



## **Public Buildings Committee**

Practice Note 10

### **REVALUATION 2005**

#### **FIRE STATIONS**

#### **1.0 INTRODUCTION**

1.1 This practice note deals with the valuation of Fire Stations currently occupied by Local Authorities and Joint Fire Boards.

#### **2.0 BASIS OF VALUATION**

2.1 The subjects in this practice note should be valued on the Contractor's Basis, with the unit cost rate being applied to the gross external area of the buildings.

2.2 There are 3 main elements in the valuation of these subjects: -

1. **Building Cost**
2. **External Works Cost**
3. **Site Value**

The building and external works costs have been analysed to a £2m contract size and have been adjusted to the Scottish mean location factor. Professional fees have been excluded.

The valuation procedure to be followed is as stated in Basic Principles Practice Note 2 on Contractor's Basis Valuations and Public Buildings Practice Note 4 on External Work Costs, Allowances and Land Values.

#### **2.3 Elements of Valuation**

##### **2.3.1 Building Cost**

This is derived from the unit cost rate having regard to the quality of the construction and the finish. The rates to be applied are shown in section 4.0 below.

### 2.3.2 External Work Costs

Public Buildings Committee Practice Note 4 on External Works Costs, Allowances and Land Values should be referred to for the rates to be applied.

In the absence of necessary detail being available it is recommended that an overall rate of £50 per square metre be applied to the area of the fire station site. (Exclusive of building solum). This reflects the exceptional external works found at fire stations.

As a check, the value of the external works is on average approximately 33% of the building cost.

### 2.3.3 Site Value

The site value should be based on local evidence and the appropriate rate applied to the whole site.

In the absence of any local evidence, a rate of £10 m<sup>2</sup> - £50 m<sup>2</sup> may be used for sites (outwith city centres).

## 3.0 SPECIFICATION

### 3.1 General

Large stations are normally permanently manned and comprise Appliance Rooms, Watch Rooms, Mess Rooms, Offices, Lecture Rooms, Tower designed for both hose drying and drill purposes, Smoke Chamber, Dormitories, Recreation Rooms, Plant and Yard. They are generally found in large towns or cities.

Small stations are normally in a range of 150-300 m<sup>2</sup>, not permanently manned, with Appliance Room(s), Watch Room, Muster Bay, Lecture Room, Toilet, Hose/Drill Tower, Plant and Yard.

### 3.2. Categorisation

Fire stations can be divided into two types depending on the standard of construction and finish: - "Quality" and "Basic"

#### 3.2.1 Quality Specification

A typical "Quality" specification has an Appliance Room of steel-framed construction with 11" cavity brick wall infill, finished externally with dry dash and with decorative features such as facing brick, synthetic or natural stone and moulded acrylic panelling, etc. More recently, however, Appliance Rooms may have 11" cavity load bearing walls. Internal walls are generally fully tiled, partly terrazzo or finished with facing brick.

Roofs are designed to provide unencumbered open area. The

construction can be reinforced concrete units lined internally with tiles, parana pine or similar hardwood lining, pre-stressed single span frame infilled with siporex beams and finished with 3-ply bituminous felt and mineral chips or, more recently, traditional style double pitched roof construction (sometimes incorporating steel beams to cope with wide spans) with tile or slate externally and plasterboard or acoustic tile ceilings.

Floors may be either granolithic or concrete finished with quarry tiles or terracotta and laid with non-slip tracks.

Average wallhead height is normally 5 metres.

Other features include fluorescent tube lighting, central heating and electrically operated up and over doors.

"Quality" ancillary accommodation (Watch Rooms, Mess Rooms, Offices, Lecture Rooms, Dormitories, Recreation Rooms, etc) has a similar external wall specification to that of an equivalent Appliance Room. Internally, the walls are generally finished with plaster, with parts faced with glazed tiles, timber panelling or facing brick.

Floor may be finished with quarry tiles, polished hardwood, vinyl tiles or carpet, etc.

Roofs may be traditional double pitched as before or of aluminium decking with built-up roofing felt finish or similar. Roof linings may be of plasterboard, timber lining or tiles.

Other features include first class central heating, air conditioning, good natural light and good sanitary fittings.

### **3.2.2 Basic Specification**

A typical "Basic" specification has an Appliance Room of steel framed construction or, alternatively, 11" cavity brick load bearing walls. Walls roughcast externally and spray-painted internally.

Roofs may be pre-stressed or reinforced concrete, finished externally with 3-ply bituminous felt. Plasterboard or polystyrene tiled ceilings.

Floors concrete or granolithic only.

Average wallhead 5 metres.

Adequate lighting and minimum heating.

Little or no decorative features.

"Basic" ancillary accommodation (Watch Rooms, Mess Rooms, Offices, etc) lacks decorative features or quality fittings.

### **3.3 Pertinents**

There may be the following pertinents: -

#### **3.3.1. Workshops**

Single storey, 11" cavity brick, dry dash externally and plastered internally. Flat felt or concrete roof, concrete and granolithic floor, good natural lighting, minimum heating and fluorescent lighting. Average height 3 metres.

#### **3.3.2. Stores**

Specification as for workshops but little or no natural lighting or heating. Average height 3 metres.

#### **3.3.3. Lock-Ups**

Brick or "Marley" type construction.

#### **3.3.4. Wash Bays**

Generally an extension to an Appliance Room. Canopy, open all round, varying constructions.

#### **3.3.5. Hose/Drill Towers/Training Buildings**

The term "Hose" Tower is somewhat of a misnomer in these days of "self-drying" hoses, which require no hanging. However, all towers are still actively used for "Drill" and some of the most recently constructed may be attached to specialised Training Buildings e.g. Kilmarnock and Maryhill Road, Glasgow. There are two common types of tower, i.e. brick built and tubular steel construction. The brick built version may include features for "Drill" purposes such as internal platforms, window openings, balconies, etc. Steel towers are open structures of varying complexity.

A recent development has been the erection of specialist training buildings at some larger fire stations. These vary greatly in nature and use. It is not possible to give a standard specification. Some are used for breathing apparatus training and can be basic domestic type structures that are flooded with non-toxic smoke. A more sophisticated and expensive building of type of building is used for realistic training for fires. These buildings are more expensive as they have to be resistant to fire. In two known cases demountable steel containers have been bolted together to form a training unit.

#### **3.3.6. Forecourt and Surfaced Yard**

These vary but are normally laid to a high standard incorporating heavy

duty concrete or tarmacadam specifications to cope with the manoeuvring of fire tenders, etc.

### 3.3.7. **Boundary Walls, Fences, Landscaping, Ornamental & Unsurfaced Areas**

These will vary substantially dependent on the specific site.

### 3.3.8. **Fuel Pumps, Fuel Tanks, Water Tanks & Other Plant**

Such items may be within or outwith buildings and may be above ground or underground. Careful consideration as to their rateability will be necessary in terms of Plant and Machinery Legislation. (Obvious candidates for valuation are underground water and fuel tanks.)

## 4.0 **COST RATES**

4.1 The following cost rates should be used to arrive at the Estimated Replacement Cost of Fire Stations.

Reference is made to the Scottish Assessors' Association/Valuation Office Agency Rating Cost Guide, (Plant & Machinery) where necessary.

The rates should be adjusted for: -

**Contract size** as detailed in Appendix 3 of the Basic Principles Practice Note 2 on Contractor's Basis Valuation.

**Professional fees** as detailed in Section 7.4 of the Basic Principles Practice Note 2 on Contractor's Basis Valuation.

### 4.2 **"Quality" Stations**

Approximate Cost per m<sup>2</sup> (GEA) **£900**

### 4.3 **"Basic" Stations**

Approximate Cost per m<sup>2</sup> (GEA) **£740**

### 4.4 **Workshops**

Approximate Cost per m<sup>2</sup> (GEA) **£400**

### 4.5 **Stores**

Approximate Cost per m<sup>2</sup> (GEA) **£360**

### 4.6 **Lock-Ups**

Costs may range from **£1600 to £3250** for Marley-type construction to

good quality brick construction for lock-ups in ranges, each unit being 15/16 square metres over walls

#### **4.7 Wash Bays**

Open all round

Approximate Cost per m<sup>2</sup> (GEA) **£250**

Those which are open ended extensions to the appliance room should be valued having regard to the rate applied to the fire station building, with adjustment to reflect lack of wall/walls.

#### **4.8 Hose/Drill Towers/Specialised Training Buildings**

Towers - Approximate Cost per m (height) **£1700**

Specialised Training Buildings  
(E.g. Kilmarnock & Maryhill Road,  
Glasgow)

Consult Actual Costs  
(N.B. The evidence available  
suggests that they can cost  
More than fire station buildings.)

#### **4.9 Fuel Tanks, Water Tanks & Other Plant**

Consult Rating Cost Guide (add the appropriate addition for fees).

### **5.0 AGE & OBSOLESCENCE**

Age and obsolescence allowances should be applied in accordance with the tables in Basic Principles Report 2 and Public Buildings Practice Note 4.

### **6.0 DECAPITALISATION RATE**

The appropriate decapitalisation rate should be applied.