

Collaborative Planning supports organisations to deliver under ECC

The 'more for less challenge'

The water industry is one of those heavily regulated sectors that undertakes large civil engineering improvement schemes. These schemes are no exception to the 'more for less challenge', where increasing efficiency and delivering value for money is key! The use of collaborative working techniques ensures that both supplier and client organisations' aspirations and objectives are aligned to help achieve and deliver improvements in Asset Management Plans (AMP) and efficiency targets.

To support this water industry contracts are let under the NEC3 Engineering and Construction Contract (ECC), NEC4 is coming in June this year (Contractors roll out the red carpet for NEC4). The ECC is a contract designed to facilitate collaboration and to stimulate good management. One way it does that is by focusing on the programme and using the programme directly in the assessment of compensation events. Unfortunately, in the construction industry the capacity to develop and maintain good programmes is often lacking.

Collaborative Planning

It's no surprise then, that a number of the UK's water companies have chosen to adopt the use of collaborative planning as an approach to help them deliver on their 5 – 10 year plans. The Collaborative planning approach drives the engineering consultants and contractor to work together in delivering design and construction services supporting their AMP's.

Bourton Group's consultancy team have been supporting the industries delivery on efficiency targets using Lean construction techniques and methodologies, particularly 'Collaborative Planning' methodologies. Collaborative Planning is a highly visual and dynamic method of delivering efficiencies through improving project and programme planning by collectively developing and then committing to a project plan with reduced schedule and extraction of risk.

Our role within specific projects, has been to assist all project members; design, site, engineers and subcontractors, in the use of Collaborative Planning and so develop a sustainable capability to enable the clients to drive their own efficiencies, for years to come.

This work is vital to ensure project teams are able to meet their ambitious efficiency, and in particular delivers measurable benefits in projects and programmes through:

- More accurate forecasting and improved early warning administration
- Early identification and mitigation of risks
- Reduced timescales for design and construction
- Cost saving

An example of one of our recent deployments:

Case Study

Implementing Collaborative Planning within the design function on a £2.2m investment scheme for a Rapid

Gravity filter with UK Water Company has so far helped realise a number of gains to aid exceed of efficiency targets:

- Approximately 15% cost reduction to date
- 30%-time reduction compared with target completion dates

The team initially supported the project lead through the design stage activities by facilitating the creation of a high level plan of key operations and milestones required to move the project onto site. Once created, the operations were sequenced by each team member and recognising the inputs from others achievable timescales were baselined. This provided clarity of plan and in order to bring forward planned completion enabled the movement of any 'buffer' time to the project end – effectively as increased terminal float.

The high level plan formed the base programme, vital when building a lower level of detail. Here operations were planned on a day-by-day basis with contributions from each member of the core team. This detailed plan was shared amongst all project team members and collective effort focussed on exploring how they could meet or exceed their own deadlines and so drive the programme beyond baseline expectations.

Alongside the plan itself a project board was used to track planned operations, enabling milestones and key procurement items in order to secure commitments and track future key opportunities, risks and actions.

The ECC Project Manager is part of these Collaborative Planning sessions meaning that when the formal monthly update to the programme is submitted for Project Manager and so acceptance can be given straight away.

The project has since successfully passed through the design stage and into construction where continued support was provided working with the site leader and site team creating a high level plan with multiple sub-contractors. This has been a good opportunity to ensure the project team and sub-contractors have visibility and understanding of the programme and are able to contribute throughout the construction stage to ensure project targets are achievable. The promotion of common objectives and inclusive environments for project teams, with all members jointly accountable for driving efficiencies has been very successful. Consistent information generated by collaborative planning sessions enables the use of simple communication tools such as the visual programme boards where progress is tracked and monitored using live dates at programme level has become common practice and helped drive team effort on reducing project risk and target schedules.

“Since joining us in October they have helped the team to reduce our projected total spend by £20,000 as well as create an environment where constructive challenge, parallel working and collaborative contribution is central to project planning. The methodology has helped the project team achieve efficiency gains as well as aid early identification, action and mitigation of risks which could have led to significant time delays on our project.”

Mike Timmington, Tamworth Site agent

Conclusion

Bourton Group has been working with the Construction Sector for over 10 years, helping to drive performance improvement against that Holy Trinity of measures; Cost, Quality and Delivery. Our methodologies help project team members understand the impact of interdependencies and their ideas and improvements have on the whole programme. Regular weekly reviews as well as day by day management enable this and continue to realise significant savings in both time and costs. Additional saving is expected over the next few years as the process becomes further imbedded into business as usual.



Arran McDonald, Senior
Consultant – August 2017

Arran has 20 years' experience of working in the field of improvement, the latter part specifically in the construction sector, where he has worked on a wide variety of projects in various sectors of the industry such as Housing (building, Estate management), Highways, Water (Clean and Waste), Rail (HS2), Education, Healthcare, prisons, nuclear, building refurbishments and regeneration projects to name a few.

Bourton Group has supported many businesses from a wide range of industries to implement Lean improvement techniques via tailored engagement programs.

We work collaboratively to deliver on efficiency objectives and targets, with returns on investment of over 20:1 being reported, along with wider benefits of reducing waste, decreasing time to complete activities and improvements to quality – all of which have been directly attributed to Lean.