

(1) Number of pages

24

(2) Date of repair

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No.

522 (J)

Press

Mis. 7

Dated

16-2

1877.

Not to be folded or roughly handled

Read the following papers :—

No. 395. From Major J. BEATTY, R.E., Officiating Superintending Engineer, Godavery, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, dated Dowlaisheram, 15th January 1877, No. 2,888.

As directed in your Memorandum No. 94 G.D., I have carefully reconsidered the subject of hutting the lock establishments with reference to the remarks of His Grace the Governor and your instructions; and I have now the honor to forward for your approval the plan of a block of huts of a less costly pattern than that previously submitted, and more in the style of the dwellings usually erected by the lower classes of natives.

One Plan.
" Estimate.

2. I presume that it may now be regarded as settled that, both for the sake of appearances, and what is of more importance, on sanitary grounds, it is considered expedient to substitute, for the present unsightly collections of hovels crowded together as they are on any piece of waste land, high or low, in the neighbourhood of locks, buildings of a better class, "well-made," "weather-tight," and "on a raised platform, with good drainage."

3. As good building sites are rarely available for lock huts, it is necessary to raise the floors 3 feet above the general level of the ground, to protect the basement by a line of masonry and to raise and gravel the ground about the buildings.

4. As the soil of the deltas generally, except at old village sites, is not suited to the construction of walls of mud, or rubble in mud, it is proposed to support the roof on stout posts of country-wood, of a description not subject to injury by boring insects (Maddi and Srimanu Karralu will do), and to form the walls with wattle and daub.

5. Tiling being, in my opinion, unsuitable as a roof covering in cutcha buildings such as I am now advocating, the choice seems to me to lie between corrugated iron and nanel grass thatching. Corrugated iron was used in the Upper Godavery, where material for thatching is not easily procurable; but even the natives seemed, I am told, to feel that it was not suitable on dwellings with comparatively low roofs and without special means of ventilation; it would be fire-proof, but expensive. I have therefore proposed thatching the roofs with nanel grass, a cool and cheap covering, which can be easily repaired; and probably with roofs erected on any standard plan that may be adopted the danger from fire would not be great.

6. According to the original design, permanent huts were estimated to cost on the average Rupees 280 for each Lock Superintendent and Rupees 240 for each lascar. Accommodation of the description now proposed could, it is calculated, be provided at an average cost of about Rupees 260 for each Lock Superintendent and Rupees 130 for each Lascar.

7. If the plan be approved, I shall have a separate estimate prepared for each delta, showing the cost of hutting all the existing lock and weir establishments.

No. 70 W.

No. 395-A. *Note by the Chief Engineer for Irrigation.*

In August last some incomplete papers connected with proposals for hutting lock establishments of the Godavery Delta were by mistake sent in circulation with papers belonging to another file* and his Grace the Governor having made some remarks on the subject, these were communicated with instructions to the District Engineer, who was requested, in revising his proposals, to give consideration to the points noticed, and to report there-after on the arrangements which he would propose.

2. Major Beatty's letter of the 15th instant, No. 2,888, is a reply to that communication, and he has submitted a design the details of which are clearly indicated on the plan, dated 13th January 1877, and an estimate showing the probable cost of—

A Lock Superintendent's hut at	...	...	...	RS.
				260
„ „ Lascar's hut at	...	...	...	130

It will be seen that the Superintendent's quarters are a double unit.

The Superintending Engineer notices that the cost of permanent huts on the original design was to be

For Superintendent's	...	...	...	RS.
				280
„ Lascar's	...	...	...	240

The accommodation for the Superintendent's being only a little better than that for lascars. Some reductions were however practicable, as pointed out by his Grace the Governor, and permanent huts in the Godavery can be built at the same or perhaps at a slightly less cost than in the

G.O., 6th May 1876, No. 1,115-A.

Kistna, for which delta the sanctioned estimate allows for—

A Superintendent's hut	...	...	...	RS.
				250
„ Lascar's hut	...	...	...	200

3. It does not appear to the undersigned that any real economy will result from the substitution of these perishable huts for those of a more permanent description, for repairs would be more costly. A greater saving than that indicated by the above figures could easily be secured, for the verandah level could be

3 feet to 18 inches.

11 feet above floor to 8 feet.

reduced 1 foot or 18 inches and the main walls 3 feet, but if buildings of a temporary kind are to be provided they should be of the description of sepoy's huts in regimental lines, and for such the limits might very well be Rupees 70 for a Superintendent's and Rupees 45 for a Lascar's hut, this cost being in addition to the preparation of the ground so as to provide for drainage and cleanliness. An intermediate style of building will not, it is thought, be likely to prove satisfactory.

FORT ST. GEORGE,

(Signed) JOHN MULLINS, Lieut.-Col., R.E.,

25th January 1877.

To the Secretary to Government, Public Works Department.

Chief Engineer for Irrigation.

No. 396.

ORDER THEREON, 16th February 1877, No. 522.

IRRIGATION, No. 38.

Establishment.

HIS GRACE the Governor in Council is of opinion that the following will be the system of hutting lock establishments which will best suit the habits of

the men, and at the same time tend to secure their health and comfort.

1st.—Sites for hutting lock establishments should be carefully chosen and marked out, and these sites should be sufficiently raised and well drained.

2ndly.—The alignments of the huts should be fixed.

3rdly.—The several members of the lock establishments should be allowed to erect their own huts, in such a manner as they may prefer subject only to such limitations or restrictions as the District Engineer may find necessary for the orderly regulation of these dwellings, and for making them fairly substantial, and not unduly liable to injury or destruction by fire.

4thly.—A reasonable amount to be provided by Government for the erection of each hut.

5thly.—The huts to be the property of, and to be maintained by, Government, charges for maintenance being restricted to the necessary cost of repairs, and not to be allowed to cover damage caused by the carelessness of tenants.

2. It will be seen that the Chief Engineer for Irrigation has suggested Rupees 70 for a Superintendent's and Rupees 45 for a Lascar's hut, exclusive of the preparation of the sites. The District Engineer will consider what amounts will be necessary and prepare estimates for sanction.

3. No masonry walls will be necessary to the raised platforms. One or more platforms on which to erect huts will be provided, and flat earthen slopes will connect these with the ground level.

4. These Proceedings will be communicated to the Superintending Engineer, Kistna, who will submit proposals in accordance with the above instructions, and estimates for sanction in supersession of those sanctioned in G.O., No. 1,115-A, of the 6th May 1876. Huts (if any) already commenced on that sanction can be completed.

(True Extract.)

Lieut.-Colonel, R.E.,

Secretary to Government.

To the District Engineer, Godavery.

Kistna.

„ Chief Engineer for Irrigation.

„ Revenue Department.

Exd. S. T. Austin.

Spare Copies

Note by the Chief Engineer
for Brigadier No: 40 dated 25th Jan'y 1877.

Columbieris Lt Col. R. G.
Joint Secretary to Govt and
Secy. Branch

[illegible]

I think it is best to construct
substantial dwellings once for
all & it was another view that
I sent up the historical estimate
which was sanctioned. It is
unhappy however apparently to
obtain the information called
for in my Memo to the D.C.

in order to be able to place the subject
in a complete shape before you.
It is desirable to carry out efficient
arrangements but it is essential
to introduce as soon as possible
some improvements. Further
will be done until a settlement
of the style of dwellings is made.
It would be much better to have
lines like those of a regiment
than to go on as at present.
They probably would not be
cheaper in the long run
than picket lines. The
cheap cavalry stables at
Bangalore are I think a
modern instance of money
wasted.

Bricks are not likely to be generally available. Stone in mud would not make good pillars. I think to stone in chumam pillars would be unexpensive.

To W.

Office Note

The office put up in a
file relating to Gorham
Ordnance License fees, the
value of an incomplete
Correspondence with D.E.
Gorham regarding lock
Establishment and
as a consequence His Grace
the B has noted on plans
estimate which have not
been accepted & which are
under revision. In connection
however with His Grace's views
on the subject the D.E. will be
requested to prepare alternative
estimates for well made & weather
tight dwellings of the class ordinarily
used in the district by the labouring
class.

Wm 3/8

1.0.

then would be the case in future dwellings
and if such an ^{permanent structure} ~~substantial~~
adopted. it would
be profitable to reduce
estimate - as the substitution
appears unacceptably large
with regard to the weight to
be carried -

Foundations 4' 3" wide
+ or 3.6 wide
+ 4.0 deep
+ 3.6 deep
can hardly be necessary for the
walls partition walls of the
huts - nor apparently
for the verandah can
it be necessary to have
foundations - 3.6 x 3.6.

Such foundations would
not be needed in England
& the Melbourn commission
and if the necessity of carrying
up 1.6 walls. in the gables
the partitions is not apparent -
if roofs are thatched it
would probably be desirable
to carry 2 of partitions
through roof in case of fire.
Bd. 17/8

Godavari River
Lock. Quits

The Lock Sup. should have
a good clap house -

The Lascar houses
stone rooms proposed now
seem of too costly a character
in view of the climate & hygiene.
Site with probably exercise
a more important influence
on health than the material

It seems to need consideration
whether anything more
is needed than a well
made & weather tight dwelling
of the clap or crumby kind
in the district by the locking
clap -

If buildings of a permanent
structure of stone or brick
are erected - it will probably be
found more difficult to
disinfect in case of any
infectious disease occurring

memo.

6

The average price of a Sepoy's hut in the three places given above is as follows:-

Perambore Grant hut. Rs. 164.

Poyaswam Grant in aid do. - - - 100

Bangalore - - - do - - - 144.

Prices will differ according to locality, climate, level of ground, nature of soil, price of building materials very considerably and influence cost of construction, but taking the three instances given above Rs. 150 may be taken to be the amount required for a Sepoy's hut.

7

.. 8th Feb.

My dear General
The reference for
the Govt of India on
the subject of hutting
the Army is now
out in circulation -
and in the Gov.
in Chief's report
on it - the Quarter
Master Genl gives

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of a letter but
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attached.

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M. J. J.

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OFFICE OF CHIEF ENGINEER FOR IRRIGATION,

Fort St. George, 25 January 1877.

Note by the Chief Engineer for Irrigation.

Enclosures 3.

Navigation
License fees.No. 94 - F.D. - 31st Aug.

No. 2888.

In August last some incomplete papers connected with proposals for putting lock establishments of the Godavery Delta were by mistake sent in circulation with papers belonging to another file - and His Grace the Governor having made some remarks on the subject, these were communicated with instructions to the District Engineer, who was requested in reviewing his proposals to give consideration to the points noticed, and to report thereafter on the arrangements which he would propose.

Major Brathys' letter of the 15th inst. is a reply to that communication, and he has submitted a design the details of which are clearly indicated on the plans dated 18th January 1877, and an estimate showing the probable cost.

infectious disease

cost of
 A lock Superintendents hut at Rupees 260
 " do. Lascars " " " 130

It will be seen that the Superintendents quarters are a double unit.

The Superintending Engineer notices that the cost of permanent huts on the original design was to be
 for Superintendents — Rupees 280
 Lascars — " " 240

The accommodation for the superintendents being only a little better than that for lascars. Some reductions were however practicable as pointed out by His Grace the Governor and permanent huts in the Godavery can be built at the same or perhaps at a slightly less cost than in the Krishna for which Delta the same estimated estimate allows for.

A Superintendents hut — Rupees 250
 Lascars — " " 200

It did not appear to the undersigned that any real economy will result

G. O. 6 May
 1876. W-1115A

3 feet to 18 inches
 11 feet above
 floor to 8 feet.

result from the substitution of these perishable huts for those of a more permanent description, for repairs would be more costly. A greater saving than that indicated by the above figures could easily be secured, for the Verandah level could be reduced 1 foot or 18 inches and the main walls 3 feet, but if on buildings of a temporary kind are to be provided, they should be of the description of depoy huts in regimental lines, and for such the limits might very well be Rupees 70 for a Superintendents and Rupees 45 for a lascar's hut, this cost being in addition to the preparation of the ground so as to provide for drainage and cleanings. An intermediate style of building will not, it is thought, be likely to prove satisfactory.

Wm. Lenthall
 Chief Engineer for Irrigation
 The Secretary to Government
 P. W. D.

P.W.D.

29 JAN 77

No. 853

The Chief Engineer for Irrigation,

The Secretary to Government,

Public Works Department.

Dated 25

Despatched 29

Received

1877.

ENCLOSURE 2

No. 70-N.

Subject.

Hutting lock over establish-
ments. Kadaveru District.
have submitting revised design
for — with remarks.

Vrs-6

No 522

Public Works Department.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 11 Feb 77

Read the following:

Note by the Chief Engineer
for Irrigation

(H.C. No. 70-N of 25 Jan 77)

His Grace the Governor
in Council is of opinion
that the following will
be the system of putting
lock establishments
which will best suit
the habits of the men
and at the same time
tend to secure their
health and comfort.

1. Sites for putting lock
establishments should
be carefully chosen
and marked out, and
these sites should be
sufficiently raised and
well drained.

Approved
10/2

2^{ndly} the alignments of the huts should be fixed.

3^{rdly} the several members of the lock establishment should be allowed to erect their own huts in such a manner as they may prefer subject only to such limitations or restrictions as the District Engineer may find necessary for the orderly regulation of these dwellings, and for making them fairly substantial and not unduly liable to injury or destruction by fire.

4^{thly} a reasonable amount to be provided by Govt for the erection of each hut.

5^{thly} the huts to be the property of and to be maintained by Government, charges for maintenance being

} what to be paid by the Govt

being restricted to the necessary cost of repairs, and not be allowed to cover damage caused by the carelessness of tenants.

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3. No masonry walls will be necessary to the raised platforms. One or more

platforms on which to
erect huts will be pro-
vided and flat earthen
slopes will connect these
with the ground level.

4. These Proceedings will
be communicated to the
Superintending Engineer
Kistna who will submit
proposals in accordance
with the above instructions
and estimates for same.
Now in supersession
of those sanctioned in
G.O. No. 1113 of the 6th
May 1876. Huts (if any)
already commenced on
that sanction can be
completed.

by S/r

e.s. 77-2-77
2.10.10.2.77
18.10.10.2.77

His Grace the Governor

Resubmitted with
information to the
Military
Dept

Dr. Padanary ✓
" Kistna ✓
Ch. for Irrig with 3
Enclosures
Revenue Dept ✓

Drpd - 1-3-77



Post. of 1877 Standard.
PUBLIC WORKS.

To the W. E. Godavery.

Dated

Issued

Recd.

Encl.

G. O., 1877, No. 522

Nos. 395-96

Hutting Rock and West
Establishments of the
Providence Delta - Instruction
issued relative to the
system of —

Left in Reg.

Feb 10. 2. 77
Re Berlin 2. 27

22 sep - 1-6-77