New e-zine this month

Quality Procedures Explained
More Efficient Printing

Lean Construction Ireland National Conference 2018

20th November, Croke Park Dublin

Deliver Projects Better, Faster, Together

Lean Construction Ireland will host a unique one day symposium in Croke Park Dublin on the 20th of November 2018. The theme of the event is "**Lean Innovation - Inspiring our Future in Construction**". The aim of the event is to gather experts in the field of lean construction to both inspire, and challenge the industry to implement lean practices on their projects. Participants will have the opportunity to learn from others how they can leverage the benefits of lean concepts to deliver quality projects that are safer, faster and more profitable leading to increased stakeholder satisfaction and value for money.

Jones Engineering are involved at a number of different levels in this year's National Conference:-

- We have a trade stand at the event to showcase our continuous improvement and learnings at all levels throughout the group
- Our own Rob Hughes will be speaking in one of the presentation rooms about new initiatives in his area of geo surveying and laser scanning
- We are sponsoring one of the keynote speakers at the event Rafael Sacks Professor, Civil and Environmental Engineering, Technion – Israel Institute of Technology. He is the Vice-Dean for Graduate Studies and Research in the Faculty of Civil and Environmental Engineering, and he was Head of Structural Engineering and Construction Management from 2012-2015. Rafael's research focuses on the synergies of Building Information Modeling (BIM) and Lean Construction. Recent work at the Seskin Virtual Construction Lab at the Technion, which he leads, has included: development of BIM-enabled lean production control

Professor Rafael Sacks

systems; statement of the requirements for good work flow in construction and the Construction Flow Index; semantic enrichment of BIM models using machine-learning and rule-processing, with application to BIM interoperability, model acquisition from point-cloud data, and code-compliance checking. He is a co-author of the "BIM Handbook", currently in its 3rd edition, and the lead author of a new book on Lean and BIM implementation in construction, "Building Lean, Building BIM: Changing Construction the Tidhar Way". He has a rich record of journal publications and was awarded the ASCE Thomas Fitch Rowland Prize for research in construction management in 2016.

GOT A STORY TO TELL? ………..WELL, WHAT'S THE STORY BUD?

If anyone has information or news they want to share regarding innovations or Lean Principles on their site, or maybe you have an article or story you want to share. Please feel free to contact the LEAN Development Group at the email address below and we will be delighted to help.

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Catch-up Corner

JJ Cahill Shows us 5S in a van

Don't let Having the Right Tool for the Job Grind you Down
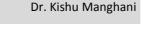
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Lean Management is an approach to running an organisation that supports the concept of continuous improvement, a long-term approach to work that systematically seeks to achieve small, incremental changes in processes in order to improve efficiency and quality.

Benefits of Quality Systems

The importance of properly established and managed quality control and quality assurance systems with their integral well-written SOPs and other quality documents for the achievement of Company business objectives cannot be ignored. They serve as a passport to success by assisting the Company to achieve high-quality processes, procedures, systems, and people, with eventual high-quality products and services and enhancement of the following:

- Customer satisfaction, and therefore, customer loyalty, repeat business and referral;
- Eliminating waste and the need for reworks;
- Operational results such as revenue, profitability and market share;
- Alignment of processes with achievement of better results;
- Understanding and motivation of employees toward the company quality policy and business;
- Confidence of interested parties in the effectiveness and efficiency of the company as demonstrated by the financial gains from company performance and reputation.

Dr. Kishu Manghani

Sprinkler Division

Sinead McCabe (ISFP) Receiving her voucher from Colin Walsh

Printer solutions

The folks in IT have been busy behind the scenes reviewing the suggestions that came in from you all on how to help eliminate printing documents to the wrong printer and they have agreed on the best solution………..

From now on our networked printers will all be set up so that you will have to release your print job by manually selecting it on the touchscreen of the printer.
If there are a number of print jobs in the queue, each one will be identified by your individual username. By selecting the username, the job will

start to print.
This will not prevent someone actually *sending* a document to the wrong printer, but it will stop documents being printed out in the wrong location, as the individual will realise their error when they go to their local printer to release it and find it's not on the list.
We had four suggestions sent in proposing that users could release print jobs by entering a PIN. These were the closest solutions to the one IT have decided to implement, so we put the names in a hat and picked out Sinead McCabe from Irish Sprinkler as the winner.

Jones Engineering

Procedures and checklists….do they help us?

1. Have you recently looked at the JEG Quality System Procedures?
2. Do you know where to find them?
3. Did you know they even existed?

If you answered "No" to any of the above then you need to keep reading

The Jones Engineering Group Quality Management System (QMS) is accredited to the ISO9001:2015 and establishes a framework for how our business manages its key processes.

The QMS assists our business in:
- Achieving greater consistency in the activities involved in providing services
- Reducing expensive mistakes
- Increasing efficiency by improving use of time and resources
- Improving customer satisfaction
- Managing growth more effectively by making it easier to integrate new employees
- Constantly improving our services, processes and systems

Over the coming months we will be focussing on a Quality System Procedure (QSP) or two, each month in "LEAN Times"; with a view to heightening employee awareness along with some practical implementation hints & tips.

There are 20 QSPs in total:

- QSP01 Control of Documentation & Records
- QSP02 IT Resource Management
- QSP03 Management Review Meeting
- QSP04 Manpower Training
- QSP05 Sprinkler Design, Installation & Commissioning
- QSP06 Estimating & Tender Submission
- QSP07 Start Up Review Meeting
- QSP08 Purchasing & Receipt of Materials
- QSP09 Subcontractor & Control
- QSP10 Planning & Site Management
- QSP11 Inspection & Test
- QSP12 Plant Control
- QSP13 Calibration of Test Equipment
- QSP14 Drawing Control
- QSP15 Minor Works & Maintenance
- QSP16 Non-conformance Reporting
- QSP17 Internal Quality Audits
- QSP18 Corrective Action
- QSP19 Estimating & Tender Submission, Bioenergy Project
- QSP20 Design Installation & Commissioning, Bioenergy Projects

Link to Quality Procedures

This month we are going to look at QSP1 & QSP14 as both topics are quite similar.

QSP1 Control of documentation & records

QSP14 Drawing control

Why control documentation and records?

If you've ever been asked to locate a critical document from an area where there is no system in place, you will be able to answer that easily…..it's painful! It takes ages, is really frustrating and wastes time that could be spent being more productive.

Standardised:-

QSP01 reminds us that we need to maintain control so that only current versions of documents are used and that forms are standardised across different group companies.

Not only does this make us look professional but it helps to standardise layouts where forms perform similar functions, ie. You get used to the look of a form from one project to the next and know how to complete it correctly.

Responsibility lies with the Quality Manager only for ensuring the system is in place and employees are aware of it. The Quality manager is not the person who generates and maintains QA records for individual projects; this falls to specific team members on each job site.

If we all do our bit we can achieve great things

Current version:-

The company's Quality System is maintained in electronic format on "Sharepoint". This means access is easy from any location as long as you have an internet connection.

If you copy and store a version of any document locally, you run the risk of it being updated on Sharepoint without you knowing.

For the same reason, all paper copies of documents are deemed to be uncontrolled.

Amendments:-

We are always looking for ways to improve the systems we operate, so we encourage any member of staff to propose amendments to any quality document. These will be reviewed by the Quality Manager and implemented once approved.

Archiving:-

Contract records need to be maintained for a period of 6 years (unless otherwise determined by the MD or Quality Manager)

6 years 6 years 6 years 6 years 6 years 6 years

So if you are given direction to "Clear the site" make sure you do not take this too literally.

All appropriate documents need to be placed in archive boxes and stored in Coolquay or in the case of O'Shea's electrical and Douglas calibration in Little Island. Each box is given a unique reference number

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and logged electronically for ease of location.

Due to the scale of records on some projects, it is preferable to scan and store electronic copies for the statutory duration.

This is a much more efficient alternative and should be encouraged where feasible.

QSP 14 Drawing Control

If there were no such things as design changes or errors then control of drawings would not be quite as critical, but unfortunately we have a bit to go until we get to that point.

Imagine the chaos on a project where drawings were released for fabrication or construction in an uncontrolled manner. Without an up to date drawing register for instance, Engineers or Foremen would not know what the current revision of a drawing should be…….many hours would be wasted installing systems that had been rerouted or worse still material specs changed due to a poorly managed distribution procedure.

← Bad system | Good system →

- Drg. received and logged on register
- Copy issued to all parties on distribution list
- Earlier revisions marked as "Superceded" and recalled/scrapped
- Field changes red-lined on drawing for handover documentation

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How checklists can help us!

Checklists save lives. They do. A few years ago patients would go to the hospital for an operation on a left knee and the doctor would operate on the right knee. A few years ago, medical staff would perform surgery and release the patient only later to discover that, when the body responded to an infection, someone had left a sponge behind! A few years ago patients were more likely to acquire a MRSA infection in a hospital than in everyday life. What has changed from a few years ago to now? Checklists. That's right—checklists. Today, medical staff at he best hospitals use checklists to ensure that they remember what they have learned. This is particularly important in repetitive situations. It is in these situations that we fall asleep—we get lazy—mistakes ensue. Patient safety depends on people who remember what they know.

Dr. Shingo reminds us forgetfulness is part of our human condition. Not that we forget forever. We think that because we *can* remember that we *will* remember. Yet, we all know that even a small distraction is enough for us to forget for the moment. Checklists are generally valuable in four situations:

1. When the person is inexperienced
2. When the operation is performed infrequently
3. When distractions are present
4. When there are significant negative consequences from performing improperly

Routine, repetitive and mind-numbing work is all around us. It can directly lead to an error that endangers us and others.

Practice:-

We can't use checklists without making them. Pick a task with some complication to it. Refresh your memory of the steps by performing the task. Once completed, write out the important steps. When satisfied that you have them all, go back to the beginning to identify and record for each step any points of attention. When satisfied, attempt to perform the task again by following your checklist. Make any necessary corrections to the checklist so that it represents successful completion of the task.

Hal Macomber & Calayde Davey
(The Pocket Sensei)