M.R.O. 1—10,006—28-2-50.

(1) Number of pages _____

(2) Date of repair _____

(3) Initials of the Referencer _____

# MADRAS RECORD OFFICE

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## Government of Madras

Public Works DEPARTMENT

| | | |
|---|---|---|
| G.O. No. / B.P. No. | 3400 | Press / Mis. |

Dated 4-12-74 19~~74~~.

***Not to be folded or roughly handled***

Read the following papers:—

No. 831.

No. 61. *Note by the Chief Engineer for Irrigation.*

During the visits made to the Godavery Delta in 1870 and 1873, the need of increased accommodation and more suitable arrangements at the Dowlaishweram Workshops came under notice, and a machine shop, in which the tools could be driven by steam power, was seen to be the most pressing want.

2. Under existing arrangements it has become quite impracticable to get through the work to be done, and as a consequence much that is essential, particularly in connection with the maintenance of floating plant, has to be left undone. Work is annually on the increase, and means must, it is thought, be found of nearly doubling the outturn if the floating plant is to be kept in order, the new plant in course of construction got on with at a reasonable rate, fair progress made with the numerous iron bridges required across canals and drains, and generally the demand for lock and sluice gates, gear, etc., met.

3. In January last the then District Engineer was requested to prepare a design and estimate for a machine shop, and it was suggested that, after putting on paper his general views on the subject, Mr. Grainger, the General Superintendent of the Public Works Workshops at Chepauk, should be consulted, in order that his experience, and knowledge also of the circumstances at Dowlaishweram, might be made use of in securing fully efficient arrangements.

No. 104, 30th January.

4. In paragraph 10 of the notes of inspection reviewed in G. O., No. 1,906, of the 15th July last, the urgent need for such a building was referred to, and Government were pleased, in paragraph 5 of that order, to say that consideration would be given to the estimate when received.

5. Lieutenant-Colonel Fischer forwarded in March last a design and estimate, amounting to Rupees 4,600, for a building $78\frac{1}{2} \times 17\frac{1}{2}$ feet, and Mr. Grainger's advice not having been taken, and it appearing that the small width proposed for the shop was insufficient, the way in which the shafting was to be carried undesirable, and other details open to improvement, Mr. Grainger was asked to consider the subject, give his advice, and also prepare a design and estimate.

No. 3,900, 28th March.

No. 381, 1st June.

6. Mr. Grainger's plan is for a shop 100 × 30, and his estimate amounts for building and machinery together to Rupees 18,350; a clerical error in the area of the roofing makes it necessary to add some 330 Rupees, so that the total may be taken to be 19,000 Rupees, of which the

No. 2,146, 17th September 1874.

| | | Rs. |
|---|---|---|
| | Building will cost about ... ... ... ... | 7,000 |
| * 2 Drills. 1 Screwing machine. 2 Boilers for engine. | Machinery* and boilers, including freight ... ... | 8,000 |
| | Shafting and other fittings ... ... ... ... | 3,500 |
| | Sundries ... ... ... ... ... ... | 500 |
| | | 19,000 |

7. The details have been carefully considered, and are illustrated by a block plan, a plan and section of the new shop, and a tracing* giving the details of the roof truss and columns for carrying the main shafting. Sanction is accordingly recommended for the increase of the capital of the workshops to the extent required to carry out the improvements contemplated.

* No. 2,375, 25th September.

CAMP AT PALAMCOTTAH, 16*th October* 1874. (Signed) JOHN MULLINS, Lieut.-Colonel, R.E., *Chief Engineer for Irrigation.*

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REFERRED to the Controller of Public Works Accounts for report whether specific allotment is necessary, and if so, of the source whence funds should be provided for the construction of a machine shop in connection with the Dowlaishweram Factory, and whether any portion of the cost is debitable to Loan Funds, seeing that its erection is necessitated principally by Loan Fund Works.

OOTACAMUND, 31*st October* 1874. (Signed) G. W. WALKER, Colonel, R.E., *Secretary to Government, P.W.D.*

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No. 62. From T. MOSS, Esq., Officiating Controller of Public Works Accounts, to Colonel G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Madras, 9th November 1874, No. 7,085.

IN returning herewith the Note, No. 831 of the 16th October 1874, by the Chief Engineer for Irrigation, received with your endorsement of the 31st idem, I have the honor to state that a specific allotment for the construction of a machine shop in connection with the Dowlaishweram Workshops need not be made unless the Superintendent of the shops anticipates that the undertaking will cause an "increase of capital." If there should be an increase of capital (which does not seem likely) a formal appropriation will have to be made from the provision for Tools and Plant Imperial. The cost of the machine shop will be debited to "Block" in the workshop books, while that of the machinery (which will no doubt be obtained through the Secretary of State on indent) will be debited to "Machinery and Plant" in the manner hitherto done in respect to stores received by the workshops from England.

1 Original Memorandum, No. 831, dated 16th October 1874, from the Chief Engineer for Irrigation.

2. The Dowlaishweram Workshops, unlike other Public Works Workshops, have been classed as *Imperial* because of the Godavery works for which they are maintained, and therefore all increase of capital must be met from the Imperial Grant, not from Extraordinary or Loan Funds, which can only be charged with *direct* outlay.

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No. 63. ORDER THEREON, 4th December 1874, No. 3,400.

CIVIL WORKS, No. 4.

THE evidence which has been adduced of the necessity for the construction of a machine shop at the Dowlaishweram Workshops and for making certain additions to the machinery is, the



Government consider, very strong, and sanction is, in accordance with the recommendation made in the foregoing Note, given for an outlay of Rupees 19,000 for the purpose of providing a machine shop 100 feet by 30 feet, estimated to cost Rupees 7,000, and for the additional machinery and fittings needed to make it complete and efficient.

2. The new shop will be constructed as soon as possible, in order that the means of turning out work more rapidly may be rendered available at an early date.

3. It is observed that specific appropriation of funds is not immediately necessary, and need only be made in the event of the result of the year's operations showing an increase to capital. On this point the District Engineer will report later in the year.

(True Extract.)

Colonel R.E.,
*Secretary to Government.*

To the District Engineer, Godavery.
,, District Engineer, Presidency.
,, Chief Engineer for Irrigation.
,, Controller of Public Works Accounts.

Exd. S. .T Austin.

Spare Copies

Office of the Controller of
Public Works Accounts

Madras 9th November 1874

From

The Officiating Controller of
Public Works Accounts

To

The Secretary to Government,
Public Works Department,
Fort Saint George.

Sir,

In returning herewith the note No 331
of the 16th October 1874, by the Chief Engineer
for Irrigation, received with your endorsement
of the 31st idem, I have the honor to state that
a specific allotment for the construction
of a Machine Shop in connection with
the Powlaisheveram Workshops need not
be made unless the Superintendent of
the Shops anticipates that the undertaking
will cause an "increase of Capital". If
there should be an increase of Capital
(which does not seem likely) a formal appro-
priation will have to be made from the
provision for Tools and Plant Imperial.
The cost of the Machine Shop will be
debited to "Block" in the Workshop books
while that of the Machinery (which will

no

no doubt be obtained through the Secretary of State on indent) will be debited to "Machinery and Plant" in the manner hitherto done in respect to Stores received by the Workshops from England.—

2. The Doolaishweram Workshops unlike other Public Works Workshops have been classed as Imperial because of the Godavery Works for which they are maintained and therefore all increase of Capital must be met from the Imperial Grant not from Extraordinary or Loan funds which can only be charged with direct outlay—

I have the honor to be,
Sir
Your most Obedient Servt

Offg Controller of
Public Works Account

P. W. 1874 Dept.
Ft. St. Geo. 3rd Nov. 1874
No: 7047

The Offg Controller of
Public Works Accounts

To

The Secretary to Government
Public Works Department
Fort Saint George

Dated 9th
Rec'd 10th November 1874
A. 7085

Returns with remarks the Notes by the Chief Engineer for Irrigation on the construction of a Madine drop in connection with the Dowlaishweram Workshops.

G.O. No: 3400. 4-12-74.

No 62
Cir 21-11-74
Sent to Common 10 Dec 74

MEMORANDUM.

Requested for reference the under-mentioned papers :—

| | |
|---|---|
| Ry No: 1766 of 17 Sept/74 with 4 Encs. | Sent with No. Ch. Engr's |
| Ry No: 1820 of 25 Sept/74 with 1 Encl | Note printed on 86 |
| Ry No: 104 of 30 January/74 | No 3400-4 Dec/74. |
| Ry No: 281 of 1st June/74 | |
| Ry No: 719 of 28 March/74 with 1 Encl. | |
| Ry No: 1482 of 17 Aug/74 | Sent with Asst Engr letter book |
| Ry No: 643 of 22 Aug/74 | in GO No 3407-4 Dec/74. |
| Engr Endorsement submitted with the Ch. Engr's Note referred to in GO No: 3441-4 Dec/74 | |

Office of the Chief Engineer
for Irrigation,
10 — 12 — 1874.

D.M. Hamilton
Head Clerk.

+ 10 Abstracts.

To 11-12-74

The Registrar of the Board

P. W. 1874 Dept.

Nº 831.

Enclosures 11.

Note by the Chief Engineer for Irrigation

During the visits made to the Godavery Delta in 1870 & 1873, the need of increased accommodation and more suitable arrangements at the Dowlaishwaram workshops came under notice, and a machine shop, in which the tools could be driven by steam power was seen to be the most pressing want.

2. Under existing arrangements it has become quite impracticable to get through the work to be done, and, as a consequence, much that is essential, particularly in connection with the maintenance of floating plant has to be left undone - work is annually on the increase, and means must, it is thought, be found of nearly doubling the outturn; if the floating plant is to be kept in order, the new plant in course of construction got on with at a reasonable rate, fair progress

progress made with the numerous iron bridges required across canals and drains, and generally the demand for lock & sluice gates, gear &c &c.

3. In January last the then District Engineer was requested to prepare a design and estimate for a machine shop, and it was suggested that, after putting on paper his general views on the subject, Mr. Grainger, the General Superintendent of the P.W. Workshops at Chepauk, should be consulted, in order that his experience, and knowledge also of the circumstances at Dowlaishwaram, might be made use of in securing fully efficient arrangements.

4. In para 10 of the notes of inspection reviewed in G.O. No 1906 of the 15th July last, the urgent need for such a building was

No 104-35 January

was referred to, and Government were pleased in para 5 of that order to say that consideration would be given to the estimate when received

5 Lieutenant Colonel Fischer forwarded in March last a design and estimate amounting to Rupees 4,600 for a building 78½ × 17⅔ feet, and Mr. Grainger's advice not having been taken, and it appearing that the small width proposed for the shop was insufficient, the way in which the shafting was to be carried undesirable, and other details open to improvement, Mr. Grainger was asked to consider the subject, give his advice and also prepare a design & estimate.

No 3900-28 March

381-1st June

6 Mr Grainger's plan is for a shop 100 × 30 and his estimate amounts for building and

No 2146-17 September 1874

and machinery together to Rupees 18,350: and a clerical error in the area of the roofing makes it necessary to add some 330 Rupees, so that the total may be taken to be 19,000 Rupees, of which the Building will cost about Rupees 7,000

| | | |
|---|---|---|
| ×Machinery & boilers, including freight | — | 8,000 |
| Shafting & other fittings | — | 3,500 |
| Sundries | — | 500 |
| | | 19,000 |

× 2-Drills 1-Screwing machine 2-Boilers for engine

7. The details have been carefully considered, and are illustrated by a block plan, a plan & section of the new shop, and a tracing giving the details of the roof truss and columns for carrying the main shafting. Sanction is accordingly recommended for the increase of the capital of the workshops to the extent

× No 2375-25 September.

required to carry out the improvements contemplated.

No 13

Camp at Palamcottah 16 October 1874

Lt Col Dundas

Chief Engineer for Irrigation

To The Secretary to Govt P.W. Dept.

Public Works Dept.
No. Pradat Gaol
Aug 18th 1874

From Colonel Inglis R.E.
Chief Engineer
Bengal

To
The Secretary to Govt.
P.W.D.
No 831 dated
16 Oct 1874

Sir,

I have the honor to solicit the sanction of the Government to the construction of a machine shop in connection with the Dowlaishweram Factory, and to the purchase of machinery for the same.

The machinery is required for the repairs of the engines and boilers employed in working the Dowlaishweram Anicut.

I have the honor to be
Sir
Your most obedient Servant
(Signed) H. Inglis
Colonel R.E.

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P.W. 1874 Department
Progress Cost Ledger
No. 667
The Chief Engineer for
Irrigation

To,
The Secretary to Govt.
P.W.D.
No 831.

Dated 16th
Despd 23rd October 74.
Recd 24th

Entd 12 11

Note on the construction of a Machine shop in connection with the Dowlaishweram Workshops.

No. 7047/74.

Referred

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Referred to the Controller of P.W. Accounts for report whether specific allotment is necessary, and if so, of the source whence funds should be provided for the construction of a Machine shop in connection with the Dowlaishweram Factory, and whether any portion of the cost is debitable to Loan Funds seeing that its erection is necessitated principally by Loan Fund Works.

Colonel R.E.
Secy. to Govt.
P.W.D.

Ootacamund
31st October 1874

Cir 21-11-74
Reptd to Col 24 Oct 74

note, given for an addition to the capital of the shops of Rupees 19,000, for the purpose of providing a machine shop 100 feet by 30 feet, estimated to cost Rupees 7,000, and for the additional machinery & fittings needed to make it complete and efficient.

2. The new shop will be constructed as soon as possible, in order that the means of turning out work more readily may be rendered available at an early date.

Lei 2/10/74
Resp. to Govt in Cons/74

Dup. to Govt in Cons/74

7067
661

To The Chief Engr. for Irrigation
— Govt Secy. to Govt. P.W.D. for information
— Chief Engr. for P.W.D.
— Controller of Stores

17/10/74
E.M.S.

P.W.D.

Proceedings of the Madras Government
Read the following

From the Chief Engr. for Irrign. (P.W.D. No. 831 d/ 18 Octr 1874)
Contr. of P.W. Accounts (P.W.D. No. 783 d/ 19 Novr 1874)

3407

The evidence which has been adduced of the necessity for the construction of a machine shop at the Dowlaishwaram Workshops and for making certain additions to the machinery is, the Government consider, very strong, and sanction is in accordance with the recommendation made in the foregoing note, given

24/11

given for an outlay of
£9,000 for the purpose
of providing a Machine
Ship 100 feet by 30 feet,
estimated to cost £7,000,
and for the additional
Machinery and fittings
needed to make it com-
plete and efficient.

The new Ship will
be constructed as soon as
possible in order that
the means of turning
out the work more ra-
pidly may be rendered
available at an early
date.

It is observed that
specific appropriation
of funds is not immed-
-diately necessary, and
need only be made in
the event of the result
of the years operations
showing an increase to
Capital. On this point
the District Engineer will
report later in the year.

Encl.

D. E. Godavery ✓
~~G. S. Bhadra~~ D. E. Presidency ✓
Ch. Engr. for I. ✓
Contr. D.P.W. with Sk. & Estimate ✓
Desp. 5/12/14.

61-63.

Cir 21-11-74

7047 6671

Govt. of Madras.

PUBLIC WORKS.

To

The Sl. Engr
Fredericksburg

Letter

Recd. Encl. 10

G. O. 4 Dec 1874. No. 3407

Nos. 61-63.

Machine shop in connection with the new Carriage Workshops.

Sanctioning an outlay of Rs. 19,000 for the construction of a Machine Shop and for the additional Machinery & Fittings needed to make it complete & efficient with certain instructions