

1. Company Policies

1.1 Project Control & Methodology

Upon award of any project a Contract Commencement and Handover Meeting is held internally where the project team is confirmed and a Project Plan is developed. Under the leadership of an experienced Contracts Manager the following aspects of the plan are set-up:

Construction Program

The construction program is developed and from that a trade letting schedule is agreed. This schedule shows all the trades, when they are required on site and confirms the priority for the Quantity Surveyor to engage these trade sub-contractors. In developing the program, a construction methodology is confirmed and long lead time equipment or materials that are required, are identified, so that orders can be placed on time.

Trade Budgets

While the contract program is being developed the Quantity Surveyor sets up the trade budgets based on the schedule of quantities and the trade summary as provided in the tender. The budgets need to be in place prior to the award of the sub-contract packages.

Site Establishment Plan

The site manager is typically charged with compiling a site establishment plan. This plan confirms the site fencing or hoarding requirements, scaffold requirements, temporary site accommodation and temporary services. Crane requirements are also identified. Usually the site manager will also make contact with the local regional authority to establish their requirements with regard to traffic and pedestrian management around the site.

Health and Safety Plan

In line with our company Health & Safety policy, a site specific plan is also developed to identify hazards that will be encountered during the works and how these are to be managed. Task analyses are also developed for any notifiable works as required under the Act so that safe working practices are adopted. Site induction and evacuation procedures are also established.

Quality Control Plan

A project quality plan is set up prior to major work taking place on site. This plan identifies specific details or finishes that require special attention. These are typically structural steel and precast concrete details, window and waterproofing details and specialist finishes especially those in large public or important spaces. The plan also identifies trades requiring shop drawings and as-built records that need to be logged during construction.

Through the use of a structured approach as outlined above we have successfully delivered several significant projects on time, within budget and to the standard required by our Clients.

1.1.1 Brief Methodology

Each project is carefully controlled by key personnel whose input is utilised where it will add most value for our clients. Our key people in turn possess the technical excellence, experience and construction industry knowledge to get the project completed in accordance with our company promise of delivering quality construction on time.

Our project manager will provide a critical path programme at commencement and report against this programme on a monthly basis while issuing fortnightly micro-programmes for all site operatives. We have the experience and resource capability to manage and maintain critical path time-frames.

Our quantity surveyor will provide a cash flow in line with the agreed critical path contract programme and provide financial reports on a monthly basis covering variations (positive or negative) and a summary of variation prices results. Our philosophy is no surprises and transparency at all times.

The Watts & Hughes project manager will implement a full Quality Assurance Programme at commencement and report on all quality issues inclusive of inspections undertaken. Samples and/or prototypes can be provided where necessary.

With modern technology communication is much easier to manage with remote clients and consultants by the use of e-mail, photographs and scope for more personal interaction.

1.2 Quality Assurance

Contract Quality Plan

Watts & Hughes recognise quality, along with safety, programme and cost as one of the essential elements required for the satisfactory outcome of any project.

In this regard we employ a range of quality initiation, assessment, monitoring and completions forms, all to ISO standard.

Each project has a Contract Quality Plan (WAT 70/40) prepared jointly by the Contract Manager and respective Project Manager prior to the commencement of any works on site. The completed Contract Quality Plan is reviewed and signed by the company Construction Director, Mr. Mark Gutry before implementation and is then monitored throughout the project by Watts & Hughes's in-house ISO consultant. A copy of this form can be supplied on request.

In addition individual items or trades are identified at the start of the project for special consideration or attention with regard to quality. These trades are monitored as required during the course of the works and any necessary corrective action taken immediately. All identified works are subject to a final review and sign off for compliance and acceptability.

As far as possible, remedial items are attended to during the course of the work so that there is no backlog to correct upon completion. Using our quality control procedures we are able to keep remedial items to a minimum and any significant items are highlighted, as they occur, and are dealt with as soon as possible so that they do not become major concerns or problems.

Watts & Hughes Construction recognise that providing a quality project to the Client is a major ingredient in the successful completion of all our projects. In this regard all Watts & Hughes personnel, both on and off site, associated with the projects bear a responsibility to consistently produce the best possible quality in all the works they do. The Project Contract Manager is ultimately responsible for quality control, implementation, monitoring and delivery.

We also use a set of ISO complainant forms during the course of each project which become our site specific quality control manual. The forms are available to be viewed upon request.

Quality Control Manual

Watts & Hughes uses standard Quality Control Documentation on all our sites which are amended for use with each new project. A copy of our standard document can be provided on request.

Code of Compliance

During the works there will be inspections by the building inspector in line with the inspection requirements as set out in the building consent documents.

Once the staged works are nearing completion, a meeting will be requested with the building inspector to ascertain exactly what written information and as-built drawings are required for code compliance or

public use certificate. A site walk is also requested to ascertain any practical requirements the inspector may have for compliance.

Project Information Folder

At project completion a folder is prepared for the Client containing copies of all as-built information, service manuals for items of plant installed, copies of all warranties and general information that may be useful after the project is complete.

1.3 Health & Safety

Health and safety ranks very highly with Watts & Hughes Construction on all our projects. We have a Safety Management Plan in force as well as a safety booklet which is provided to each employee. All employees are given safety training through Site Safe and six-weekly Supervisors' Safety Meetings are held. We employ the services of an independent external Safety Auditor, Karen Wells from Narek Consulting to perform regular safety audits on all our projects and if there are issues they are addressed immediately.

Hazard identification is undertaken prior to the commencement of each project and we have an Emergency Plan which is amended to be project-specific. All staff receive training in emergency procedures and emergency drills are carried out every six months.

All serious non-injury accidents or accidents which result in harm to employees are investigated and the results communicated to the employee and the engineer.

Records are kept for fatalities, serious harm, accidents (including near misses), hazards as well as Material Safety Data Sheets (MSDS). Over the past five years Watts & Hughes Construction has had no fatalities, injuries resulting in "no lost time", lost days from machinery failure or accidents which have resulted in environmental damage or pollution. Our "lost days from injury" information is currently being updated and will be supplied pending the success of our submission. During this time we have also not been cautioned or prosecuted by OSH or any other enforcement authority.

1.4 Environmental Policy

1.4.1 Green Star Initiatives

Watts & Hughes would encourage the following specific design strategies be reviewed and or considered if not already incorporated into the final design:

- Natural climate control (orientation, natural light, ventilation, solar control, building form)
- Optimal levels of insulation, avoiding heat seepage and thermal bridging and use of thermal mass
- Good interior air quality (ventilation, non-toxic materials)
- Healthy electro magnetic environment
- Energy efficient electrical equipment and services to limit demand (plant, services, lighting controls and equipment)
- Maximum use of onsite renewable energy resources (eg solar water heating, grid connected photovoltaic system, wind power, biomass, earth coupled heating and cooling)
- Use of materials from sustainable sources wherever possible (eg all timber can be sustainably resourced)
- Active recycling of solid and liquid wastes (biological sewage treatment and wetland purification)
- Collection and re-use of rainwater and recycling of grey-water and use of water saving devices
- Design for durability, adaptability and re-use
- Use of recycled building materials and components

- Minimizing construction waste and strategies for recycling the waste that is unavoidable
- Design for eventual recycling of the building, components and materials
- Onsite composting for use in edible landscape

ESD procedures to be implemented by Watts & Hughes during construction would be based on the REBRI guide based on the three R's

REDUCE, REUSE, RECYCLE

Examples of Procedures

- Identify components from existing building for reuse
- Dismantle rather than demolish
- Protect materials for salvage
- Provide a waste storage area with multiple skips clearly labelled for separation and recycling
- Where practical order pre-cut materials to avoid waste
- Utilise mobile crushing plant for disposing of concrete waste/demolition material

Watts & Hughes would promote implementation of the REBRI Guidelines for all trades to foster environmental awareness and remove waste.

Good Site Management to Avoid Waste

If a building site is well managed and tidy, materials are less likely to get damaged and workers can work to be more efficient with materials. This leads to savings in both wastes and costs:

- Maintain a tidy site—a tidy site means that materials are less likely to be damaged or lost.
- Train staff and contractors during induction and team meetings.
- Have designated cutting or preparation areas for timber, joinery, cladding, tiling etc and store the off cuts in a single location for easy access and reuse (see guidelines above). Staff and contractors are more likely to reuse off cuts if they are easily found and stored separately from other wastes. Provide signage that the waste is for reuse not disposal.
- Protect new materials from damage, weather etc.
- Have a single waste storage area with clean signage on how to sort and store recyclables.

Training and Communications

- Waste should form part of the usual site communication and training such as during the site induction and during tool box meetings.
- Develop an induction sheet to explain the waste management system or create a waste section in your regular induction information.
- Let people know who to approach if they have a problem, idea or other suggestion about waste.
- Waste reduction could be a regular agenda item at toolbox meetings and project management meetings with the client and design team.
- Use clean signage around the site to explain the waste management system. Some examples are:
 - using the hazard identification board
 - staff notice board
 - signage on bins and at the waste storage area
 - signs on entrances
- Shout morning tea, drinks at the end of the project or provide other incentives to meet waste reduction targets.

New Materials Storage and Handling

- Have a designated area for unloading and storing new materials.
- Materials should be stored under cover to guard against damage from weather.
- Make sure materials are stored away from vehicles and driveways.
- Put signage up if it helps.
- Order delivery of materials as needed to reduce the time they are stored on site and minimise the chances of wastage from damage and unnecessary handling i.e. have fragile fixtures delivered and installed as close as possible to completion date.
- Check that packaging adequately protects the goods i.e. keeps them dry and dust free during storage.
- Check quality, condition and quality on delivery. Report any discrepancies immediately and send unwanted products back to the supplier.
- Reject inferior goods if their quality will result in additional waste. Send them back to the supplier.
- Report careless delivery staff to the supplier.

Green Star Accreditation Training

We currently have two staff members who are completing the Green Star Accreditation training and we have one staff member who is an Accredited Green Star Professional.