



Faculty of Engineering
Department of Architecture

Professional Practice

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M.S.C. Madyan Rashan

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Ethics and Professional Practice



Course Reading List and References:

- **The Architect's Handbook of Professional Practice**
by R. L. Hayes, Ph.D., AIA Editor-in-Chief

► Contractors

- The contractor, or constructor, is at the hub of a complex construction industry.
- Contractors are firms which differ greatly in their size and capabilities.





Contractors

- ▶ Traditionally, the contractor is chosen by competitive tender having priced either a specification and drawings or a bill of quantities and drawings.
- ▶ Alternatively, work may have been negotiated with a preferred contractor.
- ▶ In both instances an architect has been engaged by the client. Today the procurement processes and the contractual arrangements entered into are many and varied.



Contractors

- ▶ Sub-contractors, as their name suggests, are businesses to whom the contractor sub-lets its work.
- ▶ When work is sub-let it is delegated to another with the contractor remaining liable to the client (or 'employer') for the performance of the sub-contractor (e.g. defects in the sub-contracted works) under the building contract.



Contractors

- ▶ In general terms work will be sub-let in one of two ways. **First**, it may be the specific wish of the architect, employer or other member of the design team that a certain facet of the work is to be carried out by a particular company.
- ▶ This may be for a number of reasons that could include a particular expertise, quality based on past performance or simply price.

► Contractors

- **Second**, The choice of sub-contractor to undertake the work could be left to the contractor.
- Such a sub-contractor is known as a 'domestic' sub-contractor; servant of the contractor or a part of the contractor's 'household'.
- Under the standard forms an architect has no power to object to any names put forward by the contractor as sub-contractors.



Contractors

- Their only power might be, in given circumstances, to object to that particular facet of the works being sub-let on the grounds that it was always expected or required that it would be undertaken by the contractor.

► Consultants

► Architects

- Architects are usually the principal or lead designers on a building project and in many cases the lead consultant. They have the difficult task of translating a client's ideas into an acceptable design and then into working drawings.
- For business purposes no one can call themselves an architect in the United Kingdom unless they are on the register maintained by the Architects' Registration Board (ARB).

► Consultants

► Architects

- The list of duties identified by Hudson, in the last edition to be edited by him of *Hudson's Building Contracts* (1926), is still considered relevant today⁸ and are set out below.
- To advise and consult with the employer (not as a lawyer) as to any limitation which may exist as to the use of the land to be built on, either by restrictive covenants or by the rights of adjoining owners or the public over the land, or by statutes and by-laws affecting the works to be executed.
- To examine the site, sub-soil and surroundings.
- To consult with and advise the employer as to the proposed work.

► Consultants

► Architects

- To prepare sketch plans and a specification having regard to all the conditions which exist and to submit them to the employer for approval, with an estimate of the probable cost, if requested.
- To elaborate and, if necessary, modify or amend the sketch plans as he may be instructed and prepare working drawings and a specification or specifications.

► Consultants

► Architects

- To consult with and advise the employer as to obtaining tenders, whether by invitation or by advertisement, and as to the necessity or otherwise of employing a quantity surveyor (Engineers do not so often employ a quantity surveyor).
- To supply the builder with copies of the contract drawings and specification, supply such further drawings and give such instructions as may be necessary, supervise the work, and see that the contractor performs the contract, and advise the employer if he commits any serious breach thereof.

► Consultants

► Architects

- It should be noted that usually architects inspect, rather than supervise, work; something which the courts have endorsed.
- Architects must have a good practical knowledge of building and allied trades, and must have at least a working knowledge of the more specialised aspects of building, such as mechanical and electrical engineering services.

► Consultants

► **Quantity surveyors/cost managers**

- The work and services provided by the quantity surveyor might be described as the financial management of the project, whether it is on behalf of the client or the contractor.
- Traditionally, certainly during the early part of the last century, quantity surveyors were employed to prepare bills of quantities for building projects.
- Their role was constrained to a specific but important part of the building process.

Quantity surveyors/cost managers

Today the work of the quantity surveyor can be summarised briefly as follows:

- ▶ preliminary cost advice
- ▶ cost planning including investment appraisal and whole life costing
- ▶ value management or engineering
- ▶ risk analysis
- ▶ procurement and tendering procedures
- ▶ contract documentation
- ▶ tender evaluation
- ▶ cash flow forecasting, financial reporting and interim valuations
- ▶ final accounting and advice on contractual claims and disputes
- ▶ cost advice during use/occupation by the client
- ▶ technical auditing.



Other consultants

- ▶ The other members of the design team who may be involved with a project could include any combination of the following:
 - ▶ structural engineer
 - ▶ building services engineer
 - ▶ landscape consultant
 - ▶ specialist consultants.

Clerk of works

- ▶ The clerk of works is sometimes employed as an inspector of the works during construction, either directly by the client or through the architect.
- ▶ Clerks of works are responsible for checking that the materials and workmanship conform to the specification outlined in the contract documents.
- ▶ They may be, albeit rarely, authorised to issue instructions to the contractor; under the forms of contract their powers do not extend to the issue of instructions.

Clerk of works

- The clerk of works is usually under the direction of the architect and, if the clerk of works is appointed by the architect, the architect is responsible for the clerk of works' actions. However, in most instances, the client appoints the clerk of works and is responsible for the clerk of works' actions.

Construction industry bodies

► Professional organisations

► Members of the building team all have their professional organisations that act as learned societies with libraries, research facilities and internet websites for members.

► Architects

► Royal Institute of British Architects (RIBA) (www.architecture.com)
► Royal Incorporation of Architects in Scotland (RIAS) (www.rias.org.uk)

► Project Managers

► Association for Project Management (APM) (www.apm.org.uk)

Employment Opportunities

- ▶ Many years ago, most architects were employed either in private practice or in local government.
- ▶ There were a relatively small number of architects employed in other areas, but they were the minority.
- ▶ One of the great advantages of an architectural education has always been that, because it is so broadly based, the architect has the chance to examine in some detail a great many employment possibilities.

► Private practice

- An architect will opt for private practice for many reasons:
- ***Because the type of work is likely to be varied***
- ***Because of the particular type of work***
- ***The opportunity to become involved***
- ***The opportunity to take responsibility***
- ***The opportunity for advancement***
- ***Satisfaction***



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