

Civil Engineering Measurement Disputes Revisited

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Of all the articles that I have written in the last few years, the one which seems to have provoked the most interest is the one published in the September Newsletter on Civil Engineering Measurement Disputes.

Since publication I have received a number of emails requesting further detail on various points, and in an excellent letter to the editor published in the November issue, Mr Vincent Wu drew attention to one area where he disagreed with my opinion.

Mr Wu's letter and the email I have received highlight the very reason why this is such a common area for disputes - because it is a grey area where opinions differ as to correct interpretation. In my previous article I examined the situations where the provisions of GCC Clause 59(3) should be invoked to rectify 'items omitted or errors in description' in the Bills of Quantities, and I identified three specific types of errors.

The first two types of errors, i.e. where there is a specific item in the Standard Method of Measurement ("SMM") which is required for the works, but which has not been measured in the Bills of Quantities, and where there is a specific item in the SMM which is required for the works, but which has been measured differently or with a different description to that required by the SMM, seem to be generally agreed as areas where the Bills of Quantities should be rectified in accordance with GCC Clause 59(3).

It is the third type of 'error' i.e. where works are required but there is no applicable item in the SMM nor are the works covered by an item coverage of another item, that seems to be the most controversial. In my opinion this type of error is an 'item omitted' requiring rectification pursuant to GCC Clause 59(3).

However, this is certainly not a view held by all, and Mr Wu for one considers that this is incorrect, and that GCC Clause 59(3) shall only operate for an omitted item if that item is required by the drawings, and required to be measured as an item by the SMM.

This is a view that I am aware is held by many engineers and quantity surveyors in the industry. However, it is a view to which I cannot ascribe, because I do not consider it correct to restrict measurement (and thus claims for items omitted) to those items included in the SMM.

The reason for this is that the SMM was not drafted with the intention that it would comprehensively cover all civil engineering works that required measurement. The SMM details the most common works, but it is the intention that where works are not covered by the SMM, the SMM should be amended by way of particular preambles to cover such works.

Consider, for example, a contract I am currently working upon. The works include slope protection works and in a particular area, gabion walls (walls formed of wire mesh baskets filled with rocks) are required. The SMM includes no item for such works, but I do not consider it can be correct (or even desirable) for such works not to be measured and the Contractor deemed to have allowed for the walls in his other rates. I say not desirable because if such was the case the engineer would not know where the walls were allowed for and would have no means of valuing them for interim payment purposes or for valuing any variations to them.

No, this can't be correct. GCC Clause 59(1) provides that the Bills of Quantities shall be

prepared and measurements made in accordance with the procedures set down in the SMM. In this respect SMM Part II entitled General Principles, paragraph 4, provides that the Bills of Quantities are to contain all items, compounded in accordance with paragraph 3, required to comprise the Works, and paragraph 3 provides inter alia, "where the Method of Measurement does not identify the work required it shall be amended as appropriate", i.e. by particular preambles.

There is therefore a duty on the draftsman of the Bills of Quantities to include items for all the works, and if the SMM does not provide a required item, such as, for example the gabion walls, there is a duty to amend the SMM accordingly.

If this is not done, then I consider that the contractor would have a valid claim for an item omitted for the gabion walls, on the basis that the draftsman of the Bills of Quantities breached GCC Clause 59(1) by not adding an item into the SMM for gabion walls and including their measurement in the Bills of Quantities.

This is of course an extreme example because the gabion walls are major items of work that could not conceivably be deemed to be covered by another item in the Bills of Quantities. However, I believe that the same principle must be adopted throughout, be the works concern a major element such as a gabion wall, or a minor element such as a stainless steel cover strip on a movement joint which could logically be allowed for in the item for the movement joint itself.

I consider therefore that the correct procedure to adopt when a contractor prices the Bills of Quantities is as follows:

1. The extent of the works to be priced for each item in the Bills of Quantities should be ascertained from the BQ description (which in the example quoted by Mr. Wu will be where the concrete in a concrete manhole is covered), the item coverage and general preambles.
2. The quality of such items of works should then be ascertained from the Specification.
3. The location and conditions under which such items of work are to be carried out should then be ascertained from the Drawings.
4. However if there is an item of work shown on the drawings which is not covered by paragraph 1 above, then in accordance with GCC Clause 5(2)(a) it is an item omitted to be rectified under GCC Clause 59(3).

In this way there is certainty for both the contractor and the engineer as to what to allow for, or what has been allowed, in each rate.

This is in my opinion the correct interpretation of the measurement rules of the GCC and the SMM, but I am sure that many will hold differing views. As long as this remains the case, civil engineering measurement will remain a fertile area for claims and disputes.

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