STRONG BUILT

ENGINEERING AND CONTRACTING

Willingness to serve

GOOD PRECTICES/ INITIATIVES

"QUALITY WORK"

PRESENTATION

STRONG BUILT
ENGINEERING AND CONTRACTING
Willingness to serve

Quality Theme

STRONG BUILT
ENGINEERING AND CONTRACTING
Willingness to serve

Quality Objectives – F.Y. 2018

OBJECTIVES	STRATEGY	TARGETS
Maintain an effective quality management system in compliance with ISO 9001 standards (Corporate level)	Maintain ISO 9001 Certificate	Zero Major Non-Conformity
Enhance customer satisfaction	Monitor and track the Customer feedback/ complaint process to ensure issues raised by Customers are properly addressed and closed out within time frame. Conduct customer satisfaction survey at all projects at 50% and 100% of project completion.	Outstanding Feedback/complaints rate: 0% Client Satisfaction Index > 80%
Consistently implement the quality management systems across the business.	Implement the internal audit process (QA) to verify the compliance of project management system against corporate requirements. Monitor the status of closing out audit observations to ensure corrective actions are taken to rectify identified issues in timely manner.	Level 2 Quality Audit Score > 85% Outstanding Observations Rate < 25%
Efficiently manage project quality performance to ensure deliver high quality project to our Clients.	Fully develop construction WMS and ITP's to ensure execution works meet the Industrial Standards and contractual specifications. Conduct regular Quality Control Audits on operations activities including Subcontractor works and monitor the status of closing out identified Non-Conformities. Control Subcontractors and suppliers performance	Inspection rate: 100% as per ITP Outstanding NCR's Rate < 25% Vendor Pre-qualification Rate: 100% (for major suppliers and subcontractors) Vendor performance evaluation Rate: 100% (for major suppliers and subcontractors)
Enforce the awareness of quality concept in the business.	Frequently conduct quality induction and tool box talks for project staff	Quality Management systems Induction Rate : 100% Quality Training: 2 sections/ month Quality Walk: 1/ month

STRONG BUILT
ENGINEERING AND CONTRACTING
Willingness to serve

Duties & Responsibilities of Quality Team

Quality Manager –

- To prepare QP,ITP,s as per specifications.
- To Ensure the Implementation of SBT Quality Management system at Project site .

QA-QC/Lab Engineers/Supervisors –

- To Ensure that work is being carried out as per WMS.
- Inspection of the work ,conducting Lab tests as per ITP.
- Inspection & testing of incoming materials at site /plant.
- Inspection of site activities, Subcontractor's work, to issue OFI to avoid poor quality/defective work, NCRs for Non conforming works & follow up for their closure.
- Maintaining quality records.
- Submit Weekly Reports / Monthly Reports.
- Ensure routine Calibration of measuring equipment's.

Corporate Procedures-Quality

- **SBT-QAM-PR-001 -Management Review Meeting**

This procedure sets out the process for scheduling and conducting regular management reviews of the company's management systems to ensure their continuing suitability adequacy and effectiveness.

Management Reviews shall be held at the following intervals:

- **Meetings at Corporate level** to review the functionality of the Corporate Integrated Management System – **at least once in each financial year.**
- **Meetings at Project Levels** to review the functionality of the Project Integrated Management System – **at least twice in each financial year**. **Quality Monthly Report** shall be prepared and forwarded to HO for records.

Corporate Procedures-Quality (cont..)

SBT-QAM-PR-002 -Procedures

This procedure describes the Company's guidelines on the preparation of procedures to ensure that system procedures are consistent with the requirements of Quality Standards as well as Company policies.

- **At Corporate Level,** the Managing Director and Business Partner – HSSEQS are responsible to ensure Corporate procedures are in compliance with SBT Management system.
- **At Project Level,** Project Management Team and Project Quality Representative are responsible to ensure that SBT Procedures are communicated, implemented and maintained.
- **Corporate Systems Representative** is responsible to ensure latest versions of SBT Procedures and SOP's are uploaded into the company Server.

Corporate Procedures-Quality (cont..)

- **SBT-QAM-PR-003 –Project Management System**

This procedure describes the Company's requirements for the preparation of Project Management system documentation including Project Management Plan in order to ensure that project documents are in line with Management System.

Corporate Procedures- Quality (cont..)

SBT-QAM-PR-004 –Quality Assurance Audit

This procedure describes the Company's guidelines on quality assurance audits at all business levels. These audits are essential for the Company to:

- Assess and monitor business performance.
- Ensure the system is properly implemented in compliance with ISO 9001 standard, contractual and regulatory requirements.
- Ensure the system can be continually improved.procedures are consistent with the requirements of Quality Standards as well as Company policies.

The Frequency of Audit is as below:

- ✓ Level I audit – Conducted by Project Quality Manager on Quarterly Basis.
- ✓ Level II Audit – Conducted by Business Unit Team once in a 6 months.
- ✓ Level III Audit – Conducted by Third Party for Certification Purpose.
- ✓ Quality Walk- Conducted by Project Quality Manager on Monthly Basis.

Corporate Procedures- Quality (cont..)

SBT-QAM-PR-005 –Internal Non Conformity

This procedure describes the Company's guidelines on managing internal non-conforming items or services. The purpose of this procedure is to:

Identify, document and manage items that do not meet the agreed requirements and prevent their inadvertent use.

Identify improvement areas by recording and analyzing causes of not meeting the agreed requirements.-**OFI is issued**

Control the quality internal failure cost i.e. the cost of defects and nonconformities to enable actions to be taken to reduce the project cost..

1.1 Nonconformance Categories:

Grade	Descriptions
Major NCR	The non-conformance work results in significantly delay of project progress.
	The failure cost > INR 5,00,000 (Five Lakh)
	The non-conformance work completely breaches an approved work method statement (WMS) / contractual requirements/ company requirements.
Minor NCR	The non-conformance work that do not have impact on the project progress.
	The failure cost < INR 5,00,000 (Five Lakh)
	The non-conformance work due to the partial non-fulfilment of approved WMS / contractual requirements/ Corporate requirements.

Corporate Procedures- Quality (cont..)

SBT-QAM-PR-006 –Control of Quality Cost

This procedure describes the Company's guidelines on project reporting of quality internal failure cost i.e. the cost of defects and nonconformities to enable actions to be taken to reduce the project cost.

- The Operations team and accounting department is responsible to collect the cost related to non-conformance, allocate these costs to the agreed activities and provide the data to quality Department for quality cost assessment.
- The quality management is responsible to analyze the quality related costs and take appropriate controlling actions.

Corporate Procedures- Quality (cont..)

SBT-QAM-PR-007 –Quality Training

This procedure describes the Company's guidelines on the SBT Quality Training process. The purpose of quality training is to give :

- An Overview of ISO 9001 requirements.
- Quality Policy, Objective and Performance
- Customer Satisfaction
- Non-conformance Report and Opportunity For Improvement
- Document Control process
- Continual Improvement and Innovation

Project Quality Manager is responsible to develop and implement Quality Control Training at planned intervals.

At project level, Project Quality Manager shall liaison with HR Department to develop the Training Need analysis and Training matrix to implement the Quality Control Trainings for the Current Year .

STRONG BUILT
ENGINEERING AND CONTRACTING
Willingness to serve

Quality Management System Training & Induction

QMS & HSE TRAINING

STRONG BUILT
ENGINEERING AND CONTRACTING
Willingness to serve

Quality Management System Training & Induction

QMS & HSE TRAINING

Corporate Procedures-Quality (cont..)

- **SBT-QAM-PR-008 –Monitor of Customer Satisfaction**

This procedure describes the process of gathering and monitoring the Client's perception on quality aspects to ensure SBT deliver the project that meet Client's expectation.

The Quality Representative is responsible to ensure the effectiveness of the process and to maintain a good working relationship with Client to ensure Client's addressed issues are properly close out in timely manner.

The Project Quality Representative shall implement the Client Satisfaction Survey at 50% and 100% of project completion.

STRONG BUILT
ENGINEERING AND CONTRACTING
Willingness to serve

Customer satisfaction survey form

CUSTOMER SATISFACTION SURVEY

Project:_____ Date: _____

Help us to improve our business performance and strengthen our Client relationship. Your feedback is greatly appreciated. Please take five minutes to record your opinions on our performance. This survey is only used for continual improvement of services to our client and shall not be used in any way for contractual claims/disputes, whatsoever.

Rating scale: *Excellent: 100%* *Good: 80%* *Average: 50%* *Poor: 30%* *Unacceptable: 0%*

	Excellent	Good	Average	Poor	Unacceptable
1. How did the Project Team response to your concerns?	☐	☐	☐	☐	☐
2. How do you feel about project planning activities?	☐	☐	☐	☐	☐
3. Do you think our document control process is capable to handle project documentation?	☐	☐	☐	☐	☐
4. How would you rate our Engineering Review Process (i.e. drawings and technical documents)?	☐	☐	☐	☐	☐
5. How satisfied are you with the quality of the work?	☐	☐	☐	☐	☐
6. Do you believe LIhas a good Management Systems in place?	☐	☐	☐	☐	☐
7. Do you believe SBT commits to providing employees and persons under our care a safe working environment?	☐	☐	☐	☐	☐
8. How good is SBT in preventing impact of its works to the environment?	☐	☐	☐	☐	☐
9. How is our IT support function?	☐	☐	☐	☐	☐
10. How would you rate SBT in terms of managing of Subcontractors and Suppliers?	☐	☐	☐	☐	☐
11. Do you think LIprovides sufficient resource for executing the project?	☐	☐	☐	☐	☐
12. How do you feel about the relations between Leighton and the community where we are working in?	☐	☐	☐	☐	☐
13. How would you rate about SBT performance overall?	☐	☐	☐	☐	☐

Corporate Procedures- Quality (cont..)

- **SBT-QAM-PR-009 –Quality Awards**

This procedure sets out the Quality Award Processes to be adopted at SBT. This procedure explains about the criterions, categories of awards, selection methodology and frequency for such awards.

The Quality Awards Programmed is designed to recognize and reward the individuals/ project teams who have excelled in their performance in regards of quality aspect. The rewarded individuals/ projects are set as the role models to cultivate the quality culture within the organization..

STRONG BUILT
ENGINEERING AND CONTRACTING
Willingness to serve

Quality Award

Quality Award Distribution At Mahindra Project

Quality System Documents

- Plans
- Procedures
- Construction Method Statements
- Standard Operating Procedures
- Inspection & Test Plans (ITP)
- Records (Checklists, As Builts, Test Reports)

STRONG BUILT
ENGINEERING AND CONTRACTING
Willingness to serve

Quality Initiatives

- Quality Walks
- Quality Walk Closeout Report
- Quality Pocket Card
- Idiot Guide for Quality
- Quality Control Training

STRONG BUILT
ENGINEERING AND CONTRACTING
Willingness to serve

Quality Initiatives

Quality Walks

The Project Quality Manager shall decide the frequency of “Quality Walks”. He shall notify the concerned person (supervisor, project engineer, quality engineer, project manager, sub-contractor’s engineer, client’s representative, if any) one week prior to such walks.

The non conformities which are already raised in the form of Non-Conformance Report shall not be raised in such walks.

STRONG BUILT
ENGINEERING AND CONTRACTING
Willingness to serve

Quality Walk Report

Quality Walk Report

QA Team:	
SuhailQuasim	WaghSwapnil
VinodPatil	Mishra
Sanjay Saini	Ramesh Mane
Rupesh	Amol Kamble

Report No: 04
Date: 31/02/17
Inspection Area: Mahindra Project
Package:

Description: Sand streaking found on over surface.

Location: villa no.16
Action required: Check properly concrete mix and workability and bleeding and over vibration may on effect.

Action By: Ansari/ Vinod
Date completed:

Verify By: Suhail Quasim

Photo-01

Description: Starter finish found not ok.

Location:: Drain work
Action required: Need to properly finish concrete with stopper.

Action By: Ansari/ Vinod
Date completed:

Verify By: Suhail Quasim

Photo-02

STRONG BUILT
ENGINEERING AND CONTRACTING
Willingness to serve

Quality Walk Closeout Report

STRONG BUILT
ENGINEERING AND CONTRACTING
Willingness to serve

Quality Walk Close Out Report

QA Team:		Report No: 02	Cloes out point
SuhailQuasim	WaghSwapnil	Date: 27/12/16	
VinodPatil	Mishra	Inspection Area: Mahindra Project	
Sanjay Saini		Package:	
Rupesh			

Description: Curing compound barrels found kept in open area. **Location: Near Quality Lab** **Action required**: Need to keep in shaded area. **Action By:** Saini/ Vinod **Date completed:** **Verify By:** SuhailQuasim	Photo-01  
Description: Honey comb found in kicker. **Location:: villa no-35** **Action required**: Need to check the shuttering gaps before casting concrete. **Action By:** Saini/ Vinod **Date completed:** **Verify By:** SuhailQuasim	Photo-02  
Description: Honey comb found in kicker. **Location:: villa no-16** **Action required**: Need to check the shuttering gaps before casting concrete. **Action By:** Saini/ Vinod **Date completed:** **Verify By:** SuhailQuasim	Photo-03  
Description: Honey comb found in kicker. **Location:: villa no-16** **Action required**: Need to check the shuttering gaps before casting concrete.	Photo-04  

STRONG BUILT
ENGINEERING AND CONTRACTING
Willingness to serve

Quality Initiatives

Pocket Cards

The Quality Pocket Cards are the pocket sized cards which project persons can carry and refer in the field.

The Project QA/QC Manager shall select or approve the content of these cards e.g. Lap lengths, concrete covers required , status of calibration, grades of concrete at different levels, unit weight of steel bars, aggregate etc. These cards should be distributed to project personnel

STRONG BUILT
ENGINEERING AND CONTRACTING
Willingness to serve

Sample Quality Pocket Cards

QUALITY OBSERVATION	
1	Hook bending to be done properly
2	Tying of rings to be done properly
3	Concrete top levels to be checked properly
4	Covers to be maintained properly
5	Master rings to be placed 100mm above & below couplers in columns
6	Caps to be placed to protect threaded portion of rebar
7	Wooden gauges to be removed before concreting
8	Plumb checking after Concreting to be done
9	Curing Compound to be applied immediately after de-shuttering
10	Rebar request Form to be completed properly
11	If Diameter of links are changed, spacing to be adjusted accordingly
12	delays in deshuttering to be avoided

Calibration Record				
Sl No.	Description of Material	Serial No.	Date of Calibration	Due Date of Calibration
A	Alliance			
1	Auto Level	492634	8.07.09	07.07.10
2	Auto Level	492998	8.07.09	07.07.10
3	Auto Level	491607	4.12.09	03.12.10
4	Total Station	202243	8.07.09	07.07.10
5	Total Station	63030073	18.08.09	17.08.10
B	VSL			
1	Pressure Gauge	(VSL/PG/095)	16.11.09	16.11.10
2	Pressure Gauge	(VSL/PG/093)	16.11.09	16.11.10
3	Pressure Gauge	(VSL/PG/081)	11.11.09	11.11.10
4	Hydraulic Jack	(VSL/TCH/035)	26.03.10	26.03.11
5	Hydraulic Jack	(VSL/TCH/033)	26.03.10	26.03.11
6	Hydraulic Jack	(VSL/TCH/072)	26.03.10	26.03.11

STRONG BUILT
ENGINEERING AND CONTRACTING
Willingness to serve

Sample Idiot Guide for Quality

IMPORTANT BLOCK/PLASTER GUIDE				
S.NO	**DESCRIPTION**			**PHOTO**
1	BLOCK WORK MIX RATIO:	100 mm Block work	1:4	
		Above 100 mm Block work	1:6	
	PLASTERING MIX RATIO:	Wall plaster 1:4 (1:6 if ready mix)		
		Ceiling plaster	1:3	
		Chasing filling	1:3	
		Fiber mesh fixing	1:3	
2	PLASTER THICKNESS	Ceiling	10mm	
		Inner wall	12mm	
		External wall	20mm	
		Block Bed mortar(Block around)	12mm	
3	Fix fiber mesh over Conduits and blocks & concrete joints			

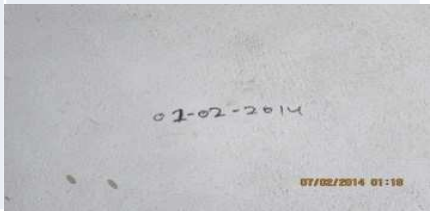
STRONG BUILT
ENGINEERING AND CONTRACTING
Willingness to serve

Sample Idiot Guide for Quality

S.NO	DESCRIPTION	PHOTO
4	Mix mortar Quantity for 2 hours requirement only	
5	Wet the blocks with water prior to use.	
6	Use straight edges and line thread to maintain line & level.	

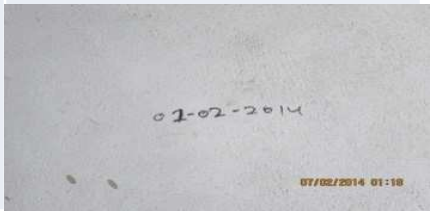
STRONG BUILT
ENGINEERING AND CONTRACTING
Willingness to serve

Sample Idiot Guide for Quality

S.NO	DESCRIPTION	PHOTO
7	Maintain straight and clean interface between wall & ceiling joints.	
8	Reuse the falling mortar within 1 hour	
9	Plaster construction joints should be 90 degree.	
10	Write date on the wall and do the curing for the 7 days.	

STRONG BUILT
ENGINEERING AND CONTRACTING
Willingness to serve

Sample Idiot Guide for Quality

S.NO	DESCRIPTION	PHOTO
7	Maintain straight and clean interface between wall & ceiling joints.	
8	Reuse the falling mortar within 1 hour	
9	Plaster construction joints should be 90 degree.	
10	Write date on the wall and do the curing for the 7 days.	

STRONG BUILT

ENGINEERING AND CONTRACTING

Willingness to serve

THANKS FOR YOUR VALUABLE TIME