

HARBOUR ENGINEER'S OFFICE,
LIMERICK.

FLOATING DOCK.

Specification for "Sett" Paving.

The work consists in excavating the roadway to the depth (average) of 15 inches below quay coping level over an area as shown on the drawings. The excavated material shall remain the property of the Harbour Commissioners, and shall be removed and properly banked in a position to be pointed out by the Harbour Engineer. When excavated the ground shall be formed to proper contour and filled in with Portland cement concrete, 8 inches in thickness, composed of 4 cubic feet best Portland cement and 8 cubic feet of clean coarse sand to each cubic yard of clean stone broken to pass through a 2" ring. The proportions for the concrete shall be gauged in measured boxes, and each gauging shall be mixed twice in the dry state, wetted with the least quantity of water necessary, and again twice turned over, deposited in place, well rammed and surface graded to contour and formed with fall of one inch to ten feet towards quay coping, and channel courses on either side, or such other fall as the Engineer shall require. "Setts" of four inches wide, six inches deep, and from six inches to nine inches in length or thereabout, will be supplied to the Contractor, and these setts will be stacked on sites as near to the work as may be most convenient to the traffic, and from which sites the Contractor shall draw from as required. No setts shall be laid on a concrete surface that has not been completed at least seven days previously.

The setts shall be laid in parallel courses and touching, on a bed of one inch of clean coarse sand, and well grouted with a mortar composed of one part of Portland cement to five parts of sharp sand.

Care shall be taken that the travel of the road gates shall not be impeded, and at the entrances to the sheds the surface shall be so formed that it shall not obstruct the working of lorries, etc.

Channel courses shall be formed in the positions required by the Harbour Engineer, and shall be laid in a similar manner on a similar foundation and to the same falls as the paving, viz. :—one inch to ten feet, or such other fall as the Harbour Engineer may consider necessary in any particular case, towards the nearest gullies.

The Channel courses shall be sixteen inches wide, laid with four lines of setts longitudinally with the run of the channels, and the

bottom of the channel shall be one inch lower than the general pavement alongside same, at any particular spot.

C.I trapped gullies, wherever same may be required, shall be supplied by the Harbour Board, and shall be set by the Contractor at a price inclusive for all labour and material, and such price for each gully as set shall be stated in a Schedule of prices that shall accompany his Tender.

The Portland cement shall be of quality equal to best Loudon No. 1, and shall be subject to the approval of the Harbour Engineer, and fully equal to the standard specification supplied to the Harbour Board's Contractor for cement for the current year.

With the exception of material specified to be supplied, the Contractor shall supply all the material, plant, and competent labour required for the execution of the work, and he shall observe the terms of the "Fair Wages Clauses."

He shall carry out the work to the satisfaction of the Harbour Engineer, and in such a manner as in the opinion of the Engineer will least interfere with the requirements of work in the Dock. He shall be liable during the execution of his Contract for all delay or damage to persons or things, and shall be responsible for all claims, defects or loss arising therefrom, and shall not hold the Harbour Board liable for any delay or loss that in the opinion of the Engineer may be sustained through inconvenience or necessity arising from the exigencies of traffic, weather or delay, in the supply of setts, but should the delay occur through insufficiency in the supply, the time for completion of the Contract will be extended accordingly. The Contractor shall be bound to efficiently light and barricade the portion of the site under construction. The Engineer shall have full power to modify the construction of the work, or to increase or diminish the extent thereof without violating the Contract, and the value of all such additions to, or deductions from the Contract quantities, shall be estimated, and paid for, or deducted as the case may be, from the Contract sum in accordance with a Schedule of Rates that shall be attached to this Specification.

The work shall be carried out with energy and despatch, and if in the opinion of the Engineer the Contractor fails to do so, then it shall be competent for the Harbour Board after seven days notice in writing to determine the Contract and to enter upon and take possession of the work, and to use all plant, materials or other things already on the ground, or monies in hand, and to complete the work either by Contract or under their own control. The Contractor shall not further interfere with the works, nor shall any claim or liability be incurred by the Harbour Board for so doing, in undertaking and completing the work.

The work shall be completed within a period of Six Months from the date of notification of the Contract having been accepted, under a penalty of Five Pounds per week for every week or part of a week beyond the expiration of the last day of such period.

The Tender shall state a gross sum and also a price per square yard for the paving complete for the area shown on the plan, and each price shall be based on a detailed Schedule attached to this Specification which shall accompany the Tender sent in, and without which the Tender will not be considered.

In the event of the Harbour Board deciding to contract for the laying of the setts only, the Tender shall state a price per square yard for same, such price shall include, laying, ramming and grouting, with the necessary labour, but exclusive of all material.

The Contractor will be required to execute the usual bond, to be prepared by the Solicitor to the Harbour Board, and shall provide two solvent and sufficient sureties whose names shall be inserted in the Tender, and who shall be jointly and severally bound in the penal sum of one hundred pounds each for the due performance of the Contract.

Payment will be made on the Engineer's certificate as the work proceeds, but no certificate will be issued for less than one hundred pounds, and a retention of 10% will be withheld on each instalment, and such retentions, together with the final certificate of one hundred pounds, will be paid three months after the completion of the Contract, during which period the Contractor shall uphold, maintain, or make good to the satisfaction of the Engineer any defects or subsidences that may appear in the payment.

Should the Contract be for laying, ramming and grouting only, fortnightly (or longer period) payments will be made to suit the convenience of the Contractor, but on each such payment a retention of 10% will be withheld, and such retentions, together with the final payment will be certified for, fourteen days after the work has been completed and thrown open to traffic, and should any defect in the laying of the setts become apparent during this or any previous period, the Contractor shall be bound to make good the same to the satisfaction of the Engineer before the final payment is made.

Tenders shall be made out on the form attached hereto, and shall be sent accompanied with the Schedule of Prices properly filled in, and addressed to The Chairman, The Harbour Commissioners, on or before

endorsed "Tender for Paving.
The Harbour Board do not bind themselves to accept the lowest or any Tender.

H. V. MOKONY, B.E., Assoc. M. Inst. C.E.,
Harbour Engineer.

October 19th, 1904.

FORM OF TENDER.

To The Limerick Harbour Commissioners.

GENTLEMEN,

I hereby Tender to execute the Dock Paving agreeably with the Plan, and all the conditions and stipulations of the Specification issued by you, and dated _____ for the total sum of _____ equivalent to _____ per square yard, or in the alternative, for laying, ramming, and grouting only, for the sum of _____ per square yard, and in the former event, I agree to add to, or deduct from the Contract sum (as the case may require), the value of any additional work executed or of any alterations or diminutions made in the work of the Contract, such values being estimated according to the annexed Schedule of Prices which are the same as this Tender has been based upon, and are calculated for work executed, delivered and completed according to the terms of the Specification.

Dated this _____ day of _____ 1905.

I am, Gentlemen,

I name as my Sureties _____

of _____

and _____

of _____

