

Construction projects – effective project management

A brief guide



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GET IN TOUCH

1. Introduction

Why have we created this guide?

At last you have the go ahead for your construction project – and the longed for better facilities for your school, academy or MAT are within sight.

Your team will need to plan ahead to allow enough time for the design, planning and construction work to be completed properly. Work that is rushed is likely to be unsafe and of poor quality.

You will need to write a “client brief” for your architect/designer and building contractor including as much information as you have about the project, along with the timescales, budget and any known hazards such as overhead cables and buried services.

And it is essential to communicate, cooperate and coordinate with your designer and contractor throughout to avoid anyone being harmed or unexpected costs arising because issues have not been thought through.

If you have any doubts, appointing a professional project management team will be money very well spent.

We hope this ebook will answer many of your questions!

The Surveyors to Education Team



“We chose the right partners in S2e, who delivered exceptional value for money on a complex project within very short time scales.”

*Ben Elliot, Director of Corporate Services
Hingham Lane School*

2. Cost vs time vs quality analysis

The golden triangle

Carry out a cost vs time vs quality analysis to secure the best outcome for your school, academy or MAT. These three elements are often known as a project's "golden triangle".

Effective Project Management

When you are improving or replacing dilapidated buildings you will be seeking to create optimal learning environments that benefit your pupils and teachers.

You will need to minimise the disruption of a building programme that could have a negative impact on their concentration if carried out during term time. And you will be aiming for high quality, energy efficiency and low maintenance costs.

The "golden triangle" is about balance, but priorities will be specific to each project.

Seeking professional advice can help you get the equation right.

This a role that S2e can fulfil.



3 elements of the 'golden triangle'

- Quality
- Timeframe
- Cost constraints

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3. Appointing a Principal Designer

The importance of effective project management

Appointing a Project Manager – also known as a Principal Designer – is a vital step to ensuring your project will be on time and budget, and ready for the new school term.

The main pillars of a project management service are:

- Architectural design
- Planning applications
- Feasibility studies
- Mechanical & electrical design
- Structural engineering
- Cost planning
- Construction (design & management)
- Regulation compliance. See our ebook.

[Construction projects – know your legal duties](#)

The Principal Designer will manage all contractors and assist your academy or MAT through every stage of the construction process, providing strategic and operational support against cost, quality, time and health & safety criteria.

Focused solely on the academy and MAT sector, S2e has experienced Principal Designers ready to project manage your construction work from inception through to completion.




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4. Contractor pricing

Comparing like for like between tenders

When you put your project out to tender, you should be aware of the following:

- **The principles of contractor pricing**
Contractors price their work as a markup on various services and materials in order to cover factors such as labour, insurance and overhead for office costs and operations.
- **Exclusions**
You should be sure you understand what is included and what is excluded, to avoid unexpected bills at a later stage.
- **Cost breakdown**
A detailed cost breakdown will reassure you that you are getting the best value for money, reveal any hidden charges and give you visibility as to the major expenses involved in your project.
- **A framework to ensure fair pricing**
This will allow you to compare like with like when contractors tender, so you can double check what each is offering at what cost.



Prices obtained from contracts must include:

- Exclusions
- Detailed cost breakdown
- Framework to ensure fair pricing between contractors

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5. Insisting on a contract


Avoid being let down

You should insist that your contractors sign a contract.

Trusting a local builder informally or relying on an estimate provided at tender are mistakes made by too many organisations commissioning construction work.

Taking legal advice from professionals with expertise in academy building projects is essential.

*See also “Appointing a Contract Administrator regulated by RICS (Royal Institute of Chartered Surveyors)” in our ebook [Construction projects – know your legal duties](#).



What your contract should cover:

- Disputes
- Workmanship
- Defects
- Payment terms

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6. Monitoring progress

Ensure building compliance and peace of mind

Put in place robust monitoring of work on site so you can be confident the contractor is adhering to current regulations and installing each element correctly.

While you and your colleagues are getting on with the day-to-day responsibilities of running your school, academy or MAT in the best interests of your pupils, staff and multiple other stakeholders, you are unlikely to have time to supervise every aspect of the construction work.

You are also unlikely to have the technical expertise to judge if the contractors are performing as they should.

Yet you could be liable for any breach in regulations, with potentially devastating safety, cost, legal and reputational consequences.

Handing this task over to a Principal Designer and an experienced project management team therefore provides both guaranteed compliance and peace of mind.



“S2e helped us address all the major pressing issues (safety & regulations compliances) despite some curveballs such as uncovering an archaeological site”

*Anne Marie Willett, Trust Operations Manager
Thomas Estley Community College*

7. Reviewing workmanship

Avoid defects that undermine expectations

Have a specialist on hand to review quality of workmanship and look for defects.

After all the planning, fundraising, design work and compliance considerations that have gone into your project, you do not want it undermined by faults.

Rectifying defects can cause delays, involve you in time-consuming disputes, incur additional costs and leave you with teaching and learning spaces that do not measure up to expectations.

Again, having a professional project management team on your side will alleviate these difficulties.



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8. Cost control


Manage project delivery to your timescale

You can keep cost control tight by managing project variations/omissions and making sure the contractor has priced for all elements of work at the outset.

A cost plan is a critical part of any construction project, determining the practicality of a project and putting the controls in place to manage its delivery to your timescale.

Cost planning will not only tell you how much a project will cost but when the expected expenses will occur, important information for obtaining finance and determining profitability.

All S2e surveyors are RICS qualified and expert in developing detailed cost estimates and plans as part of a fully integrated capital projects delivery service.



Key elements of a cost plan are:

- Initial cost appraisal
- Pre-tender estimate
- Tender pricing document
- Contract sum

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9. Compiling an Operations Manual

Avoid defects that undermine expectations

An Operations and Maintenance Manual, or O&M Manual, compiles all the information on operation, maintenance, decommission and demolition that a building's users will need. Although an O&M is not mandatory by law, it is often required after a project is completed or for contractor handoffs.

Your O&M will help people using your new or renovated building to reliably and efficiently carry out their tasks with consistent results. A good manual will reduce human error and inform everyone precisely what they are responsible for and who they are responsible to.

Typical contents of an O&M manual include:

- Details of project and type of construction
- As-built drawings in an agreed format
- Services plans
- Asset register
- Instructions for operation and maintenance
- Manufacturers' instructions
- Copies of guarantees and warranties
- Fire, gas and electrical certificates
- Commissioning and testing results
- Completion certificates
- Planned maintenance schedule



"We are extremely pleased we had S2e on board to deliver these difficult projects on time and within budget. There was minimal disruption, and they showed the high standards and attention to detail they are so widely renowned for."

Chris Punter, Estates Director, East Midlands Education Trust

10. In summary

Proven project management experience

Project managing construction work is no easy task.

As qualified chartered building surveyors specialising in education, S2e has proven project management expertise built over many years. Our experience helps make every project stress free and ensures you get the best value for every penny you invest in the future of your academy or MAT.

From new classroom blocks to extended changing facilities and upgraded sports halls, we will work alongside you to minimise disruption and risk to pupils, staff and visitors.

Through effective project management we manage projects big or small to meet your budget and timeframe.

If you would like to discuss any of the information in this ebook or have any questions, please contact us using the details below and we will be delighted to help.

The Surveyors to Education Team

“S2e have provided our MAT with excellent service. They are always available; communications are unfailingly smooth, and we have complete trust in their expertise as they manage the considerable challenges that can arise with our 31 academies.

Nothing has been too much trouble for them.”

*Duncan Mills, CEO
Peterborough Diocese MAT*

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