

CLIP

## A national M & E contractor used CLIP to make significant cost savings by improving the efficiency of their processes



*‘We have been extremely impressed with the CLIP project and what mutual benefits it can bring to SEC as our contractor, and ourselves in refocusing our staff on the way we approach this contract and ultimately reducing wastage in line with our corporate strategy. We were delighted to take an active part and look forward to seeing the results’*

*Alan Mills (left) of Hampshire County Council with Bob Hall of Southern Electric Contracting*

### THE PROJECT

Street lighting maintenance contract  
2002-2007 – Hampshire

**CLIENT:**

Hampshire County Council

**CONTRACTOR:**

Southern Electric Contracting

Andy Rhind-Tutt of Southern Electric Contracting (SEC) tells us how CLIP helped them to identify significant cost savings, and create a ‘working together’ partnership with Hampshire County Council (HCC).

### VIEW FROM THE CONTRACTOR

#### Background to the project

SEC is a mechanical & electrical contractor, and forms part of Scottish and Southern Energy. The company is the largest public street lighting maintenance contractor in the UK.

We have a strong quality and safety focus, and like to partner closely with our clients across every aspect of the business.

#### What attracted us to the CLIP programme

Our Chief Executive, Bob Hall had made contact with CLIP after hearing the benefits of using the programme. He then invited a CLIP engineer to

*By using CLIP...*

*‘It now only takes nine man hours to replace a column, instead of up to 22 hours. The savings are massive when you consider the number of columns we are responsible for maintaining’*

introduce the concept of 'lean construction' to the senior management team working on the Hampshire contract.

As a result, we held a partnering workshop with the CLIP engineer where we logically analysed the way we undertook our contracts. We quickly realised we could make big improvements by adopting 'lean working' through this new approach.

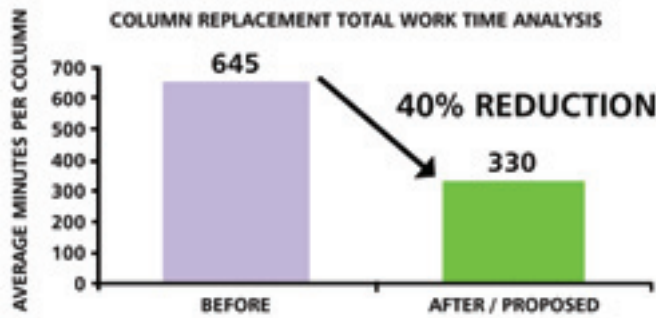
### What our aims & expectations were

Our five year contract with HCC is one of the largest street lighting maintenance contracts in the UK. It involves maintaining around 144,000 lighting units. We felt that using CLIP could really benefit both SEC and HCC through the contract, as it would allow us to improve the way we work together, and make mutual efficiency savings.

Our main aim was to develop a new 'radical approach' to street lighting maintenance, where we would look at every activity and see how it could be streamlined.

*“Through ‘working together’ with HCC and using the CLIP project we have been able to develop a ‘radical approach’ to street lighting maintenance. We took an open mind and a fresh look at every activity to see what changes could be made, and how efficient we could become. I am delighted with the progress to date”*

*Bob Hall of Southern Electric Contracting*



### We also expected CLIP to allow us to:

- Reduce the number of visits and amount of manpower required to replace a lighting unit
- Encourage a partnership with the client, so we always work as one team rather than two
- Reduce the overall cost of replacing a lighting unit and deliver better value to the client.

### How the CLIP process worked for us

To embrace the CLIP project, the Partnering Board at director level, which had been formed initially to move the contract into a partnership, created a 'Working Party'. It is made up of myself, our Partnering and CLIP Champion, Charles Stephens and Jim Pendrey, the Assistant Lighting Engineer from HCC. An experienced CLIP engineer joined the group to assist with implementing the whole process.

We started by looking in detail at each work type, and broke down the processes involved. We then identified which activities were wasteful, which were non-value adding, and which actually added value. We found a lot of waste, through travel to and from site, particularly during the replacement of a column and its associated fittings. Initially we agreed to focus just on this area, so we sat down and 'process mapped' each stage of the process, which we call 'ordered works'.

Between the client and us, we identified that we were making up to 10 visits to site. This meant the street light was often out of order for 25 days, and that we were digging up the same area of pavement on up to four different occasions.

Now, instead of having three specialist teams all going to site at different times, we have created a 'multi tasking' team made up of three operatives who all attend site at the same time. They take specialised vehicles and all the gear they need to get the job done quickly, in a minimum number of visits. We now track the improvements we make on each phase of the work using KPI graphs, which the whole team can view on a board at the main office.

By altering our processes we have improved the quality of the work, reduced the amount of waste and the impact we make on the environment, because we make fewer visits to site. By working closely with HCC we can also plan ahead so that their site visits coincide with ours.

We held regular workshops with the CLIP engineer to ensure everyone understood what we were trying to achieve. Thanks to the workshops the whole process has gone smoothly, improvements have been achieved and the CLIP process is now very much a part of the way we do things on this contract.

‘You need to approach CLIP with an open mind, and start by using it on just one job. I guarantee you will be impressed by the results. We were’

Andy Rhind-Tutt  
of Southern Electric Contracting



First CLIP workshop held at Potters Heron

## How we benefited from this initiative

As an example, on the ‘Ordered Works’ programme, we are able to reduce the site visits required to replace a street column from as many as 10 to two. So, it now only takes nine man hours to replace a column, instead of up to 22 hours. The savings are massive when you consider the number of columns we are responsible for maintaining. Because of this, we can now offer HCC more column replacements per annum for less cost.

We are in the process of moving both teams into one office to reduce duplication of work and improve communication. HCC have commented on the time savings this move will make for them as decisions will be made far quicker, and the relationship between the teams will improve. By forming the sub-groups, ownership of the improved ways of working has been grown within both organisations. This has also helped identify the best way HCC and SEC can work together.

It is still early days, but we foresee CLIP bringing significant cost savings for both parties for the remaining two years of the contract.

## How we plan to use the skills & lessons learned

Using our experience from the HCC contract, we can now ‘process map’ each activity on similar contracts that are already running. We have developed a spreadsheet that automatically works out what percentage of the work is waste, and what percentage is adding value for the client. We can then re-organise ourselves so that the work is completed more efficiently.

Getting CLIP set-up was a slow process, but now we know what big improvements are possible, we are planning to roll it out quicker onto other contracts.

You need to approach CLIP with an open mind, and start by using it on just one job. I guarantee you will be impressed by the results. We were.



SEC street lighting engineers working to repair a column

## LEARNING POINTS

- Set-up a working group involving senior directors, and appoint a ‘CLIP Champion’ who is committed to the initiative. This shows the rest of the team that CLIP is worth while, and helps communicate the benefits across the company.
- Get the client involved in the process. They can make valuable contributions and will appreciate the savings you can pass onto them.
- Make sure you record the lessons and knowledge learned from one project, and turn it into a practical system that can be used to benefit future contracts.
- Sit down and look at every process on a contract to see what adds value to the client and what doesn’t. Take the area with the most waste, and step by step look at ways to remove it from the process.
- Hold regular workshops with the CLIP engineer to ensure everyone understands what you are trying to achieve. This will help ensure CLIP becomes a part of the way you do things on a contract.
- Approach CLIP with an open mind, and don’t be afraid to develop a new ‘radical approach’ to a familiar process.

## JARGON BUSTING BOX

### ■ **7Ws – look for seven wastes that can never be added value:**

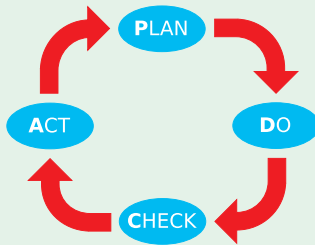
- Motion    ■ Transport
- Waiting    ■ Overproduction
- Defects    ■ Unnecessary inventory
- Inappropriate work or processing.

### ■ **5Cs – check these to lay the foundations for continuous improvement:**

- **Clear out** – separate the essential from the non-essential
- **Configure** – a place for everything, and everything in its place
- **Clean & check** – assess the current condition of the environment
- **Conformity** – ensure standard easily maintained
- **Custom & Practice** – ensure everyone follows the rules.

### ■ **THE PLAN-DO-CHECK-ACT (PDCA) CYCLE –**

a way of thinking which encourages continuous improvement



### ■ **THE CLIP – ‘standard structured approach’ – which is made up of four main stages:**

- **Pre-diagnostic** – setting the aims and training the team in lean tools and techniques
- **Diagnostic** – practically applying the tools to analyse the situation
- **Improvement activity** – looking at the data for opportunities to improve processes
- **Follow up** – identify barriers to success and set improvement actions in place.

### ■ **VISUAL CONTROL –**

a major part of the CLIP process is to use visual tools to display data, highlight improvements and record ideas. These include:

- **Key Performance Indicators** – are the measure of performance of activities that are critical to the success of an organisation
- **Pareto Chart** – a comparative bar chart that shows the number of defects for each chosen area of work, and the cumulative total of defects over the whole project
- **Fishbone Diagrams** – are used to identify the possible causes of problems. Start by defining the problem to be investigated and write it down. Then draw lines (bones) to represent each cause that runs into it. Finally you can brainstorm what is actually the cause of the problem
- **Priority Matrix** – a quadrant chart used to prioritise which improvement areas to focus on first. For example, you can place activities that will have a high impact at a low cost in one quadrant and focus on these first.

## GETTING HELP

### CONTACT DETAILS

Martin Watson  
CLIP Director  
BRE  
Garston  
Watford WD25 9XX  
01923 664638  
www.bre.co.uk  
www.constructingexcellence.org.uk/  
service/clip

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