

Public Works (1898) Department.

G.O., No. 14126
1942

DATED 3rd Aug 1948

✓
24/8/48
20/8/48
30/8/48
6/9/48

[Despatch Abstract.]

Indent: Ordered that the — for rolled steel girders required for the construction of a bridge across the Chennier river in the Coimbatore Dn, be forwarded to the Dept of Stores, for compliance.

Indent: Forwarding for favour of Compliance, an — for rolled steel girders required for the construction of a bridge across the Chennier river in the Coimbatore Dn.

Forwarding, for favour of compliance, an — for rolled steel girders required for the construction of a bridge across the Chinnar river in the Coimbatore division.

PUBLIC WORKS DEPARTMENT.

General.
Account.

LETTER—from

W. B. DEWINTON, Esq.,

*Secretary to the Government of Madras,**Public Works Department,*

To

THE DIRECTOR-GENERAL OF STORES,

INDIA OFFICE, LONDON.

SIR,

I am directed to forward, for favour of compliance, a special indent, in duplicate, for rolled steel girders required for the construction of a bridge across the Chinnar river in the Coimbatore division.

2. The requisite certificate by the Examiner of Public Works Accounts as to the provision of funds, has been endorsed on the original indent.

I have the honour to be,

Sir,

Your most obedient servant,

(Signed) W. B. DEWINTON,
Secretary to Government.

OOTACAMUND,
3rd August 1898.

Exd. T. K. Narayana Aiyangar.

GENERAL.
ACCOUNT.

Government {1898} of Madras.
PUBLIC WORKS.

Recd.

Regd.

} 1898.

Enclosures

Spare copies

G.O. No. 1941 W., 3rd August 1898.

AUGUST.

Indent

Ordered that the — for rolled steel girders required for the construction of a bridge across the Chinnar river in the Coimbatore division, be forwarded to the Director-General of Stores, for compliance.

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

General.
Account.

READ—the following papers:—

From Colonel A. W. SMART, R.E., Officiating Superintending Engineer,
V Circle, to the Chief Engineer, Public Works Department (through the
Examiner of Public Works Accounts, Madras), dated Chepāk, 18th May
1898, No. 347 W.

With reference to your memo., No. 2046 C., dated 2nd instant, I have the honour to submit an indent, in triplicate, for rolled steel girders required for the construction of a bridge across the Chinnar river in Coimbatore division.

2. The estimate referred to in G.O., No. 480 W., dated 1st March 1895, with report is also enclosed.

From the Examiner, Public Works Accounts, dated 14th June 1898, No. 2011 B./B.

ORDER—No. 1941 W., dated 3rd August 1898.

Ordered that the indent be forwarded to the Director-General of Stores for compliance.

[Here enter No. 1942 W., dated 3rd August 1898.]

(True Extract.)

Under Secretary to Government.

To the Superintending Engineer, IV Circle.
 " " " " V " "
 " Examiner, Public Works Accounts.

Exd. T. K. Narayana Aiyangar.

Papers to be read in Proceedings :—

Again G.O., dated

189 , No.

Again G.O., dated

189 , No.

Print Current No.

of 189 , dated 18th May 1898^x , from the S. E. V circle

Quercus " " 5049

" 1898, " 14th June 1898, " The Essex P.W. Act - Vol 20/43

„ 189 , ,

,, 189 , ,

20 20 11 13/13.

ORDER.

No 1941W 3-8-28

Ordered that the indent

be forwarded to the Director-General
of stores for compliance.

Ask

16-7-98.

H. E. no 1942 w dated 3rd Aug 1948

The Director-General of Stores,
India Office, London

Sir

I am directed to forward, for favour of compliance, a special indent, in duplicate, for rolled steel girders required for the construction of a bridge across the Chinnar river in the Coimbatore division

2 The requisite certificate by the
Examiner of P.W. Accounts as to the pro-
vision of funds, has been endorsed on the
original indent.

I have etc

P. W. 4.
500 34-3-08

Public Works Department.

Current No. 5089
Letter No. 2011 3/4
Dated 14th June 1898
From the Engineer P.W. Accounts.

NOTE BY TECHNICAL SECTION.

Name of work Bridges on the Talia.
Chinnar road, Coimbatore Dist.

The accompanying indent is submitted for 28 rolled steel girders for the construction of bridges across the Chinnar river, in the Coimbatore District, the estimate for which has been submitted to the S.E. IV Circle, for revision, vide Memo No. 2046 C dated 2nd April 1898.

The indent provides for 4 girders each 25 feet long and of a section 10" x 6" weighing 54 lbs per foot run for clear spans of 22 feet, and for 24 girders of 23 feet each, of a section 10" x 5" weighing 35 lbs per foot, for clear spans of 20 feet.

The total weight of the 28 girders is 11.035 tons and at the rate of £6.10.0 per ton = £72.00.00 exclusive of freight &c.

The sections entered for the re-

1941 3 W
1942

Please see list attached, draft to P.W. & draft to Hon. Secy. Planters Association.
A.H.
24.6.98.

required load the girders have to carry appears to be weak and the correct sections for the loads provided in the indent would be as under:-

For spans 22 ft.

W. WL : 16x22 = 352 tons for which a section 15"x6" weighing 54 lbs will be required against the section 12"x6" weighing 54 lbs as provided.

For spans of 20 feet.

W. WL : 10x20 = 200 tons for which a section 13"x5" weighing 41.5 lbs will be required against the section of 10"x5" weighing 35 lbs.

It should also be observed that the depths of the proposed girders are slighter than being less than 1/20 the span, the limit allowed for deflection.

It is not clear how the loads are fixed in the indent, both dead & live, for spans 22 & 20 ft. at 16 & 10 tons respectively have been arrived at. From T's note on the original estimate, dated 21st March 1898, it will be observed that only 4.2 & 4.0 tons for 22 & 20 ft. spans respectively have been calculated, as loads on each girder for a roadway of 6 ft. and as the width of the roadway is likely to be increased when the re-

Correct, with factor of safety 4 tons per sq. inch. The girders provided by Works-shops would not, even with a limiting stress of 7.5 tons per sq. inch, bear a load of 17 tons

Correct, with limiting stress of 6.4 tons per sq. inch. The load this girder would support is only 7 tons, limiting stress being 7.5 tons, as allowed in these instructions

Several observations come up sanction, owing to orders come in this office Memo. No. 2046 dated 2nd Apr 98 para 2, for increased width of roadway & considering the defects in the indent, it is submitted that the passing of the indent may be deferred till receipt of the revised plans & estimates.

The deflection allowed of the girders proposed by Works-shops is far too great, being 1/50" & 1/55" of span respectively. Atk 24.6.98

Public Works (1898) Department.

CURRENT No 5049

No 3007C of 30 June/98

From The Examiner of O.W. accounts.

No. 2011 B/B

See Duplicate.

The S & W Circle is requested to forward the revised plans and estimates for the Tallicherry Chinnar road, called for in this office No 2046C, dated 2 April/98, as soon as possible. The rolled steel girders required for bridges cannot be procured until it is known what loads they have to carry. Atk 24.6.98.

Dated 14.6.98
Received }
Registered } 15.6.98
Enclosures 4
Spare copies .

SUBJECT.

Roller Steel girders required for the construction of a bridge across the Chinnar river in Coimbatore. Certifying as to the provision of funds to meet the cost of the same for

025197 23/6 1/4/7/98

1/7/98

BACK PAPERS.

FURTHER PAPERS.

1. All articles required for the public service, which cannot be manufactured in India, are, as an almost invariable rule, to be obtained by indenting on the Secretary of State. The Store Department at the India Office constitutes a special agency, which is maintained for the express purpose of purchasing stores in England on account of the Government of India, and, save in the special cases mentioned below, stores of European manufacture must not be bought in India, or obtained direct from Europe independently of the India Office.

2. The special cases in which, with the previous sanction of the Government of India or of the Local Government, as the case may be, stores of European manufacture may be obtained in India, are:—

- (a) When for any special reason it may be more economical to do so ;
- (b) When stores indented for from England have not arrived, and inconvenience to the public service is anticipated from the delay in the supply ;
- (c) When the stores are perishable.

3. Indents for public works stores, other than railway stores, so long as they are within the grant assigned for the purpose, should be sent direct by the Secretaries in the Public Works Department of the several Local Governments and Administrations to the India Office; three copies of printed and two of manuscript indents should be sent, and a copy be submitted to the Government of India.

Note.—Copies of indents chargeable to Provincial and Local Funds are not required to be sent to the Government of India.

4. This form of indent should invariably be adhered to, other modes of application being entirely discarded, and requisitions in the body of letters, which may be overlooked or misunderstood, being specially avoided.

5.. The columns (which sufficiently explain their own meaning) must be filled up without alteration, and others are not to be substituted, any remarks that may be considered necessary being confined to the column for that purpose, which should contain every explanation that may guide in the supply and pattern of the articles required.

6. Where an established proportion for general stores has not yet been fixed, it should consist of three years' ordinary expenditure: the quantities in store at the date of requisition being added to the quantities due upon former accounts, the difference between the aggregate of these two columns and the established proportion is the proper quantity to be asked for. This procedure, if duly attended to, will always keep up an ample supply for general service; but, however, in exceptional circumstances, it is found desirable to exceed the established proportion, the reason for so doing must be inserted in the column of remarks. The calculation of the established proportion on the basis of three years' ordinary expenditure is not applicable in the case of railways.

7. The columns printed in red ink are to be left blank for completion

8. In the column of remarks, the port to which stores are to be consigned should be stated, and also the names of the last two or three vessels whose consignments have been included in the quantity in store as shown in column

9. Each indent must be accompanied by a certificate of the necessity for the stores indented for, and that they cannot be advantageously procured locally, or from surplus stores of other departments, railways or administrations.

10. In the case of stores for imperial purposes (including all state railways) in a year not yet begun, the sanction of the Government of India must be obtained to the proposed allotment before the Examiner can give his certificate; but for stores for provincial services (except provincial state railways) the sanction of the Local Government or Administration will suffice the Examiner.

(13. When it is expected that the outlay will be provided partly in one year and partly in another, the following addition should be made to the officer's certificate—"and that the balance of the estimated outlay in the year 1891-92 will be provided by the Government of India in the month of the year 1891-92." Vide Government of India letter No. 1000 of 1891.)

2. In preparing indents attention should be paid to the rules on the subject in appendix O. (P. W. Code, vol. I.)

Chas. X. Smith
6690/2
SPUR

23 MAY. 1898

Madras

chasing
in the
EXAMINER,

ACCOUNTS

13 JUN 1898

Annual indent on England for Stol

Indent N^o 2 of 189

NAMES OF ARTICLES.

Revenue to which cost is chargeable.

Imperial head of account or grant to which cost is chargeable.

Established proportion.

How established proportion is calculated.

Number or quantity in store on

Number or quantity due on previous indents.

Number or quantity indent Rate.

VALUE

Of number or quantity due on previous indents.

Of number or quantity now indented for.

REMARKS.

Shipped or under provision.

Proposed to be provided.

Remarks by the Director General.

1

2

3

4

5

6

7

9

10

11

12

13

14

15

lled Steel Girders

Size Weight per foot running

12" x 6" 5 1/2 lbs

By 7 of 100 man Long 60 Catalogue 1895 Page 69

10" x 5" 35 lbs

tion 6. 10. 7 100 man

60 Catalogue 1895 Page 69

Provincial

0 4 10
or
+ 2 1/2

72

Port of landing
Madras

Add 10 per Cent for freight 8 1/2 % L 7

7 1/2 % L - 79

0 Weight = 2.410 Tons

x = 8.625

Total 11.035 tons at £ 6.5 per ton = £ 71.725 say 72

H. W. S. S.
General Superintendent
P. W. S. S.

Indent on England for stores required for the Public Works Department in the Province of

Madras, for the service of the Indian Government.

I hereby certify that the stores enumerated in this indent are absolutely required for the service of the Public

Works Department for a period of

~~months, and I further certify that I have, by a personal inspection of works and stores, satisfied myself that~~

~~they comprise the least possible quantity necessary for the above period, and they cannot be~~
procured of Local Manufacture or from Surplus Stores of other
Departments, Railways and administrations.

Dated this *April* day of *1898*, at *Madras*
*Arthur Col. P. E. **

General Superintendent
P. W. Stores Madras *Superintg: Engr. V. Crile, †*

NOTE—1. In cases in which a personal inspection of books and stores cannot be made, the portion of the certificate relating thereto should be scored through.

2. The Indent should be paged, and the signature attached to the last line of the Indent.

3. The quantities entered in the indent should invariably be given in English weights and measures.

I certify that funds to meet the outlay which it is estimated will be incurred in England in connection with this indent during the year 1898-99 (a) *have been provided for in estimates of the*
P. W. Dept to the extent of £ 19-00-00 vide letter to go out to P. W. S.
office note no. 2787C & 10 June 1898

R. A. Denny

Examiner of P. W. Accounts,

Madras & Coorg Province.

No. *2011 3/8* dated the *14 June* 1898.

* Signature.

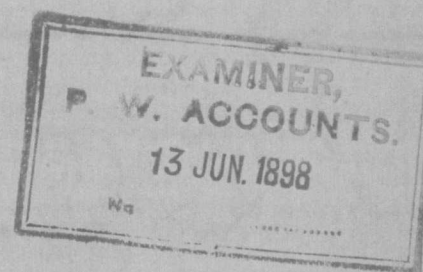
† Rank.

(a).—Here insert either "have been provided for in the estimates of the Public Works Department to the extent of £

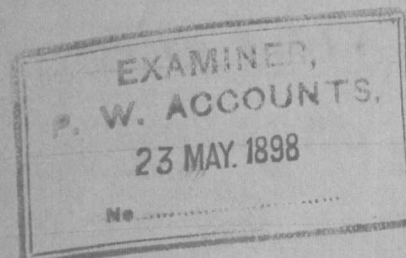
" will be provided by the Government of India in the estimates of that year, vide Government of India No. dated

Public Works (1898) Department.

CURRENT No.



Order



From *The Supy Engineer*
5 Field

No. *347 W.*

Dated *18 May 1898*

Received

Enclosures *3*

Spare copies

SUBJECT.

Whinmar River in Coorg -
below Division.

Submitting an indent
for rolled steel girders
required for the construction
of a Bridge across
the -

FURTHER PAPERS.

13 JUN. 1898

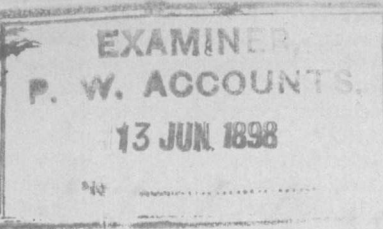
Report to accompany Indent for
Rolled Steel Girders required for Con-
= structing a Bridge across the Chinnar
river in Coimbatore Division.

The revised plan & Estimate are under preparation by the Superintending Engineer IV Circle in accordance with the instructions conveyed in Chief Engineer's Memorandum No 2046 E of 22nd April 1898. Provision will be made in the Estimate to meet the cost of the girders.

Guiders of the description cannot
be locally manufactured.

Amherst Col. R. B.
Superintg. Engineer: V. Circle.

No. 347



SUPERINTENDING ENGINEER'S OFFICE,

V CIRCLE, MADRAS,

Chepak, $\frac{18}{20}$ May 1898.

From

Colonel. A. W. Smart. R.E.

Offg. SUPERINTENDING ENGINEER,

V CIRCLE,

To

THE Chief Engineer
Public Works Department.

Through
The Examiner of
P. W. Accounts, Madras.

SIR,

Enclosures: 5

Indent in triplicate.
Statement.
Report.

With reference to your memorandum
no 2046. C. dated 2 Instant, I have the honour to
submit an Indent in triplicate for rolled steel
girders required for the construction of a Bridge
across the Bhinnar river in Coimbatore Division.
2. The estimate referred to in G. O.
no 480. W dated 1st March 1895 with report is
also enclosed.

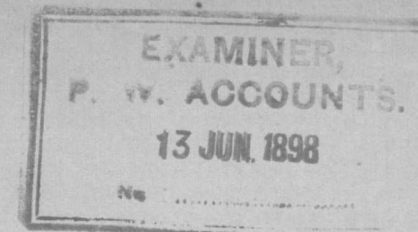
I have the honour to be,

Sir,

your most obedient servant,

Am Smart Colonel R.E.

Offg. Superintending Engineer
V Circle.



(E. No. 221.)

KEEP-WITH

CURRENT No.

GOVT. OF MADRAS. }

1898

{ P. W. DEPT.

EXAMINER, P. W. ACCOUNTS.

dated

189 .

Madras, 27 May 1898.

OFFICE NOTE No. 1768 B

To

W.

BEFORE I can give the usual certificate as regards funds, please state whether the necessary grant to meet the value of the English Stores included in the accompanying ^{Special} Indent No. 2 of 1898-99, received from the Superintending Engineer 5th Circle, will be provided for later on in the year.

2. The value of the Indent amounts to Rs. 1281 at 18h 3 $\frac{1}{4}$ d, the rupee, the current rate of exchange, inclusive of 3 per cent. charge for Insurance and Departmental Supervision.

27.5.98

C.

27/5/98

27.5.98
5049

EXAMINER,
P. W. ACCOUNTS
23 MAY 1898
No. 15 4/168/1000

12 MAY 1898

EXAMINER,
P. W. ACCOUNTS
13 JUN 1898

065.41
5000/50

Coimbatore
CONSULTING ARCHITECT DIVISION.

Details of *Roller Steel girders* demanded on Indent for the *Construction of a Bridge across the Chinnar river in Coimbatore Division.*

Item of Indent.	SECTION REQUIRED.		Iron on mild steel.	Weight per foot run.	MAXIMUM AND MINIMUM LIMITS OF DIMENSIONS OF SECTION WHICH MAY BE ALLOWED IN CASE THE EXACT SECTION CANNOT BE PROCURED.				Lengths.	Clear span.	NUMBER REQUIRED.			Dead load including weight of joist.	Arrangements of load.	Condition of joist.	Stress in tons per square inch not to exceed.	REMARKS.
	Depth.	Width.			Depth.		Width.				In dead length, i.e., both ends machined.	With one end machined.	With neither end machined.					
					Maximum.	Minimum.	Maximum.	Minimum.										
	Inch.	Inch.		L. B.	Inch.	Inch.	Inch.	Inch.	Feet. Inch.	Feet. Inch.				Tons.			Tons.	
1	12	6	Mild Steel	54	"	"	"	"	25—0	22	"	"	4	16	Distributed	Supported	7.5 Tons	Rolled Steel girders are required of uniform section throughout.
2	10	5		35	"	"	"	"	23—0	20	"	"	24	10				
<div>16x22 = 25.2 10x20 = 20.0</div> <div>$\frac{1}{20}$ of span = 4.2 feet = $\frac{22 \times 20}{2} = 220$ lbs. = 12.2 inches</div> <div>an amount Col. R. E. Superintg. Engineer: V Circle.</div> <div>Consulting Architect to Government.</div>																		

$\frac{1}{2} \times 20 = 10$ ft. 22 feet
 $= 22 \times 10 = 220$ ft. 13.2 inches

$16 \times 22 = 352$
 $10 \times 20 = 200$

as usual
Col. P. E.
Superintg. Engineer: V Circle.

12.550
1827
5045

4th