award stage.*
- *The Estimate Leader appointed for each tender has the responsibility for the preparation of the tender documentation and co-ordination with other departments.*
- *The Project Managers have the responsibility for contract review after contract award and during project execution.*

h) The quality management system procedures issued are:

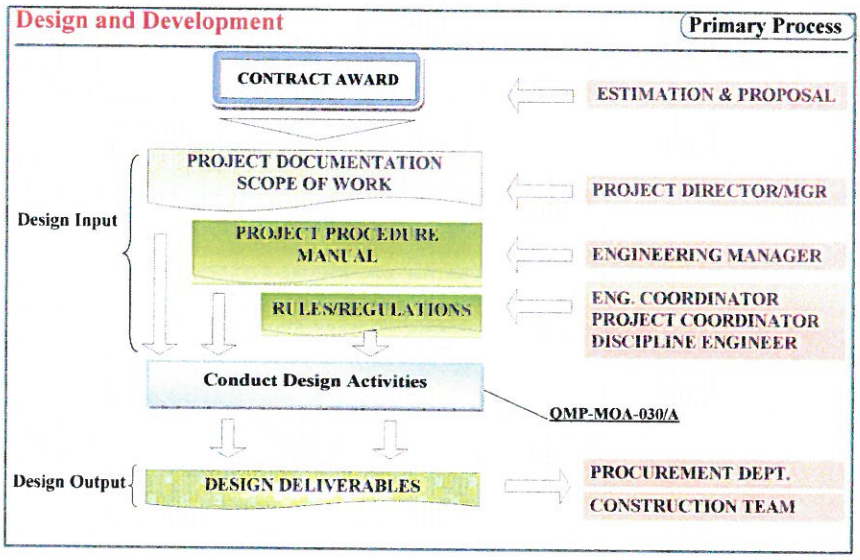
QMP-MOA-009: *Preparation of Estimation and Proposal*

7.2.2 Customer Communication

CCC has determined effective arrangements for communicating with its customers. Contract information, enquiries and customer feedback, including customer complaints if there are any, are all transferred between CCC and customer via the relevant managers of departments and are then filtered down to those responsible.

7.3 Design and Development

Design and development is the function of the Civil Engineering Department for civil projects and Plant Engineering Department for plants "oil and gas". Design and development is organized and controlled in a manner to satisfy contractual requirements and ISO 9001:2008 standard, section 7.3. Design and Development Process and interface with other Processes is represented in the following chart:



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7.3.1 Design Input and Design Output

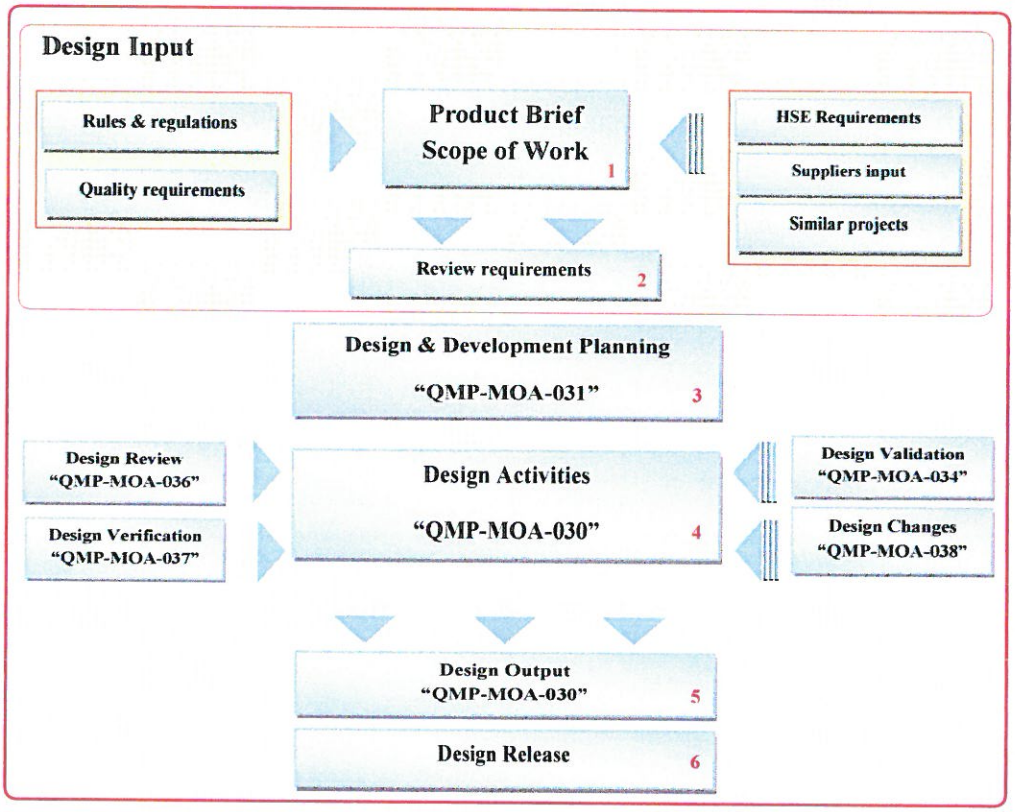
Design Input for CCC projects where applicable is covered by quality management procedure "QMP-MOA-030" for CED and "QMP-MOA-030A" for PED. The design input is classified into two groups:

External Input: *Customer's requirements,*
Industry code and standards,
Suppliers input and
Statutory and regulatory requirements,

Internal CCC Input: *policy and objective*
Competence requirements
Feedback information from previous projects
Records and data on existing processes and products

The design output is a list of requirements for product or service. Design output usually takes the form of calculations, equipment selection, drawings, list of requirements, etc.

The following chart represents the design input and output in the design and development cycle:



Note "valid for all design charts": The references in the chart refers to civil engineering department "CED", plant engineering department "PED" procedures have the letter "A" at the end, such as "QMP-MOA-031A" for design and development planning.

7.3.2 Design and Development Planning

Design and development planning is carried out to determine the requirements for design stages and design interface. Design and development planning for CCC projects is covered by quality management process "QMP-MOA-031" for CED and "QMP-MOA-031A" for PED.

a) The objectives of design and development are as follows:

- To determine the Design and development stages as customer's design brief is understood and all necessary points are clarified.
- To ensure that the design is produced in an agreed format, it shall be prepared and checked by appropriately qualified personnel and shall then be issued in accordance with contractual, statutory and regulatory requirements.
- To undertake interdisciplinary checks to ensure adequacy.
- To produce specifications, drawings and CAD in accordance with agreed procedure.
- To approve and validate design software.
- To control and monitor design subcontractors.
- To control the preparation of purchase requisitions.
- To set out on-site procedure to ensure that work meets design requirements and that variations, modifications and concessions are controlled.

b) The Assistant Vice President Engineering is overall responsible for developing, maintaining and implementing the design control procedures for the Civil Engineering Department.

c) General Manager EPC Oil & Gas is overall responsible for developing, maintaining and implementing the design control procedures for the Plant Engineering Department at EPSO, Abu Dhabi.

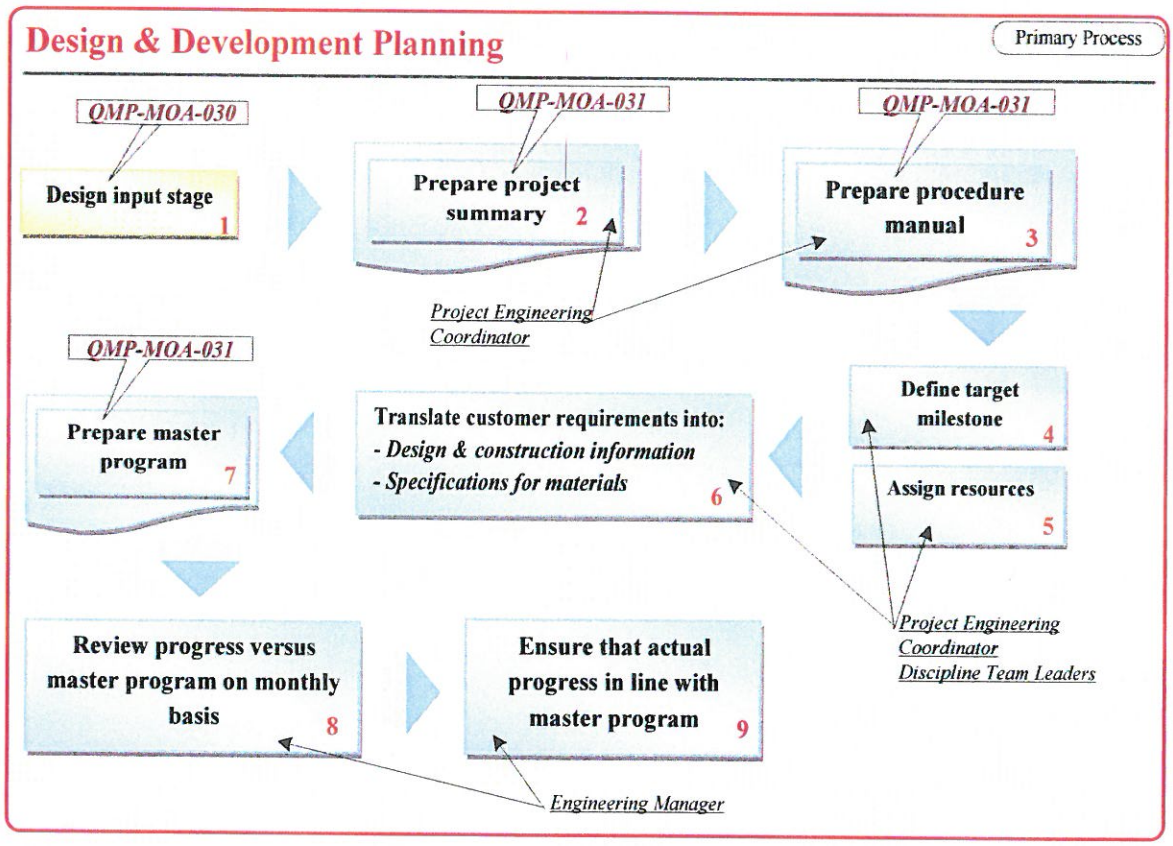
d) The Quality Management System Procedures issued for Design and Development, Civil Engineering Department, are:

QMP-MOA-030:	Engineering Department Activities
QMP-MOA-031:	Design and Development Planning
QMP-MOA-032:	Numbering, Issuing and Checking of Documents
QMP-MOA-033:	Preparation, Checking and Control of Calculations
QMP-MOA-034:	Design & Development Validation
QMP-MOA-036:	Design Review
QMP-MOA-037:	Design Verification
QMP-MOA-038:	Changes Procedure

e) The Quality Management System Procedures issued for Design and Development, Plant Engineering Department, are:

QMP-MOA-030A:	Plants Engineering Department Activities
QMP-MOA-031A:	(Plants) Design and Development Planning
QMP-MOA-036A:	(Plants) Design Review
QMP-MOA-037A:	(Plants) Design Verification and Validation
QMP-MOA-038A:	(Plants) Design Change

Design and development planning is illustrated in the following chart:



7.3.3 Design and Development Review

The design and development review is carried out in accordance with planned arrangements to:

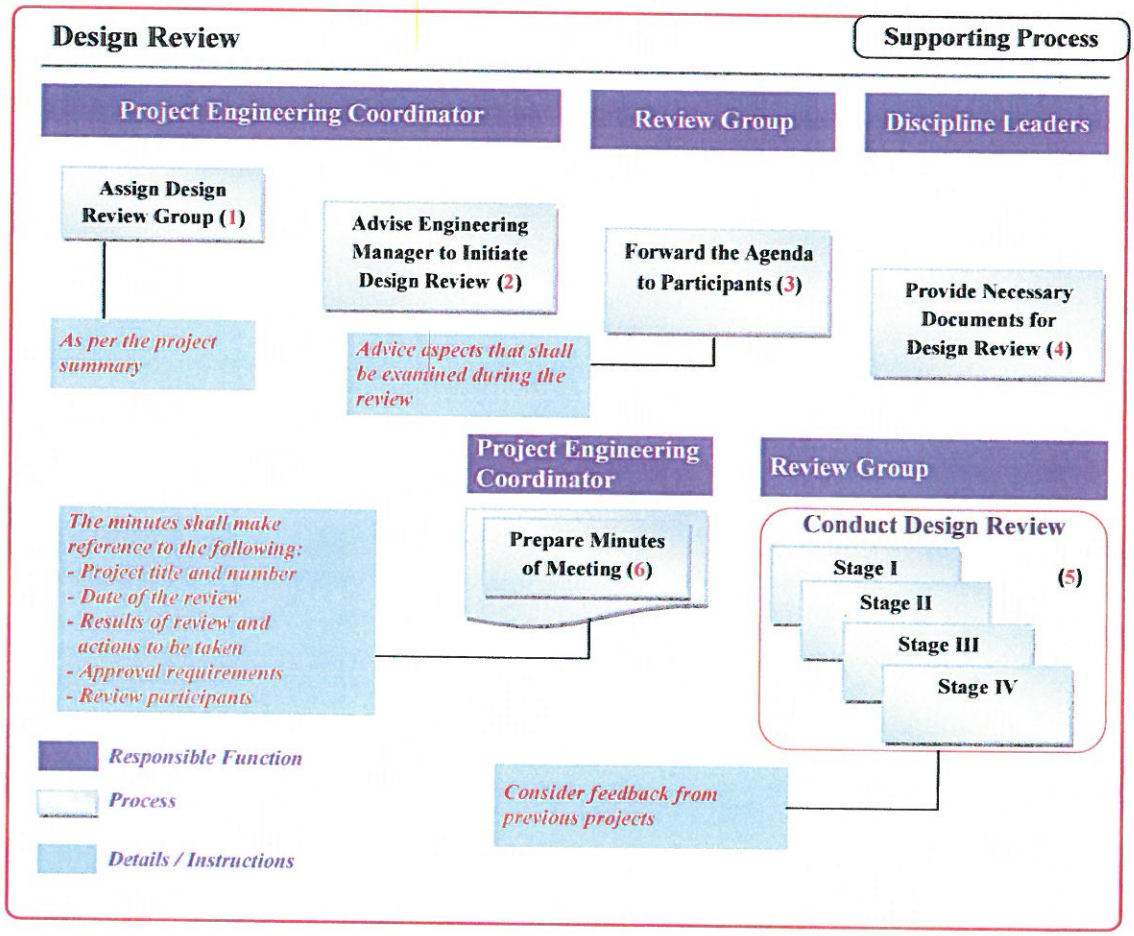
- Evaluate the ability of the results of design and development to meet specified requirements
- Identify any problems and propose necessary actions

The design and development review shall be carried out in 4 stages:

a) At the time of project initiation to approve the overall strategy of the design
b) Immediately following the preparation of project summary

c) Monthly, at agreed milestones or as specified in the project summary
d) On completion of the design for final approval

Design and Development Review process in reference to "QMP-MOA-036" for CED and "QMP-MOA-036A" for PED is shown in the following chart:



7.3.4 Design Verification

Design Verification is applied to all phases of production of engineering documentations such as calculations, drawings, specifications, data sheet, etc.

Design Verification Process is carried out in accordance with planned arrangement described in quality management procedure "QMP-MOA-037" for CED and "QMP-MOA-037A" for PED. Design and development verification process is shown in the following chart:

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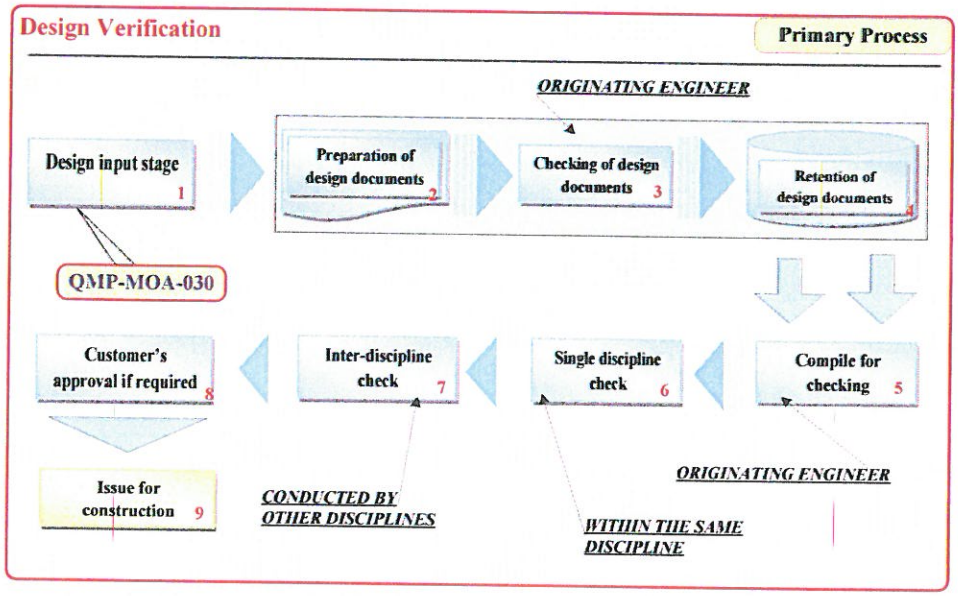

7.3.5 Design Validation

Design Validation process is described in quality management procedure "QMP-MOA-034" for civil department and "QMP-MOA-37A" for PED. One or more of the following methods may be used for design validation:

- *Prototype development*
- *Operability & Constructability Study*
- *Development of a Pilot Project*
- *Technical Validation*
- *Comparison of Test Results*

7.3.6 Design Changes

Design and development changes shall be reviewed, verified and validated, as appropriate, and approved before implementation. The review of design and development changes shall include evaluation of the effect of changes on constituent parts and products already delivered.

Records associated with design change and action taken as a result of design change shall be maintained. Design and development changes is carried out in accordance with documented process described in "QMP-MOA-038" for CED and "QMP-MOA-038A" for PED.

Design and development changes is illustrated in the following chart:

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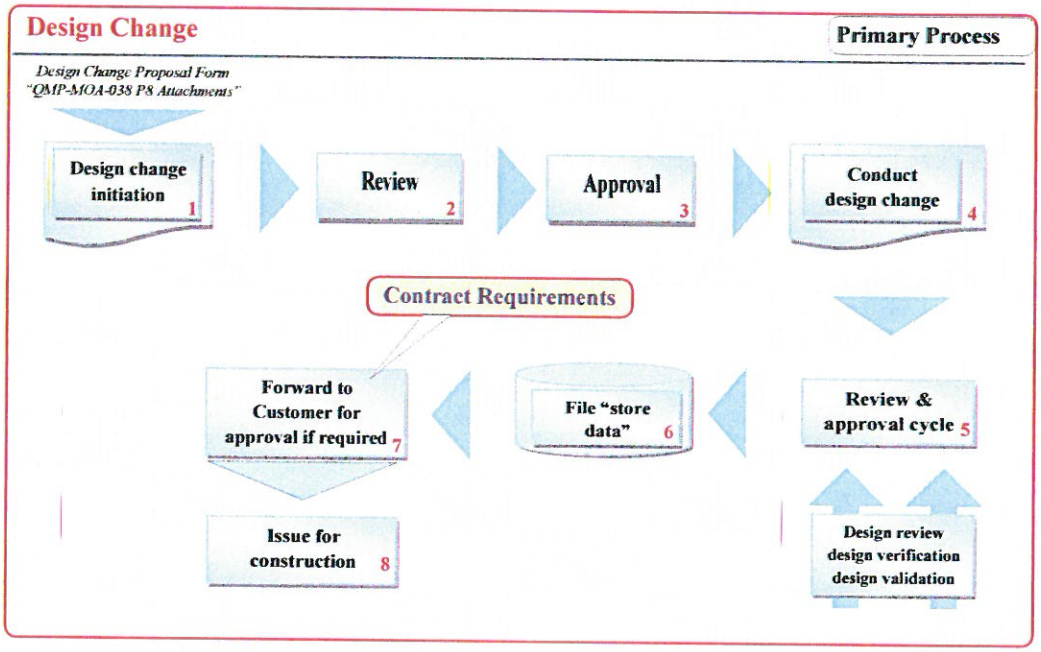

7.4 Purchasing

7.4.1 Purchasing Process and Information

General

Purchasing is performed in a manner so as to ensure that purchased product conforms to specified requirements. CCC purchasing scope for projects may include purchasing of all permanent materials or purchasing of limited materials that depends on contractual requirements.

Suppliers/Vendors

Purchasing of permanent material or services (subcontracting) is only performed from suppliers that are approved by customers or selected from approved vendors' list established by CCC as a result of proven past performance.

New suppliers may be selected on the basis of one or a combination of the following:

- on-site evaluation of capabilities and quality management system
- references of suppliers
- ISO 9000 certified quality management system
- experience of other users
- Prompt response to inquiries
- Quality of their products
- Compliance to requirements
- Financial stability
- Adequacy of documentation
- Efficiency in their operations

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Material Approval Request "MAR"

Processing of MAR is carried out by Discipline Engineer, who is responsible for obtaining Employer's approval if required. The approved MAR along with the commercial requirements and quality requirements is forwarded to potential suppliers for quotations by Procurement Engineer. The Procurement Engineer prepares a comparison sheet and process it for final review and approval in line with Procurement Procedures.

Purchase Order

Purchase orders and material purchase requisitions are issued for all ordered material. They include all the necessary data to fully define the product or service ordered including quality and certification requirements. Prior to the issue of purchase orders to suppliers, they are reviewed by defined levels of authority within MOA or project organisation.

Quality Requirements

Controlling the quality of the purchased item(s) may be necessary by source inspections. Consequently, access to the supplier's premises is included as a condition in the purchase order.

Purchasing Responsibility

- The Procurement Manager of the project task force is responsible for purchasing of materials for EPC project in accordance with the CCC internal levels of authority for expenditure.
- Construction projects conduct their own purchasing for materials, however, according to agreed split of scope Central Procurement Department at EPSO also conducts purchasing for the projects.
- The respective MOA department managers in conjunction with projects and area management are responsible for the subcontracting of services.
- The responsibilities for the review of purchase order data prior to issue are defined in the corresponding procedures.

The quality management system procedures issued for Purchasing are:

CM-CPD-001:	*Procurement Manual "CPD"*
PED-EP-904-44-00/PED	*Procurement Manual "PED"*
QMP-GEN-006 :	*Field Purchasing*
QMP-GEN-012:	*Subcontracting*

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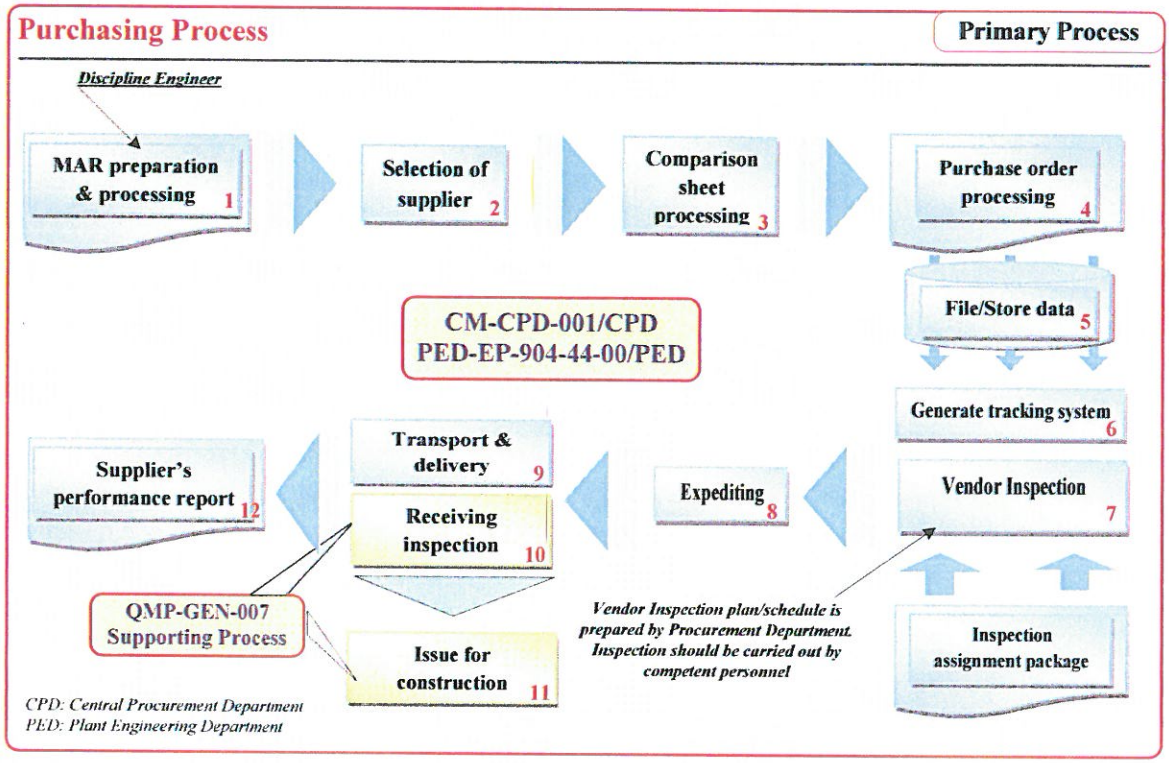

7.4.3 Verification of Purchased Product

Vendor Inspection is carried out in accordance with Inspection Assignment Package. The Procurement Engineer is responsible for overall coordination of vendor inspection activities. Depends on the criticality and complexity of the product vendor inspection may be carried out by Procurement Department, Discipline Engineer, Quality Department or Third Party Inspection Agency. Reporting and distribution of vendor inspection reports shall be carried out in accordance with contract requirements.

7.5 Construction / Production and Service Provision

7.5.1 Process Control and Validation

Construction activities are carried out in accordance with planned arrangement. Contract specifications, specific construction requirements and engineering instructions and drawings are reviewed by the Engineer in charge of construction activities and by the Quality Engineer responsible for same activities. The results of the review would be a set of requirements listed in the following documents:

Project specific management procedures
Quality control procedures
Inspection and test plans
Method statements and work instructions

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In addition to the above, drawings, specifications, applicable codes and standards are used during construction phase. At the initial stage of the project, the above mentioned documents are prepared by CS&QM.

a) Process Control in the context of CCC's activities covers the phases of *project mobilization, project execution and project demobilization.* All phases are under controlled conditions satisfying the requirements of ISO 9001:2008 section 7.5.

b) All mobilization and project phases are scheduled using different levels of detail to reflect the agreed work breakdown structure per discipline.

c) Special processes are a major part of the construction activities, the *result of which cannot be fully verified by subsequent inspection.* Welding, heat treatment, non-destructive examination, painting, concrete work, heavy lifts are the main processes in construction activities that fall into this classification. Adequate documented instructions or procedures ensure that these processes are planned and performed under controlled conditions and by suitably trained and qualified personnel. These requirements extend to equipment as well as measuring and testing devices. These are maintained and calibrated as necessary to perform their expected tasks.

d) Construction equipment is maintained in a manner to assure its continuous production capability and that it doesn't adversely affect quality of the production.

e) Project managerial personnel are continuously monitoring the progress and quality of work through meetings and as a part of their daily duties and records are maintained.

f) Process control is the responsibility of the following:

- It is the ultimate responsibility of project managers to ensure that all project activities are performed in a controlled manner.

- It is the responsibility of the project department managers to ensure that all project activities within their scope of responsibility are performed in a controlled manner. They are also responsible to ensure that all personnel under their responsibility are adequately qualified and experienced to perform their duties.

- The Managing Office – Athens (MOA), Engineering, Procurement and Support Office – Abu Dhabi, U.A.E. (EPSO) and area offices are responsible for support activities to the projects.

g) The quality management system procedures related to project execution as applicable are listed in appendix 9.6 of this manual.

7.5.2 Identification and Traceability

a) Product identification and traceability requirements specified in a contract are identified and covered by the corresponding project procedures. If such requirements exist, they are introduced at the engineering stage and applied throughout the phases of procurement, receipt, construction and installation.

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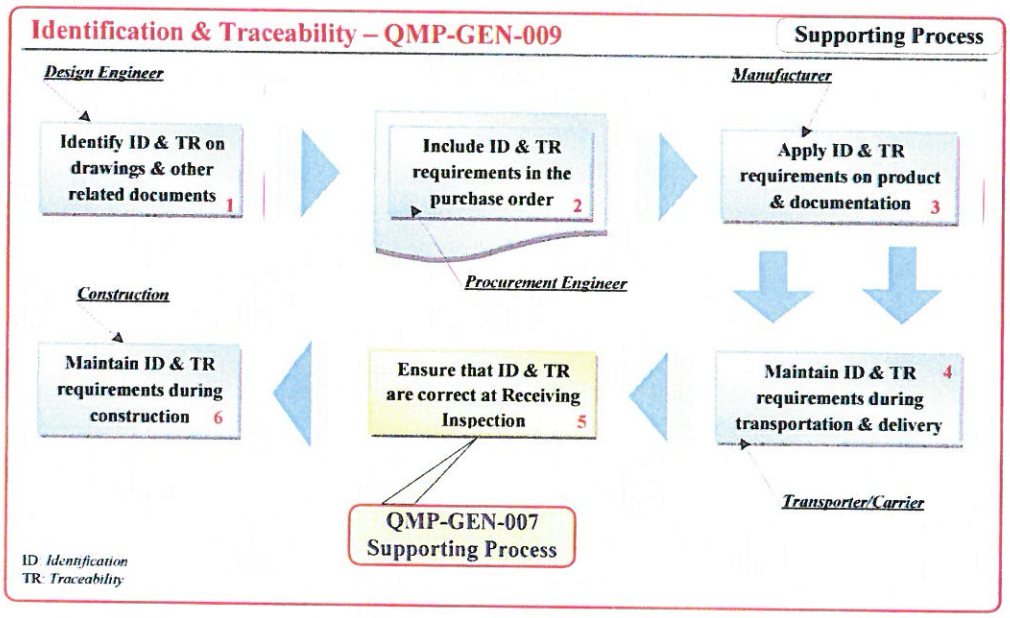
b) As a minimum, CCC's system of material and product identification and traceability, covering the requirements of ISO 9001:2008 section 7.5.3, has been applied. The system ensures that material and product is adequately identified and traceable with appropriate markings and/or documentation during all stages of fabrication, construction and installation.

c) The quality management system procedure issued for identification and traceability is "QMP-GEN-009".

Processing of identification & traceability requirements is shown in the following chart:



7.5.3 Inspection and Test Status

a) The inspection and test status is fully and continuously maintained for all material, equipment, assemblies and work under construction, which is tested and inspected.

b) The various stages of inspection and test status are:

- to be inspected
- under inspection
- on hold for a decision to be taken
- inspected with pending results
- accepted or not accepted

c) The method for identifying the test and inspection status varies from the use of marking or tagging with colour coding system, storage in assigned areas, relevant inspection records or QCP and ITP's, combination of above methods etc. The method applied depends on the type and nature of the inspected item taking into consideration the involved practicalities.

d) The quality management system procedure issued is:

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QMP-GEN-011: Inspection and Test Status

7.5.4 Customer Supplied Product

a) Customer supplied product applies to "free issue material", that is material supplied by the customer, consortium, JV or partner for incorporation into the works, where applicable. This material is inspected upon receipt for damage, completeness and compliance with contract requirements. It is stored in accordance with the applicable CCC procedures that are adapted as necessary for each project to incorporate the specific customer requirements, or it may be stored by the customer, consortium, JV or partner warehouse.

b) Upon receipt by CCC, accompanying documentation is checked for correctness and any deficiencies or defects found shall be processed through the system and the Customer or partner advised as necessary.

c) Storage in suitable storage areas shall be ensured and records shall be kept for accountability of the material. CCC's acceptance of responsibility of the custody of the material from the moment of receipt requires that measures be taken to ensure that storage conditions and preservation of the customer-supplied product are adequate. This implies that any special precautions with respect to periodic maintenance or storage conditions have to be identified by the customer prior to material receipt.

d) Periodic inspections of the material ensure that its condition is suitably maintained until final processing and installation.

e) It is the responsibility of the Project Materials Engineer, to ensure that the requirements of the relevant procedure for the control of "free issue material" are implemented.

f) The quality management system procedure issued is "QMP-GEN-007"- Material Control.

e) Customer's intellectual property supplied to CCC for project use (drawings, specification etc) shall be controlled as per the project specific procedure QMP-GEN-002 : Document and Data Control.

7.5.5 Material Handling and Preservation

a) Projects receive a large volume and variety of materials, for incorporation into the works. Procedures in accordance with ISO 9001:2008 section 7.5.5 ensure that all the materials are:

- *Handled upon receipt, during temporary storage and during construction in such a manner that damage or deterioration will not occur. This implies that prior knowledge of the material must be in hand prior to receipt, and all requirements identified.*
- *Appropriate storage facilities and conditions are necessary to prevent damage or deterioration of incoming materials. Requirements for preservation shall be identified as early as possible and implemented to ensure that such materials will not deteriorate pending use.*
- *Receiving inspections are carried out and any non-conformances identified at this stage so that the customer is notified and necessary actions taken.*

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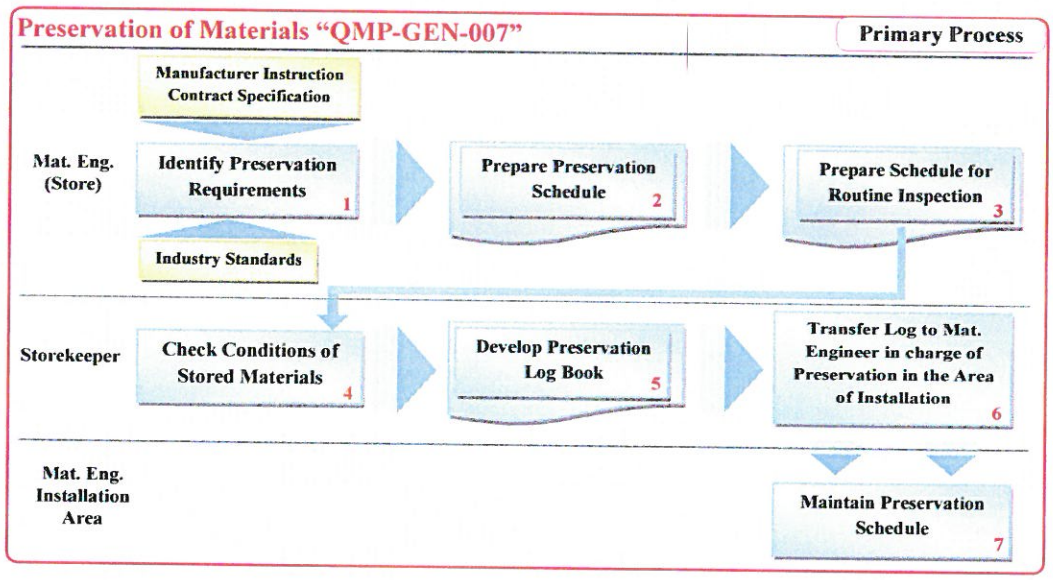
- *Materials are issued to construction with appropriate documentation and computer assisted (where appropriate) control systems.*
- *In cases where materials have to be transported, proper packaging and protection measures shall be taken to ensure materials will arrive at destination intact.*

b) Material handling is the responsibility of the following:

- *It is the responsibility of the Project Materials Engineer to comply with the applicable procedures for the handling of incoming product.*
- *It is the responsibility of the respective construction supervisors to continue handling the product as per the applicable procedures after it leaves the stores area.*

c) The quality management system procedure issued for material handling is: "QMP-GEN-007".



7.6 Inspection Measuring and Test Equipment

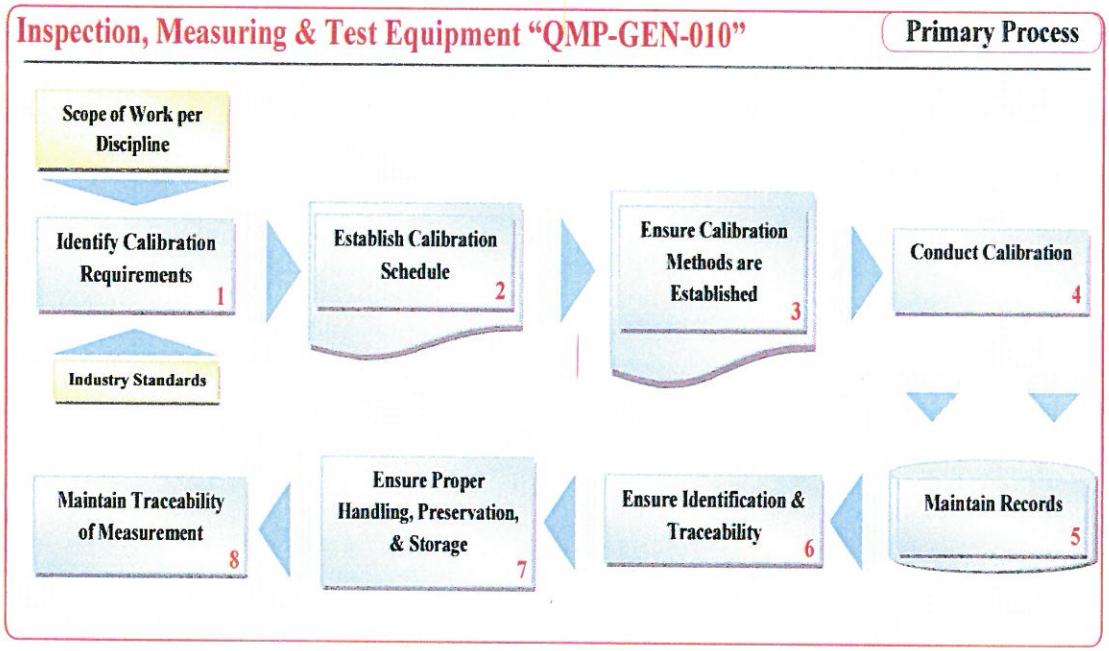
a) Measuring devices and test equipment used for measurements directly affecting the quality of the works are calibrated in accordance with the project quality management system procedure for calibration (QMP-GEN-010). The aim is to ensure that measurements will always be taken by devices or equipment which are fit for the measurement and its required accuracy. All IM & TE devices are maintained in an appropriate environment ensuring their continuous satisfactory operation in accordance with the requirements of ISO 9001:2008 section 7.6.

b) Inspection measuring and test status is the responsibility of the following:

- It is the responsibility of the QC inspectors to use all equipment and instruments in the appropriate manner ensuring their measurement accuracy.
- It is the responsibility of Construction Supervisors and Engineers to ensure that the personnel under their control are using IM & TE that are appropriate for the work that they are performing.

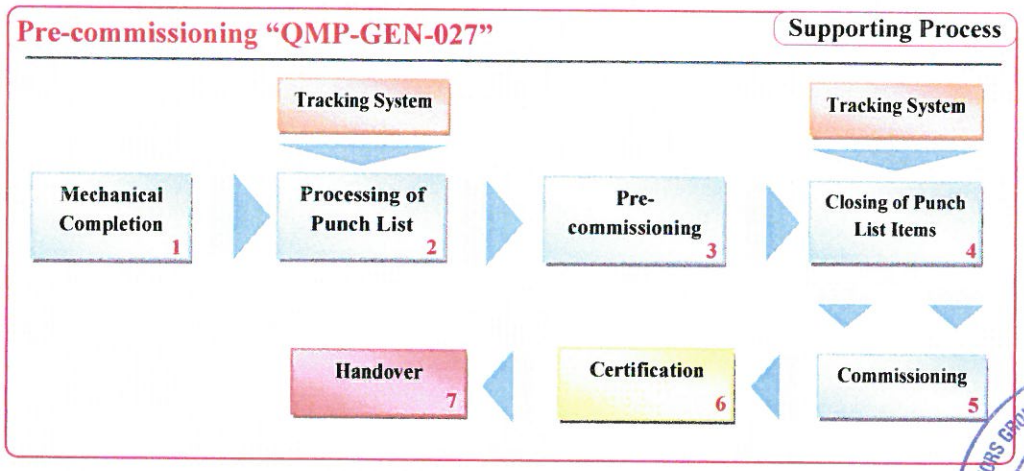
- It is the responsibility of the Project Quality Manager/Engineer to ensure that IM & TE are calibrated and controlled as required by the corresponding procedure.

c) The basic principles of this process "QMP-GEN-010" is illustrated in the following chart:



7.7 Precommissioning / Commissioning

Upon mechanical completion, facilities are handed over to Pre-commissioning Team along with the applicable records for handing over. Precommissioning is carried out in accordance with established plans and contract requirements. At the completion of Pre-commissioning, the facilities shall be handed over to Commissioning Team. Commissioning shall be carried out in accordance with established manuals and procedures in line with contract requirements. The quality management system procedure issued for pre-commissioning "QMP-MOA-027".Commissioning operation is covered by a specific commissioning manual prepared for the project.



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7.8 Certification / Handing Over

Certification is the process of compiling quality records per system or unit in line with final handing over requirements. Handing over records are generated by several departments and forwarded to Certification for further processing and handing over.

Certification is carried out in accordance with documented procedure that covers as a minimum the following items:

a) *System / unit identification and limits*
b) *ITP tracking system*
c) *Reference to punchlist processing*
d) *Reference to pre-commissioning and commissioning activities*
e) *Mechanical completion package for a given system system/unit*
f) *Handing over documentation*

Procedure for certification / handing over shall be developed on project basis.

8. MEASUREMENT, ANALYSIS AND IMPROVEMENT

8.1 General

CCC shall monitor, measure and analyse its processes, implementation of quality management system, and product conformity to specified requirements in order to determine areas that require improvement to increase customer satisfaction. This evaluation includes recording, collecting, analysing, summarizing and communication of relevant data needed to monitor performance and ensure continual improvement and effectiveness of the quality management system.

8.2 Monitoring and Measurement

8.2.1 Customer Satisfaction

One important measurement of performance is the degree of customer satisfaction. This is achieved by monitoring customer perception as to whether CCC has met the customer requirements efficiently. Ways of measuring customer satisfaction are by analysing the customer complaints or appraisals, by obtaining references from the customer and by measuring project performance.

8.2.2 Internal Quality Audits

a) For monitoring and assessing the effectiveness of the quality management system other than management reviews, quality audits of the different processes are also performed. These audits are planned, performed and documented in accordance with the requirements of ISO 9001:2008 section 8.2.2 and the relevant procedure.

b) Quality audits are performed at MOA by auditors from the CS & QM Dept., and in the projects by internal quality project auditors, at planned predefined intervals. Auditors shall have adequate

training to enable them to perform their work. The selection of auditors and conduct of audits shall ensure objectively and impartiality of the audit process.

c) Audits shall include the following:

- *Definition of the scope of the audit.*
- *Assessing the effectiveness of the process audited.*
- *A schedule produced in advance, so that feedback on the system's performance is obtained in a timely manner.*
- *Performance and effective follow-up of previous audits, to ensure that the necessary actions were taken.*
- *Review of the audit results (by documentation); to safeguard corrective actions are implemented where deficiencies have been identified.*

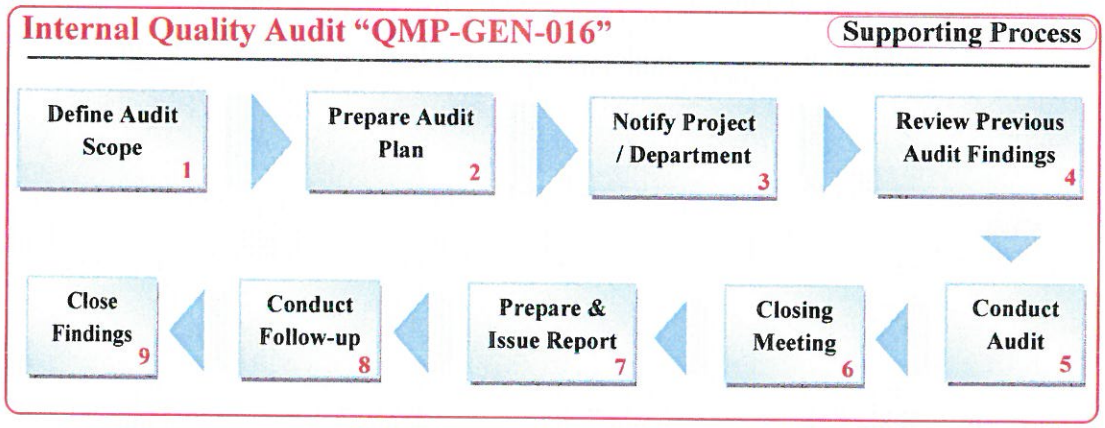
d) Quality Audits are the responsibility of the following:

- *It is the responsibility of the Project Quality Manager/Engineer and Quality Manager - Group to control the performance of quality audits.*
- *It is the responsibility of the auditors to perform effective audits and through the audit to participate in the improvement of the quality management system.*

e) The quality management system procedures issued for quality audits is:

QMP-MOA-016:	Quality System Audits
QMP-GEN-016:	Quality System Audits (Projects)

The basic principles of internal quality audit is illustrated in the following chart:



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8.2.3 Monitoring and Measurement of Processes

a) Monitoring and measurement of the quality management system processes are obtained by various methods at CCC. Project monitoring and progress reports are sent to MOA from projects that include progress of the project and results achieved. Processes where statistical techniques would prove useful are welding and NDE. Statistical techniques are employed for the control the above processes through reports issued by CCC proprietary software. Also, various types of scorecards and methods of assessment are used, as well as quality indices, to measure performance of each process or project and the results are considered along with the corrective actions raised during the audits to ensure conformity and effectiveness of the system.

b) It is the responsibility of the Project Quality Manager to control welding and NDT through "Talisman" reports and where necessary to issue project specific procedures.

c) The quality management system procedure issued is "QMP-MOA-018"- Quality Measurement & Improvement.

8.2.4 Monitoring and Measurement of Product

CCC applies monitoring and measurement of works through series of inspection, testing and surveillance checks at appropriate stages of the product realization process. The following stages take place:

a) Receiving inspection in accordance with QMP-GEN-007

b) In-process inspection and testing in accordance with approved inspection and test plans and quality control procedures.

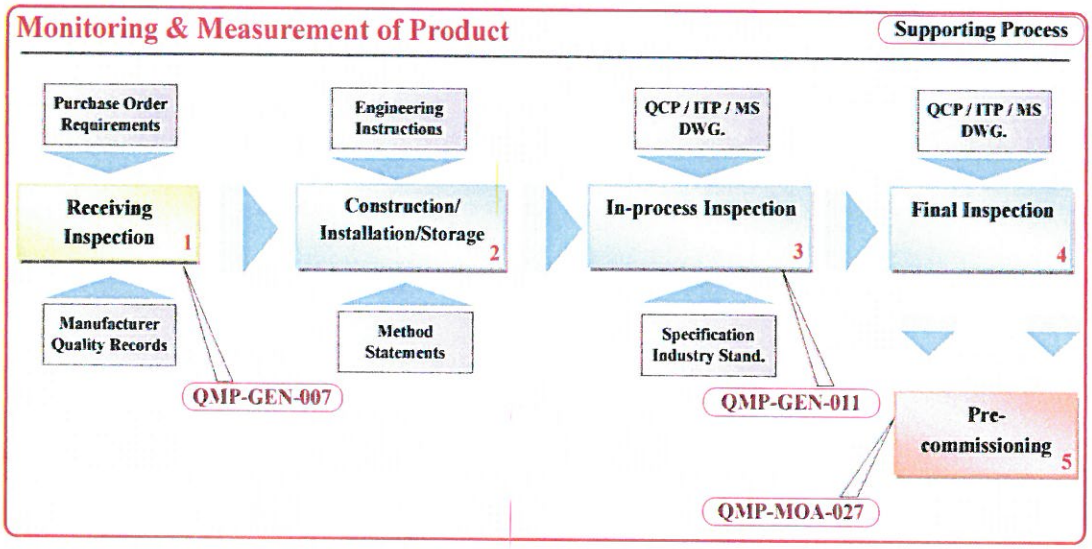
c) Final inspection & testing in accordance with ITP & QCP.

d) Monitoring and measuring of a product is the responsibility of:

- *The Project Quality Manager to prepare and ensure approval and implementation of appropriate relevant QCP's and ITP's.*
- *The Project Manager to provide adequate resources for the performance of all inspection and testing.*
- *The QC Inspectors for the performance of all inspection and testing activities.*

e) The quality management system procedure issued is "QMP-GEN-011"- Inspection & Test Status.

The basic principles for inspection of product is illustrated in the following chart:



8.2.5 Key Performance Indicators

CCC has established a process to monitor, measure and analyze its processes and quality of products and services provided to customers with major emphasis on customers' perception. This is achieved by using balanced score cards and key performance indicators. Balanced score cards focus on four major categories: financial performance, internal performance, customer relationship and learning and growth.

The quality management system procedure issued is "QMP-MOA-018".

8.3 Control of Non-Conforming Product

a) The procedure for control of non-conforming product addresses the identification of products, the decision making for further treatment of non-conforming material and measures taken to prevent inadvertent use or mixing with conformant material, in accordance with the requirements of ISO 9001:2008 section 8.3.

c) Control of non-conforming products:

- *It is the responsibility of the Project Quality Manager to control project originated product non-conformances.*
- *It is the responsibility of the Project Quality Manager to monitor trends in non-conformances.*

d) The quality management system procedure issued is "QMP-GEN-008.

The basic principles for processing a nonconformance is illustrated in the following chart:

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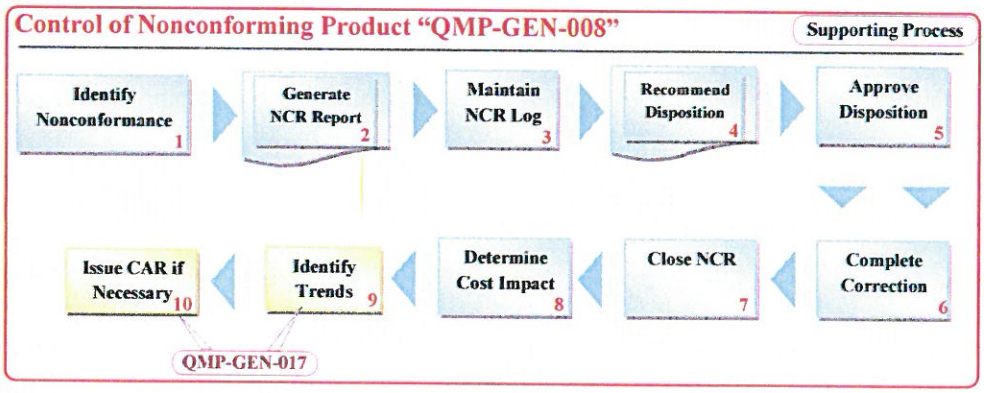

8.4 Analysis of Data

CCC determines, collects and analyze all the monitoring and measurement data received plus any additional information received from sources such as quality audits, customers and suppliers, and evaluates the effectiveness of its quality management system. From these results, CCC will be able to verify whether the quality management system is effective and how to continually improve it.

8.5 Improvement

8.5.1 Continual Improvement

CCC's aim is to continually improve the effectiveness of its quality management system by considering and complying with its quality policy, quality objectives, audit results, analysis of data and corrective and preventive actions. CCC also considers its previous experiences by looking at the "Lessons Learned" from previous projects and tries to use new ideas in order to improve the effectiveness of its system.

8.5.2 Corrective and Preventive Action

Corrective and preventive action is a key element in the operation of the quality management system.

a) Corrective and preventive actions shall be taken in cases such as:

- *A system non-conformance, in the case of non-conforming product.*
- *A non-compliance occurring as a result of quality management system audit or otherwise identified.*
- *A possible process improvement following an operational problem.*
- *Quality management system improvements recommended in management review meetings or elsewhere.*
- *Complaint from external sources, e.g. customer, joint-venture partner, main contractor.*

b) Corrective and preventive actions are covered by the corresponding procedure in accordance with ISO 9001:2008 sections 8.5.2 & 8.5.3, and address the following points:

INVESTIGATE - ANALYZE - INITIATE - VERIFY - RECORD

- *Investigate and identify the root cause of the non-conformance in order to prevent occurrence and recurrence.*
- *Analyze all the relevant information that led to the non-conformance, such as design and process controls, applicable procedures and quality records, in order to detect and eliminate the cause of the non-conformance. Analyze trends that may develop to ensure that the root of the problem has been adequately addressed.*
- *Initiate preventive actions, where appropriate, for significant conditions that caused the non-conformance. Preventive actions reduce costs by eliminating "fire fighting".*
- *For corrective and preventive actions to be effective, verification controls are in place to ensure that such actions have taken place in a satisfactory manner.*
- *Record all corrective and preventive actions. Documenting the actions taken by revising the quality management system or any other appropriate way is necessary for management review.*
- *During the management review meetings the management is informed of all corrective and preventive actions.*

e) Corrective and preventive actions:

- It is the responsibility of department managers to implement corrective or preventive actions raised on their department as a result of audit or surveillance. It is also their responsibility to keep a watching brief on areas where preventive action might be beneficial.
- It is the responsibility of the Project Quality Manager to verify corrective or preventive actions taken by a Department Manager, as a result of non-compliance with quality management system procedures.
- It is the responsibility of the Project Quality Manager to verify corrective or preventive actions taken by a Department Manager, as a result of a project initiated, construction related non-conformance.
- It is the responsibility of the Quality Manager – Group to monitor non-conformances for trends that may develop co-ordinate corrective and preventive measures and advise MOA and project management accordingly.

f) The quality management system procedures issued are:

QMP-MOA-016:	Quality System Audits
QMP-MOA-017:	Corrective and Preventive Action
QMP-GEN-008:	Control of Nonconforming Product
QMP-GEN-016:	Quality System Audits
QMP-GEN-017:	Corrective and Preventive Action

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9. APPENDICES

9.1 CCC Working Processes Flowchart
9.2 CCC Workflow for Project Realization
9.3 CCC Corporate Organization Chart
9.4 ISO 9001 Certification
9.5 CCC Quality Management System Documentation
9.6 Quality Management Procedures

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CCC Working Processes Flowchart

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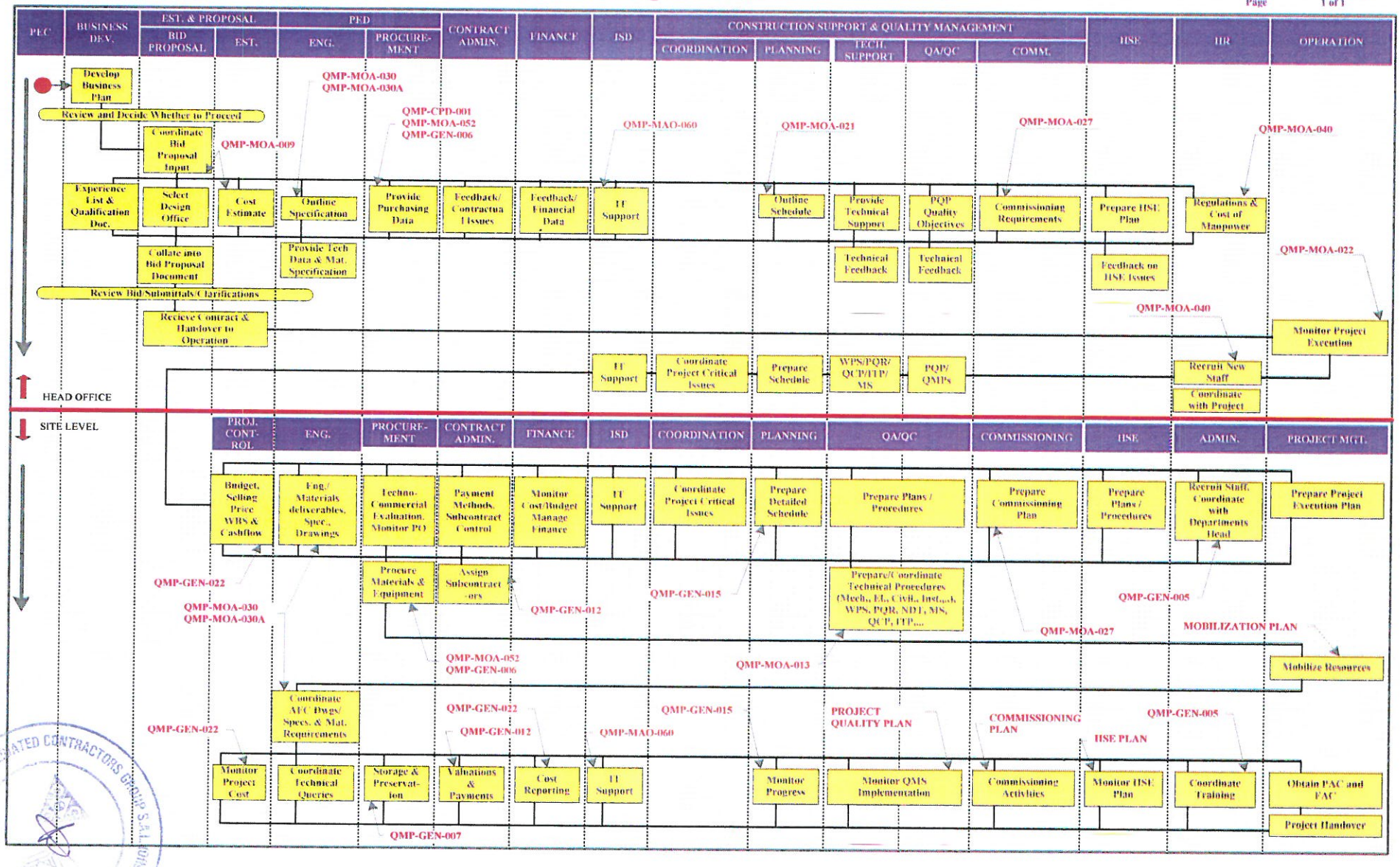

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CCC Workflow for Project Realization

Appendix 9.2
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Date February 2012
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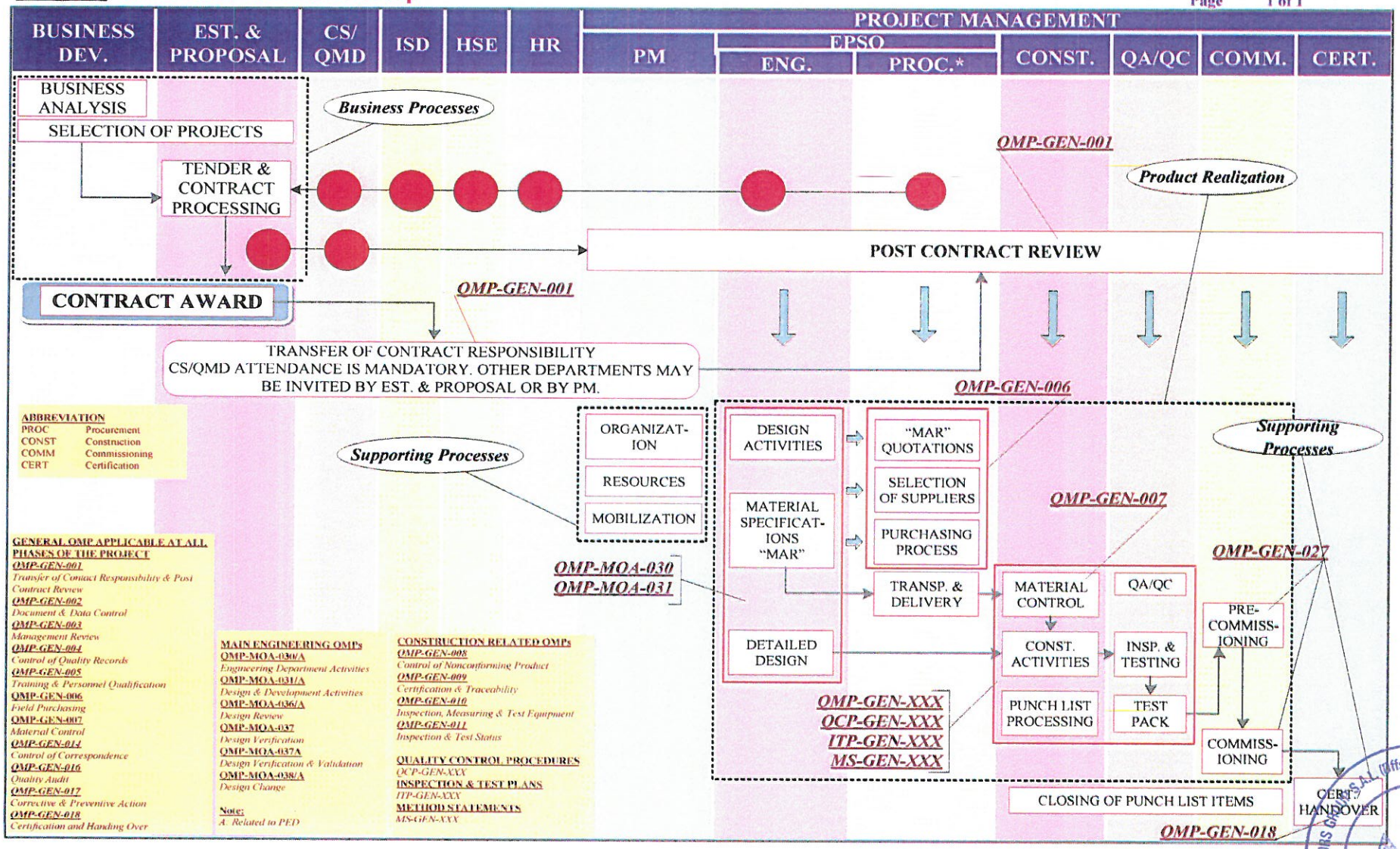

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Consolidated Contractors Company

Organization Chart

Appendix: 9.3
Ref. Doc.: QM-CCC-001
Date: Mar 2012
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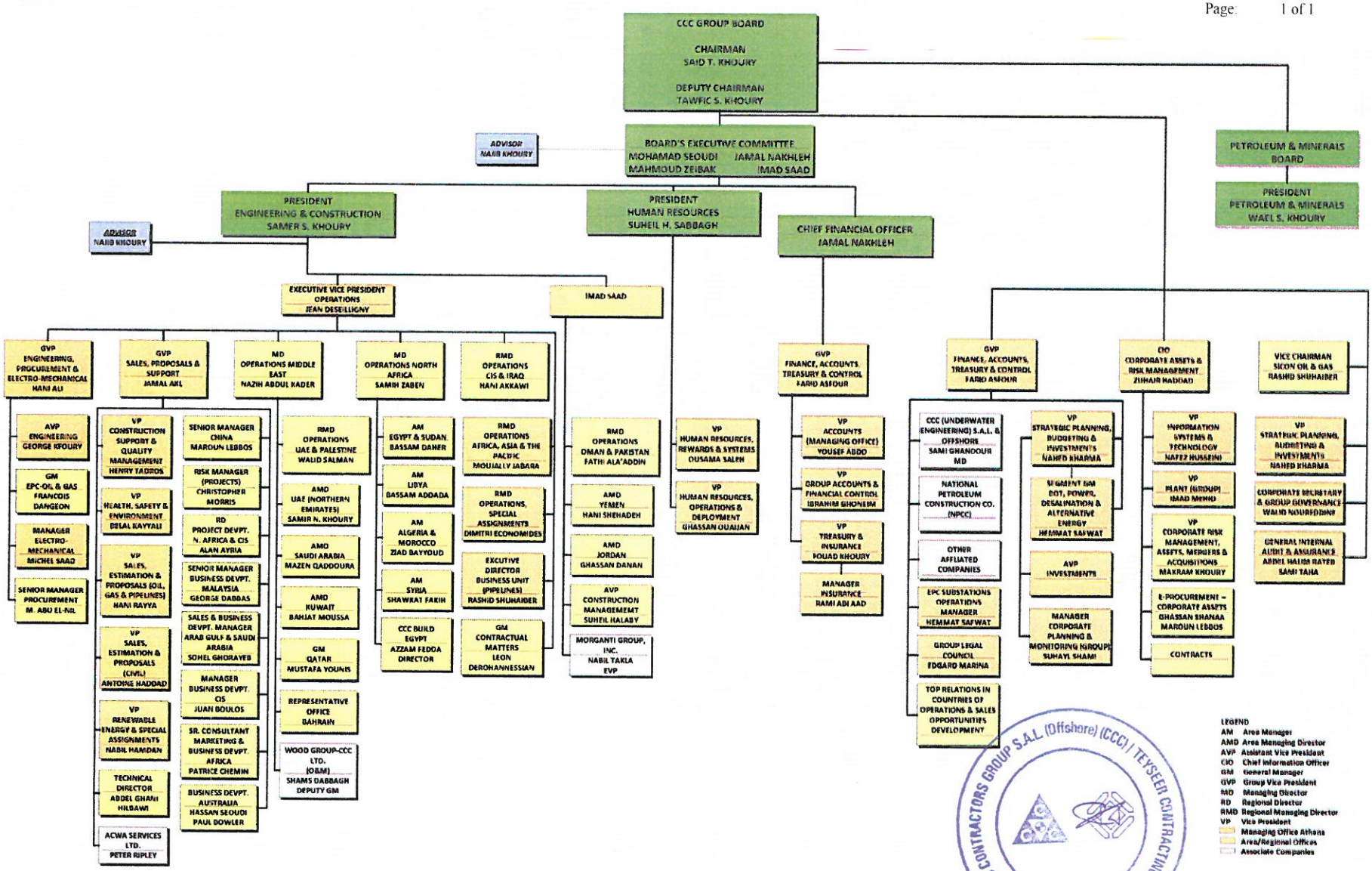

BUREAU VERITAS
Certification

Certification

Awarded to

CONSOLIDATED CONTRACTORS GROUP S.A.L.
(HOLDING COMPANY)
62B, Kifissias Ave., "POLIS" Center, 151 10 Amaroussion
GREECE

Bureau Veritas Certification certify that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

Standards

ISO 9001:2008

Scope of supply

PROJECT MANAGEMENT, ENGINEERING, PROCUREMENT, CONSTRUCTION, INSTALLATION AND COMMISSIONING OF PLANTS FOR THE OIL AND GAS RELATED INDUSTRY, CIVIL STRUCTURES, INFRASTRUCTURE WORKS AND MARINE WORKS.

Original Approval Date: 29 November, 1993

Subject to the continued satisfactory operation of the organisation's Management System, this certificate is valid until: 16 March, 2015

To check this certificate validity please call + 30 210 4063 000

Further clarifications regarding the scope of this certificate and the applicability of the management system requirements may be obtained by consulting the organisation.

N. TRILIZAS

Date: 30 March, 2012

Certificate Number: *GR18493Q*

UKAS MANAGEMENT SYSTEMS
008

Bureau Veritas Certification (Holding) S.A.S using the accreditation certificate number 008

CERTIFICATION AUTHORITY OFFICE ADDRESS: Olbrechtova 1, 140 02 Praha 4, Czech Republic
MANAGING OFFICE ADDRESS: Bureau Veritas Certification Hellas S.A., 23 Etolikou St., 185 45 Piraeus, Greece

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CCC Quality Management System Documentation

ISO 9001:2008 CLAUSE	ISO 9001:2008 REQUIREMENT	QUALITY MANUAL QM-CCC-001	QUALITY MANAGEMENT PROCEDURES	CORPORATE MANUALS
4. Quality Management Requirements				
4.1	General Requirements	Sect. 4.1, 4.2		
4.2	Documentation Requirements	Sect. 4.3		
4.2.1	General	Sect. 4.3		
4.2.2	Quality Manual	Sect. 4.3.1		Quality Manual – QM-CCC-001
4.2.3	Control of Documents	Sect. 4.3.2	QMP-MOA-001 QMP-MOA-003 QMP-MOA-013 QMP-MOA-026 QMP-MOA-060 QMP-GEN-002 QMP-GEN-014	
4.2.4	Control of Records	Sect. 4.4	QMP-MOA-006 QMP-GEN-004	
5. Management Responsibility				
5.1	Management Commitment	Sect. 5.1		Quality Manual – QM-CCC-001
5.2	Customer Focus	Sect. 5.2		

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CCC Quality Management System Documentation

ISO 9001:2008 CLAUSE	ISO 9001:2008 REQUIREMENT	QUALITY MANUAL QM-CCC-001	QUALITY MANAGEMENT PROCEDURES	CORPORATE MANUALS
5.3	Quality Policy	Sect. 5.1		Quality Manual – QM-CCC-001
5.4	Planning	Sect. 5.3		
5.4.1	Quality Objectives	Sect. 5.3.1	QMP-MOA-018 PQP-GEN-001	
5.4.2	Quality Management System Planning	Sect. 5.3.2	QMP-MOA-018 PQP-GEN-001	
5.5	Responsibility, Authority and Communication	Sect. 5.4		Quality Manual – QM-CCC-001
5.5.1	Responsibility and Authority	Sect. 5.4.1, 5.4.2		Quality Manual – QM-CCC-001
5.5.2	Management Representative	Sect. 5.4.3, 5.4.4		
5.5.3	Internal Communication	Sect. 5.4.5		
5.6	Management Review	Sect. 5.5	QMP-MOA-005 QMP-GEN-003	
5.6.1	General	Sect. 5.5		
5.6.2	Review Input	Sect. 5.5.1		
5.6.3	Review Output	Sect. 5.5.1		
6. Resource Management				

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CCC Quality Management System Documentation

ISO 9001:2008 CLAUSE	ISO 9001:2008 REQUIREMENT	QUALITY MANUAL QM-CCC-001	QUALITY MANAGEMENT PROCEDURES	CORPORATE MANUALS
6.1	Provision of Resources	Sect. 6.1	QMP-MOA-010	
6.2	Human Resources	Sect. 6.2	QMP-MOA-040	
6.2.1	General	Sect. 6.2	QMP-MOA-040	
6.2.2	Competence, Awareness and Training	Sect. 6.2.1	QMP-MOA-040 QMP-GEN-005	
6.3	Infrastructure	Sect. 6.3		
6.4	Work Environment	Sect. 6.3	QMP-MOA-050	Plant Operating Manual
7. Product Realization				
7.1	Planning of Product Realization	Sect. 7.1		
7.2	Customer Related Processes	Sect. 7.2		
7.2.1	Determination of Requirements Related to Product	Sect. 7.2.1	QMP-MOA-009 QMP-GEN-001	
7.2.2	Review of Requirements Related to Product	Sect. 7.2.1	QMP-MOA-009 QMP-GEN-001	
7.2.3	Customer Communication	Sect. 7.2.2		
7.3	Engineering Department Activities	Sect. 7.3	QMP-MOA-030/030A (PED)	
7.3.1	Design and Development Activities	Sect. 7.3	QMP-MOA-031/031	
7.3.1	Design & Development Planning	Sect. 7.3	QMP-MOA-031A (PED)	
7.3.2	Numbering, Issuing & Checking of Doc.	Sect. 7.3	QMP-MOA-032	

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CCC Quality Management System Documentation

ISO 9001:2008 CLAUSE	ISO 9001:2008 REQUIREMENT	QUALITY MANUAL QM-CCC-001	QUALITY MANAGEMENT PROCEDURES	CORPORATE MANUALS
7.3.3	Preparation, Checking & Control of Calculation	Sect. 7.3	QMP-MOA-033	
7.3.6	Design Validation	Sect. 7.3	QMP-MOA-034	
7.3.6	Pre-commissioning / Commissioning	Sect. 7.7	QMP-MOA-027	Commissioning Manual
7.3.4	Design and Development Review	Sect. 7.3	QMP-MOA-036/036A (PED)	
7.3.5	Design and Development Verification	Sect. 7.3	QMP-MOA-037	
7.3.5/6	Design Verification & Validation	Sect. 7.3	QMP-MOA-037A	
7.3.7	Control of Design and Development Changes	Sect. 7.3	QMP-MOA-038/-38A (PED)	
7.4	Purchasing	Sect. 7.4	QMP-GEN-006 QMP-GEN-012	Central Procurement Manual – CM-CPD-001
7.4.1	Purchasing Process	Sect. 7.4.1	QMP-GEN-006 QMP-GEN-012	
7.4.2	Purchasing Information	Sect. 7.4.1	QMP-GEN-006 QMP-GEN-012	
7.4.3	Verification of Purchased Product	Sect. 7.4.3	QMP-GEN-006 QMP-GEN-012	
7.5	Production and Service Provision	Sect. 7.5		
7.5.1	Control of Production & Service Provision	Sect. 7.5.1	QMP-MOA-010 QMP-MOA-021	Plant Operating Manual

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ISO 9001:2008 CLAUSE	ISO 9001:2008 REQUIREMENT	QUALITY MANUAL QM-CCC-001	QUALITY MANAGEMENT PROCEDURES	CORPORATE MANUALS
			QMP-MOA-022 QMP-MOA-025 QMP-MOA-027 QMP-MOA-040 QMP-MOA-050 QMP-GEN-015	
7.5.2	Validation of Processes for Production and Service Provision	Sect. 7.5.1	QMP-MOA-040 QMP-MOA-050	Plant Operating Manual
7.5.3	Identification and Traceability	Sect. 7.5.2, Sect. 7.5.3	QMP-GEN-009 QMP-GEN-011	
7.5.4	Customer Property	Sect. 7.5.4		
7.5.5	Preservation of Product	Sect. 7.5.4, Sect. 7.5.5	QMP-GEN-007	
7.6	Control of Monitoring and Measuring Devices	Sect. 7.6	QMP-GEN-010	
8. Measurement, Analysis and Improvement				
8.1	General	Sect. 8.1		
8.2	Monitoring and Measurement	Sect. 8.2	QMP-MOA-018	
8.2.1	Customer Satisfaction	Sect. 8.2.1	QMP-MOA-018	
8.2.2	Internal Audit	Sect. 8.2.2	QMP-MOA-016 QMP-GEN-016	

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CCC Quality Management System Documentation

ISO 9001:2008 CLAUSE	ISO 9001:2008 REQUIREMENT	QUALITY MANUAL QM-CCC-001	QUALITY MANAGEMENT PROCEDURES	CORPORATE MANUALS
8.2.3	Monitoring and Measurement of Processes	Sect. 8.2.3	QMP-MOA-018	
8.2.4	Monitoring and Measurement of Product	Sect. 8.2.4	QMP-GEN-011	
8.3	Control of Non-Conforming Product	Sect. 8.3	QMP-GEN-008 QMP-GEN-013	
8.4	Analysis of Data	Sect. 8.4		
8.5	Improvement	Sect. 8.5		
8.5.1	Continual Improvement	Sect. 8.5.1	QMP-MOA-018	
8.5.2	Corrective Action	Sect. 8.5.2	QMP-MOA-017 QMP-MOA-016 QMP-GEN-016 QMP-GEN-017	
8.5.3	Preventive Action	Sect. 8.5.2	QMP-MOA-017 QMP-MOA-016 QMP-GEN-016 QMP-GEN-017	

Note:
Project Quality Plans (PQP's), Quality Control Procedures (QCP's), Inspection and Test Plans (ITP's) and Method Statements (MS's) are issued as per Project / Contract requirements.

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QUALITY MANAGEMENT PROCEDURES

MOA

QMP-MOA-001	PREPARATION OF QUALITY MANAGEMENT PROCEDURES
QMP-MOA-003	DOCUMENT CONTROL
QMP-MOA-005	MANAGEMENT REVIEW
QMP-MOA-006	CONTROL OF QUALITY RECORDS
QMP-MOA-009	PREPARATION OF ESTIMATION AND PROPOSALS
QMP-MOA-010	MOBILIZATION
QMP-MOA-013	PREPARATION OF METHOD STATEMENTS
QMP-MOA-016	QUALITY SYSTEM AUDITS
QMP-MOA-017	CORRECTIVE AND PREVENTIVE ACTION
QMP-MOA-018	QUALITY MEASUREMENT AND IMPROVEMENT
QMP-MOA-019	PROJECT TECHNICAL & COMMERCIAL AUDIT
QMP-MOA-021	PLANNING
QMP-MOA-022	PROJECT MONITORING
QMP-MOA-024	WRITTEN PRACTICE FOR NDT PERSONNEL QUALIFICATION
QMP-MOA-025	CONSTRUCTABILITY
QMP-MOA-026	PREPARATION & ISSUE OF CORPORATE MANUALS
QMP-MOA-027	PRE-COMMISSIONING
QMP-MOA-028	EPC INTERFACE PROCEDURE
QMP-MOA-029	ETHICS AND ANTI-CORRUPTION PROGRAM
QMP-MOA-030	ENGINEERING DEPARTMENT ACTIVITIES
QMP-MOA-030A	PLANTS ENGINEERING DEPARTMENT ACTIVITIES
QMP-MOA-031	DESIGN AND DEVELOPMENT PLANNING
QMP-MOA-031A	(PLANTS) DESIGN AND DEVELOPMENT PLANNING
QMP-MOA-032	NUMBERING, ISSUING AND CHECKING OF DOCUMENTS
QMP-MOA-033	PREPARATION, CHECKING AND CONTROL OF CALCULATIONS
QMP-MOA-034	DESIGN AND DEVELOPMENT VALIDATION
QMP-MOA-036	DESIGN REVIEW
QMP-MOA-036A	(PLANTS) DESIGN REVIEW
QMP-MOA-037	DESIGN VERIFICATION & VALIDATION
QMP-MOA-037A	(PLANTS) DESIGN VERIFICATION & VALIDATION
QMP-MOA-038	CHANGES PROCEDURE
QMP-MOA-038A	(PLANTS) DESIGN CHANGE
QMP-MOA-040	HR MANAGEMENT
QMP-MOA-050	MANAGING OFFICE, PLANT DEPARTMENT FUNCTIONS
QMP-MOA-051	TRAINING AND PERSONNEL QUALIFICATION
QMP-MOA-052	PURCHASING OF EQUIPMENT AND SPARE PARTS
QMP-MOA-060	INFORMATION SYSTEMS DEPARTMENT FUNCTIONS
QMP-MOA-061	EMAIL AND INTERNET USAGE

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PROJECTS*

QMP-GEN-001	TRANSFER OF CONTRACT RESPONSIBILITY & POST CONTRACT REVIEW
QMP-GEN-002	DOCUMENT AND DATA CONTROL
QMP-GEN-003	MANAGEMENT REVIEW
QMP-GEN-004	QUALITY RECORDS
QMP-GEN-005	TRAINING AND PERSONNEL QUALIFICATIONS
QMP-GEN-006	PURCHASING
QMP-GEN-007	MATERIAL CONTROL
QMP-GEN-008	CONTROL OF NON-CONFORMING PRODUCT
QMP-GEN-009	MATERIAL CERTIFICATION AND TRACEABILITY
QMP-GEN-010	INSPECTION, MEASURING & TEST EQUIPMENT
QMP-GEN-011	INSPECTION & TEST STATUS
QMP-GEN-012	SUBCONTRACTING
QMP-GEN-013	CONCESSION / INFORMATION REQUEST
QMP-GEN-014	CONTROL OF CORRESPONDENCE
QMP-GEN-015	PLANNING & SCHEDULING
QMP-GEN-016	QUALITY SYSTEM AUDITS
QMP-GEN-017	CORRECTIVE AND PREVENTIVE ACTION
QMP-GEN-018	CERTIFICATION AND HANDING OVER
QMP-GEN-019	FIELD ENGINEERING
QMP-GEN-021	CUSTOMER COMPLAINTS
QMP-GEN-022	PROGRESS MONITORING
QMP-GEN-027	PRECOMMISSIONING / COMMISSIONING

*This is an indicative list and could be revised as per project needs without revising the Quality Manual.

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