

CITY OF
MELBOURNE TRAMWAYS.

SUPPLY OF
PERMANENT WAY MATERIAL,
CONTRACT No. 25.

SPECIFICATION
AND
CONDITIONS OF CONTRACT.

OFFICES OF THE MELBOURNE TRAMWAYS TRUST
(ENGINEER'S OFFICE),

28th November, 1885.

CITY OF MELBOURNE TRAMWAYS.

SPECIFICATION of WORKS and MATERIALS required in the manufacture, supply, and delivery of the Permanent Way materials required by THE MELBOURNE TRAMWAYS TRUST for the construction of Tramways in and about the City of Melbourne. The works to be in accordance with this Specification and the Drawings attached and in terms of the General Conditions.

1. The works required are set forth in the following Specification, and is to be understood as including the finding and providing of all materials, labour, implements, tools, carriage, and every other matter and thing that may be necessary for completing and delivering, to the approval of the Engineer, the whole of the materials comprised in that section of the contract.

SECTION A.

Rails,

2. The steel from which the rails are made shall be from a mixture of the best Hematite Iron and Spiegeleisen, and shall contain not less than .30 per cent., nor more than .45 per cent. of Carbon, and not more than 0.06 per cent. of either of the substances—Silicon, Sulphur, and Phosphorus, and shall be cast into ingots of sufficient weight to make one or more rails. The rails to be rolled accurately to the sections shown on the Drawing, and to be of sufficient length to allow of all defective metal at the ends being cut off, leaving the finished rail of sound, full, and perfect section throughout its entire length. The rails to be five ~~and one-half~~ inches deep, free from flaws and cracks, with clean smooth surfaces, accurately shaped groove, and perfectly true and straight on all sides. Any straightening the rails may require after being rolled to be done by hydraulic or other steady pressure, and not by the hammer, the ends to be cut square and perpendicular to the flange, and without reheating. The Contractor shall, at his own cost, provide means for mechanically testing, and shall test such portions of the rails as may be selected by the Inspecting Engineer for that purpose. The rails must stand, without breaking, the blow from a one-ton weight falling from a height of not less than ten feet upon the centre of a rail placed head uppermost on supports three feet apart, and show a deflection of three inches in a length of five feet.

The chemical tests shall be performed by an Analyst to be selected by the Inspecting Engineer, and the Contractor shall be charged with costs of the same, if the tests prove unsatisfactory.

Each rail is to have marked distinctly on the side the initials of the maker, the weight per yard, the year of manufacture, and "M. T. T."

- Limit of Weight. 3. The rails shall not vary more than $1\frac{1}{2}$ lbs. above or below the weight, and no allowance or extra amount shall be paid for rails weighing over the specified weight.
- Lengths of Rails. 4. The rails shall be in lengths of 28 feet, less $\frac{1}{4}$ of an inch; 10 per cent. of the quantity may be in lengths of 24 and 20 feet, all less $\frac{1}{4}$ of an inch.
Each end of the rails shall be punched with two holes, measuring $1\frac{1}{8}$ inch x $\frac{13}{16}$ inch for the fish-plate bolts.
- Fish-plates. 5. The fish-plates for the joints to be of Bessemer steel 1 foot 6 inches long to the sections shown on the Drawing, rounded on edges to fit the rails, and punched with four round holes spaced 4 inches apart; the diameter of holes to be as shown.
- Bolts & Nuts. 6. The bolts and nuts shall be of the best quality of mild steel of a thoroughly tough nature capable of standing a strain of 35 tons per square inch of section, the bolts shall be screwed in oil to Whitworth's threads, full, and well formed, to be hexagon headed as shown, and the nuts shall be Ibbotson's patent four split expansion steel nuts, heads and nuts to dimensions figured.

DELIVERY.

- Order of same. 7. The Permanent Way material shall be delivered at the Spencer Street Railway Station, in the following order, viz:—
Within six months from date of acceptance of tender 400 tons of rails and the balance in equal shipments at intervals not exceeding two (2) months.
The whole to be delivered undamaged, and in perfect order, within 18 months from the date of acceptance of tender.
- Delay on the part of the Contractor. 8. In default the Contractor shall forfeit as ascertained damages, and not by way of penalty, the sum of fifty pounds (£50) sterling for each and every week beyond the time specified for each delivery, during which time such default shall continue.

GENERAL CONDITIONS.

- Interpretation clause. 9. In these conditions of contract the word "Trust" shall mean "The Melbourne Tramways Trust;" the word "engineer" shall mean the engineer in Melbourne of The Melbourne Tramways Trust; the word "inspecting engineer" shall mean the person who has been duly appointed by The Trust to supervise the manufacture of the materials in Great Britain.
- Disputes. 10. The Drawing and Specifications are intended to be explanatory of each other, but should any errors, discrepancies or omissions appear therein, or if at any time any dispute or difference shall arise as to the Drawings or the true meaning thereof, or of any part of this Specification, or as to the manner of executing the work, or as to the quality or sufficiency of any of the work or materials, or as to any matter of charges or accounts between The Trust and the Contractor, or as to any other matter connected with the contract, they shall be referred to and settled by the Engineer, whose decision shall be final and binding upon all parties.
- Extra Work. 11. The Contractor shall not execute any additional or extra work to that shown on the Drawings, or described in the Specification, nor alter any part thereof without the written instructions of the Inspecting Engineer.

Quality of
Materials.

12. The whole of the materials and workmanship shall be of the best quality of their respective kinds, free from flaws and defects of every description. Should any of the materials or workmanship appear to the Inspecting Engineer to be of an inferior character, and not in accordance with the true intent of the contract, he shall have full power to reject such inferior work, and the Inspecting Engineer shall, at all times, have full power to visit the works of the Contractor, and inspect the materials being used and the work in all stages of its progress and shall be at liberty to suspend any portion of the work which is in his opinion not executed nor being executed in conformity with the Drawings and Specifications, and shall be at liberty to apply, or order to be applied, at the expense of the Contractor (except in the case of chemical tests), such tests as he may consider necessary for ascertaining the qualities of the materials or workmanship, and all expenses incurred thereby shall be borne and paid by the Contractor, and no certificate of approval of any work by the Inspecting Engineer shall affect or prejudice the right of The Trust against the Contractor, or be considered at all conclusive as to the sufficiency of any work or materials.

Notices to be
in Writing.

13. All notices to the Contractor affecting the money value of the works contracted for shall be given in writing, and The Trust shall not be liable for any claim for extra or altered work without the previous written orders of the Engineer.

Power of
delaying
delivery.

14. The Engineer may delay the progress or delivery of the work, or any part thereof, or grant such extension of time for the completion of the contract as he may consider necessary. The Contractor shall not make any claim for compensation, nor the sureties hereinafter mentioned be discharged by reason of such delay or extension of time.

Delay on the
part of the
Contractor.

15. In the event of the work or any part thereof not being carried on with such despatch as in the opinion of the Engineer or Inspecting Engineer will ensure its completion within the stipulated time, or if in the opinion of the Engineer or Inspecting Engineer the work or any part thereof is not being executed in a sufficiently sound or workmanlike manner, the Engineer or Inspecting Engineer shall in either of such cases give written notice thereof to the Contractor or his Agent, and if he shall refuse to amend the defective work, or comply with any order in relation thereto, or if within seven days after notice he shall not, in the opinion of the Engineer or Inspecting Engineer, have adopted ample means for the satisfactory prosecution of the work, The Trust shall have full power to take the whole of the works out of the hands of the Contractor and proceed with the execution thereof; and all loss, costs, charges, and expenses incurred by The Trust in so doing shall be borne by the Contractor, and the amount may be deducted from any moneys due or to become due to him.

Damages in
event of
delay.

16. In the case of default on the part of the Contractor in performing any work under this contract, or any stipulation in relation thereto, he shall forfeit and pay, as liquidated damages, to The Trust, the sum of £50 for each and every week during which such default continues: Provided that this clause shall not be operative during such period as the delivery of the work has been delayed by reason of any order of the Engineer or of the Inspecting Engineer or during such period as the Engineer or the Inspecting Engineer may certify that such default has arisen from a strike or combination on the part of the workmen; in which latter case the Engineer or the Inspecting Engineer shall grant such extra time as he may consider fair and reasonable.

Bankruptcy.

17. If the Contractor shall become bankrupt or insolvent, or compound with his creditors for the payment of his debts, or shall carry on or propose to carry on his business under inspectors or trustees on behalf of his

creditors, or shall commit any act of bankruptcy or insolvency, The Trust may require the work to be proceeded with ; and if this requisition be not complied with within seven days from the date thereof, The Trust shall have power to proceed with the execution of the work, or to contract with any other person or persons for the completion thereof ; and all costs, charges, expenses, and losses incurred thereby shall be borne and paid for by the Contractor or his sureties.

Mode of
Payment.

18. Payments shall be made to the Contractor in the manner following, that is to say :—

- (1.) Eighty-five pounds sterling per cent. within fifteen days after the Agent of the Trust in England has received the Inspecting Engineer's certificate, together with the bills of lading and insurance policies.
- (2.) The balance of fifteen pounds sterling per cent. will be paid after delivery in Melbourne, and within fourteen days after the Engineer of the Trust has certified in writing that the material is in accordance with the contract requirements.

Sureties.

19. The Contractor shall within seven days from notice of acceptance of tender, procure two good and sufficient sureties, to be approved by The Trust, to be bound jointly and severally in a sum equal to ten pounds sterling per cent. on the value of the works contracted for (as ascertained from the schedule of approximate quantities and the schedule of prices), for the due performance of his contract. If the Contractor shall not within the said seven days procure two good and sufficient sureties to be approved and bound as aforesaid, The Trust shall be at liberty if it think fit to rescind the contract.

Invoices, &c.

20. The Contractor will be required to furnish the necessary copies of the shipping specification and Invoices, which are to be made to correspond with the bills of lading.

Royalties.

21. The Contractor is, at his own costs and charges, to satisfy all royalties or claims in respect of any patent rights affecting any part of the work, and the Contractor shall indemnify The Trust from all actions, claims, or demands on that account.

Tenders.

22. Tenders shall be sent in upon the printed forms with complete schedule of prices, and shall be accompanied by a marked cheque for £1000, which will be returned on execution of the bond as specified above, and addressed to "The Chairman of THE MELBOURNE TRAMWAYS TRUST, 55 Queen Street, Melbourne."

23. The Trust do not bind themselves to accept the lowest or any tender.

Date when tenders must be deposited,

G.S.DUNCAN. ENGR


TENDER

*For the supply of 2400 Tons (a little more or less) of Permanent Way
Material for the Melbourne City Tramways.*

To

I, We, the undersigned, do hereby tender and offer to completely finish and supply the various materials for The Melbourne Tramways Trust in accordance with the Plans, Drawings, Specifications, and Conditions of Contract prepared for that purpose by the Engineer of The Melbourne Tramways Trust for the sum of

sterling,

and enclose herewith a marked cheque for £1000 sterling, as required by Clause  of the said General Conditions.

Annexed hereto is a complete Schedule of Quantities and Prices showing how the said sum of £ has been arrived at, as required by the said Conditions of Contract.

Should this tender be accepted, I we undertake to execute a Contract embodying the aforesaid Plans, Drawings, Specifications, and Conditions within seven days of the acceptance, or at any time thereafter when requested by you or on your behalf so to do.

Name.....

Address.....

Date.....

SCHEDULE FORM.

SCHEDULE OF RATES FOR CONTRACT for the Supply of
PERMANENT WAY MATERIAL, with Prices and Costs
upon which this Tender is calculated.

Description of Works.	Approximate Quantity.	Rate	Cost.	Total Cost.
	TONS.	PER TON.		
57-lb. Bessemer Steel				
Rails - - -	2400			
Fish-plates (approx.) -	45			
Bolts do. -	26			
			£	

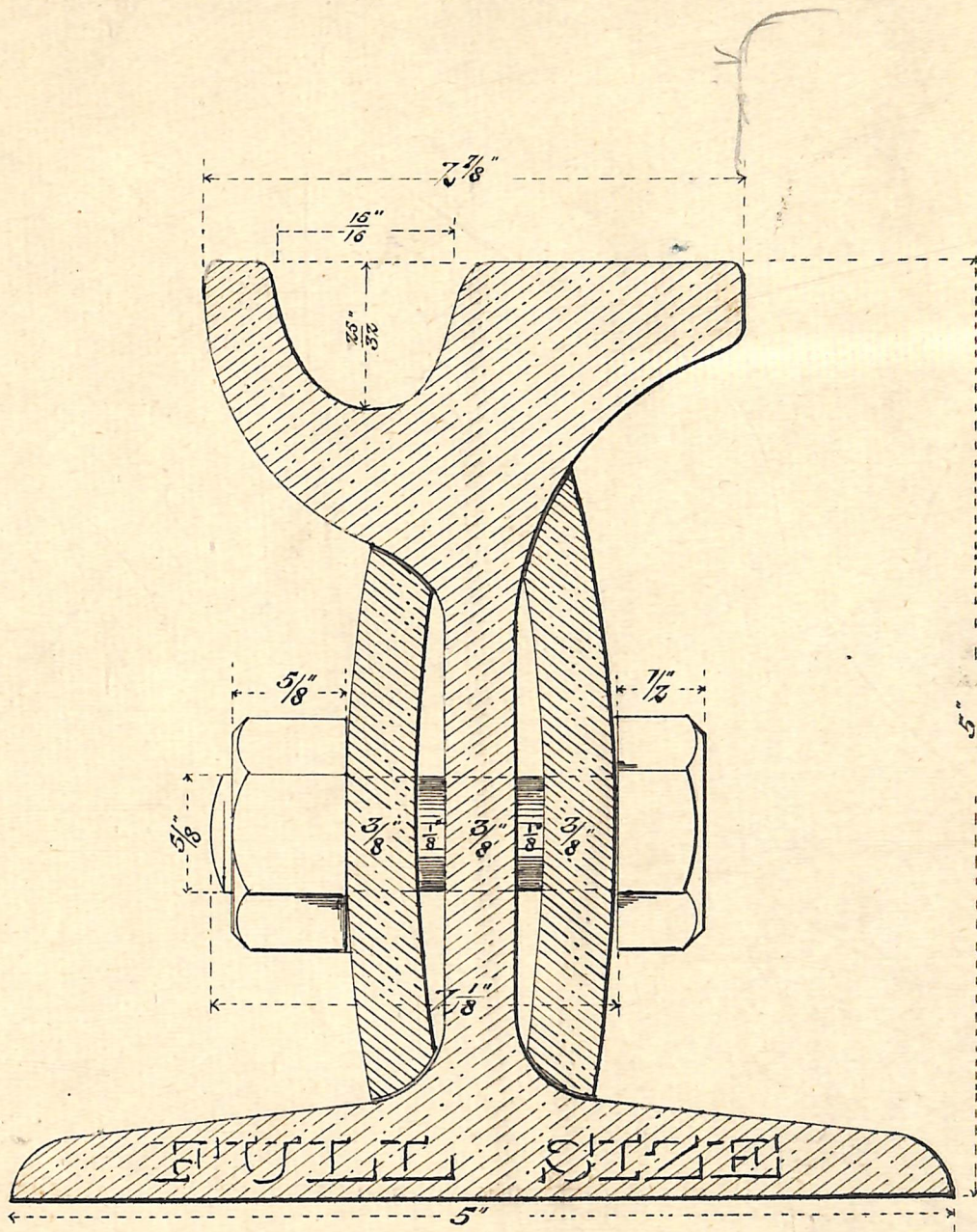
Name

Address

Date 188

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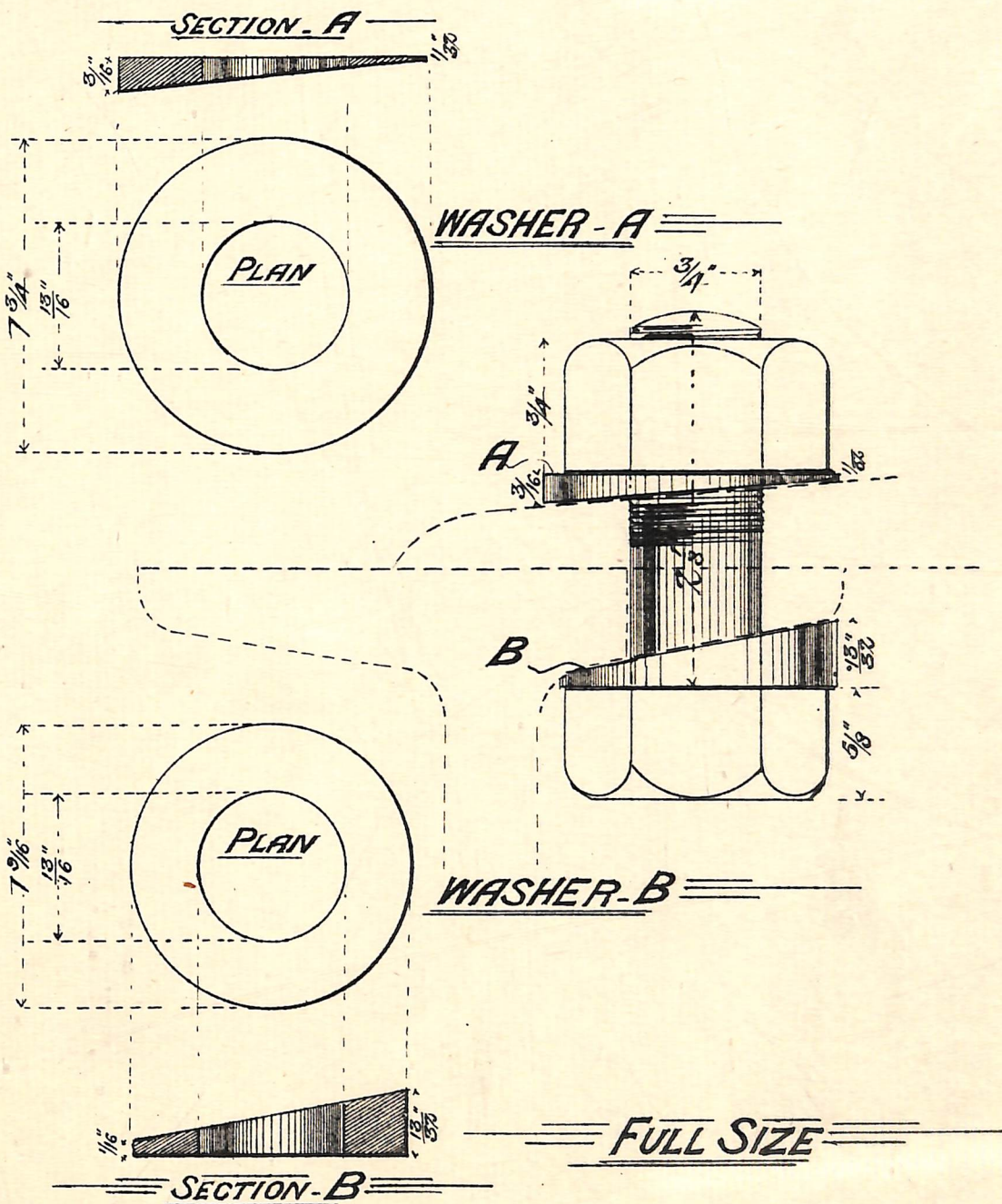
SECTION OF 57 LB BESSEMER STEEL RAILS WITH FISH PLATES ETC

- Length of Fish Plates, = 18" in.
- Bolts to Each Pair. 4
- Bolts spaced apart 4" in
- Holes in Fish Plates 1 1/8" in
- Holes in Rails 1 1/8" in x 1 1/8" in.

THE
MELBOURNE TRAMWAYS TRUST

STEEL
YOKE BOLTS, NUTS AND WASHERS

CONTRACT N^o



20/10/86