

Revaluation 2023

Public Buildings Committee

Practice Note 14 Valuation of River Gauging Stations

1.0 Introduction

- 1.1 This Practice Note deals with the valuation of river gauging stations occupied by Scottish Environment Protection Agency (SEPA), Government Departments, Universities and Colleges. Gauging stations occupied by Hydro Electric Boards and Water Authorities and used for operational purposes should not be entered in the local Roll.
- 1.2 Gauging stations are designed to monitor the state of the waterway on which they are located and deliver flood warning, water scarcity, flood risk assessment, flood defence design, climate change assessment and regulation activities. They house equipment which will automatically record river levels, flow, temperature, pollution, etc.
- 1.3 The majority of gauging stations are operated by SEPA. Details of gauging stations operated by other bodies may be available from SEPA.
- 1.4 Historically, the most common gauging stations operated by SEPA comprise a small hut on the riverbank over a vertical concrete well, connected by horizontal pipes to the river. Water enters the well and variations in level, etc. can be recorded on instruments in the hut. In recent years advances in technology have allowed smaller, simpler installations which do not require the well. Many have a cable extending over the river from which instruments can be suspended to measure mid-river flow, etc.

SEPA stations can be divided into various categories as detailed in section 5.0 below.

2.0 Basis of Valuation

- 2.1 Subjects covered by this Practice Note are valued on the Contractor's Basis.

3.0 Survey and Measurement

- 3.1 Building areas should be calculated on a gross external basis (GEA).

4.0 Valuation

- 4.1 Valuations should be carried out with reference to the SAA Basic Principles Committee Practice Note 2 (Contractor's Basis Valuations).
- 4.2 Due to the size and nature of river gauging stations the recommended unit cost rates include adjustment for contract size, professional fees and external works.

5.0 Estimated Replacement Cost (ERC)

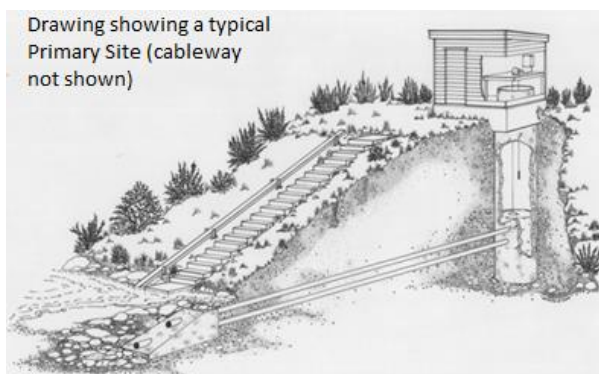
- 5.1 Due to the considerable degree of civil works involved in construction and the individual nature of each location, actual construction costs may vary considerably. It is therefore recommended that these actual costs be used where available, adjusted as necessary to April 2022 levels.

In cases where no costs are available, comparison should be made with similar stations where costs are known and appropriate adjustments made for variations.

5.2 Unit Cost Rates (Entire Station)

- 5.2.1 **Primary Site** built since mid-1970s with a cableway. Hut is usually of timber measuring 6m² - 9m² covering a well 900mm internal diameter and connected to the river by two 100mm internal diameter pipes. The riverbed and banks often require stabilisation, usually with concrete or rock armour. Any cableway across a river is usually supported at one end by the hut and at the other by a metal, concrete or timber post set in concrete and stayed to concrete anchor blocks. This tensioned steel wire allows a travelling block and trapeze to be winched across for velocity measurement of river flow.

It is anticipated that this style of station, assuming no adverse site conditions, would cost approximately £60,000 and this rate should be adopted



- 5.2.2 **Primary Basic Site** variant of 5.2.1 built from the 1960's to the 1990s. Smaller hut, usually of timber (but one example in a town provided with a brick and concrete building to resist vandalism). Well of PVC or other lining material, 400mm to 760mm in diameter, connected to the river by a 100mm pipe . Otherwise similar to a Primary Site.

It is anticipated that this style of station, assuming no adverse site conditions, would cost approximately £27,500 and this rate should be adopted.

This rate will not be subject to a functional allowance as there is no impediment on the use of modern equipment by the narrower well diameter.

- 5.2.3 **Small Hut Sites** – Generally these will be former DAFS stations, taken over by River Boards and then in turn by SEPA. Small hut approximately 3m² to 4m² over 380mm diameter well, or with no well at all. Incapable of accommodating most modern instruments. No cable across river. SEPA have confirmed that such stations will not be renewed in this form. When the structure requires to be replaced, the site would be reconstructed as “Secondary Site”

It is anticipated that this style of station, assuming no adverse site conditions, would cost approximately £8,250. This rate will be subject to a functional allowance as detailed in section 6.2 below.

- 5.2.4 **SEPA Secondary Sites and Other bodies** - Gauging stations now favoured by SEPA and other bodies such as universities. Normally comprise a box mounted on posts over river. These usually consist of a pressure transducer mounted in the river, or an ultrasonic level measurer mounted above the river surface, with a cable to an outstation/logger.

The cost of this site is usually less than £1000 (excluding the equipment within them). In addition there could be concrete or metal steps to allow safe access to the equipment. Regard should be had to the actual costs of these stations and to whether any site rent would be payable. Where considered appropriate a valuation based on these elements should be carried out using a site value commensurate with the small footprint of the site. However, it may be in some cases the answer derived will be de minimus and no entry should be made in the Valuation Roll in that circumstance.

If an entry is to be made it is anticipated that this style of station, assuming no adverse site conditions, would cost approximately £1,000 (inclusive of access works). A site rate of £25 per annum may be used in this valuation.

- 5.2.5 **Basic gauging station** - The most basic gauging station type will comprise of a post in the river on which the water level can be visually measured, as required. This form of station is no longer used and can be considered wholly obsolete.

5.3 Adjustments to ERC

As outlined in section 4.0 above, no further adjustments in respect of contract size or additions for professional fees should be made as these are already reflected in the rates recommended.

6.0 Adjusted Replacement Cost (ARC)

- 6.1 In applying age and obsolescence allowances to buildings covered by this practice note, reference should be made to guidance in the SAA Basic Principles Committee Practice Note 2 (Contractors Basis Valuations). Table A at Appendix 1 should be used.
- 6.2 Further allowances of a functional and technical nature should be considered in accordance with SAA Basic Principles Committee Practice Note 2 (Contractor's Basis Valuations).
- 6.3 In addition to any functional obsolescence allowances that may be felt to be warranted from section 6.2 above, a further functional obsolescence allowance should be granted to ex-DAFS stations, if appropriate, at -25% to reflect this style of station is now partially functionally obsolete.

7.0 Decapitalisation Rate

- 7.1 The appropriate statutory decapitalisation rate should be used.

8.0 Land

- 8.1 It is understood that, on occasion, a right of access, a right to build the station and to gauge the river have been granted free of charge, or for a nominal rent, by the owner of the land. However, a large number of stations are subject to a ground rent. Having consulted with SEPA on this matter the range of rents paid is normally in the region of £250 to £500 p.a. It is therefore recommended, except for the smallest sites, that in the absence of local rents, a figure of £375 per annum may be used.

9.0 End Allowance

- 9.1 Any factors, or circumstances, which might affect the value of the occupation of the lands and heritages as a whole should be reflected at this stage.