

Arrangements are to be made in the ends or faces of the *third* or *centre pier* of the structure and walls over it for checks or otherwise, in order that the second section of the dam can be properly joined to it.

This latter section may be made to embrace the construction of a dam such as will admit of building a transverse or connecting wall between the old and new structures; otherwise a separate dam may be formed to enable that part of the work to be done as provided for above, and termed the *third section*.

It may here be stated that as the dams are solely for the purpose of enabling the foundations to be prepared, and the permanent parts of the work to be carried out, they may be constructed in accordance with the general description above given; otherwise they may be formed by means of crib work for the inside range of the water tight compartment, and square piles driven close for the outside, where the available space will admit of the adoption of that mode of constructing a dam.

In the event of this course being adopted, the side of the cribs next the puddle chamber should be sheeted with two tiers or courses of boards put on so as to break joints, which should invariably be well driven into the bottom and secured to the side of the cribs with the assistance of a diver.

The space between the cribs and outer sheeting piles should be, of course, filled with the best description of material that can be obtained mixed with gravel and otherwise prepared for forming a puddle wall, which, when properly beaten down would prevent water passing through it.

There would also require to be tie rods between the outer range of piles and the cribs, similar to those referred to, in case the dams be formed chiefly of piles.

The alternate compartments of the cribs might only be filled with stone, as a large portion of the necessary weight could be placed on top, and for which purpose large flat stones, required for other parts of the works, might be temporarily used.

In short, the dams necessary for enabling the works to be unwatered may be constructed in either of these ways, or in such other way that they will occupy the least space consistent with the probability of their success, and that they are formed in sections corresponding in extent with those previously mentioned, and that the respective parts in each case are such as will be likely to effect the object herein contemplated in their construction.

Contractors when tendering for this important part of the undertaking are expected to state a bulk sum for which they would be willing to construct and maintain each of the three different sections of the dam.

The bulk sum tendered for unwatering each of these three different sections of the foundation for the Aqueduct must embrace the construction of all necessary coffer dams, the unwatering of that portion of the work, the maintenance of the respective dams, filling up the different spaces within the dams with water and again laying them dry as often as may be found necessary—and keeping the whole or any part of the sections dry as long as may be required by the Department of Railways and Canals for the setting of the mortar or any other purpose connected with the permanent works that may, in the opinion of the officer in charge, be considered necessary.

Contractors should bear in mind when tendering, that although the works connected with the formation of the dams are to be carried on under the direction of the officers entrusted with the general superintendence of the works, and who will point out the limits within which the dams are to be formed; still the contractor is to be held strictly and legally responsible for their construction, suitability, stability and maintenance, and for the unwatering of the enclosed space at the time agreed upon, and as often afterwards as it may from any cause be filled either in part or as a whole, and for keeping it unwatered for the full length of time required to execute and complete the permanent works contemplated.

The different amounts tendered for coffer dams and unwatering the works must also embrace the full and complete removal of the respective sections of the dams. This, it is to be clearly understood, is to be done in such a way that the puddle walls must invariably be taken out first; and, as the piles cannot be allowed to be pulled