

No. 11015 of 11/17 Jan 1891

Communicated
to the Chief Eng for
Ingr, the Rev. Dept and
the Local & Munl.
Dept for expression
of the opinion asked
for in para 1 and
for reply to the question
in para 2.

(Ed) J. P.
h

Ch: Eng for Ingr
L & M Dept

Rev. Dept with copy of
Hui's note
Cons. Eng for Reps
for information

A.—PROPOSITION Statement showing the Special Establishment required for the Tank Restoration Scheme for 1890-91.

2

28TH FEBRUARY 1890, No. 641 W., PUBLIC WORKS.

No.	Date.	Office to which the proposition refers.	NATURE OF CHANGES.			PROPOSITION.					
			Present scale.		Proposed scale.	Permanent.		Temporary.		months.	
			No.	Designation.		No.	Average or fixed pay.	Increase.	Decrease.		
							RS.	MTHS.	RS.	RS.	RS.
			1	Clerk	..	1	170	..	..	..	..
			1	Do.	..	1	96	..	..	..	..
			1	Do.	..	1	36	..	..	..	..
			1	Do.	..	1	30	..	..	..	..
			1	Do.	..	1	22	..	..	..	..
			1	Do.	..	1	17	..	..	..	..
			1	Draughtsman	..	1	96	..	..	..	..
			1	Do.	..	1	62	..	..	..	..
			1	Do.	..	1	40	..	..	..	..
			1	Do.	..	1	38	..	..	..	..
			2	Draughtsmen at Rs. 30 each	..	2	60	..	..	..	..
			1	Draughtsman	..	1	25	..	..	..	..
			6	Clerks at Rs. 12 each	..	6	72	..	..	..	..
			1	Muchee	..	1	12	..	..	..	..
			1	Messenger	..	1	10	..	..	..	..
			2	Messengers at Rs. 6 each	..	2	12	..	..	..	..
			1	Lascar	..	1	7	..	..	..	..
			2	Lascars at Rs. 6 each	..	2	12	..	..	..	..
				Total per mensem ..			817				
				Total per annum ..			9,804				
				Contingencies ..			1,418				
				Total ..			11,222				
			1	Executive Engineer	..	1	700	..	..	..	..
			1	Overseer	..	1	80	..	..	..	..
			1	Clerk	..	1	35	..	..	..	..
			1	Do.	..	1	25	..	..	..	..
			1	Do.	..	1	20	..	..	..	..
			1	Draughtsman	..	1	50	..	..	..	..
			1	Do.	..	1	40	..	..	..	..
			4	Lascars at Rs. 6 each	..	4	24	..	..	..	..
				Total per mensem ..			974				
				Total per annum ..			11,688				
				Total ..			11,222				
				Total per annum ..			9,804				
				Contingencies ..			1,418				
				Total ..			11,222				
			1	Executive Engineer	..	1	700	..	..	..	..
			1	Overseer	..	1	80	..	..	..	..
			1	Clerk	..	1	35	..	..	..	..
			1	Do.	..	1	25	..	..	..	..
			1	Do.	..	1	20	..	..	..	..
			1	Draughtsman	..	1	50	..	..	..	..
			1	Do.	..	1	40	..	..	..	..
			4	Lascars at Rs. 6 each	..	4	24	..	..	..	..
				Total per mensem ..			974				
				Total per annum ..			11,688				
				Total ..			11,222				
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			1	Do.	..	1	25	..	..	..	..
			1	Do.	..	1	20	..	..	..	..
			1	Draughtsman	..	1	50	..	..	..	..
			1	Do.	..	1	40	..	..	..	..
			4	Lascars at Rs. 6 each	..	4	24	..	..	..	..
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			1	Clerk	..	1	35	..	..	..	..
			1	Do.	..	1	25	..	..	..	..

A.—Proposition Statement showing the Special Establishment required for the Tank Restoration Scheme for 1890-91—*cont.*

No.	Date.	Office to which the proposition refers.
I.—PROPOSITIONS FOR THE YEAR ENDING ON MARCH 1890.		
NATURE OF CHANGES.		
Present scale.		
No.	Description.	Average or fixed pay.
2 1 1	Clerks for one month at Rs. 20 .. Draughtsman for one month .. Lascar for one month .. Travelling allowance and contingencies. Total ..	Rs. 40 20 6 3,000 15,774
1	Sub-Engineer ..	400
1	Overseer ..	60
2	Clerks at Rs. 20 ..	40
2	Draughtsmen at Rs. 50 and 20..	70
3	Lascars at Rs. 6 ..	18
Total per mensem ..		588
1	Lascar for one month ..	7,056
Total per annum ..		6
Travelling allowance and contingencies. Total ..		2,500 9,562
2	Overseers at Rs. 60 ..	120
2	Clerks at Rs. 35 and 20 ..	55
2	Draughtsmen at Rs. 40 ..	80
5	Lascars at Rs. 6 ..	30
Total per mensem ..		285
Total per annum ..		3,420
Travelling allowance and contingencies. Total ..		1,500 4,920
2	Overseers at Rs. 100 and 60 ..	160
2	Clerks at Rs. 20 ..	40
2	Draughtsmen at Rs. 30 ..	60
2	Lascars at Rs. 6 ..	12
Total per mensem ..		272
Party, Tank restoration Scheme.		
16th March 1889.		
II.—PROPOSITIONS FOR THE YEAR ENDING ON MARCH 1891.		
NATURE OF CHANGES.		
Proposed scale.		
No.	Description.	Average or fixed pay.
2 1 1	Clerks for one month at Rs. 20 .. Draughtsman for one month .. Lascar for one month .. Travelling allowance and contingencies. Total ..	Rs. 40 20 6 3,000 15,774
1	Sub-Engineer ..	400
1	Overseer ..	60
2	Clerks at Rs. 20 ..	40
2	Draughtsmen at Rs. 50 and 20..	70
3	Lascars at Rs. 6 ..	18
Total per mensem ..		588
1	Lascar for one month ..	7,056
Total per annum ..		6
Travelling allowance and contingencies. Total ..		2,500 9,562
2	Overseers at Rs. 60 ..	120
2	Clerks at Rs. 35 and 20 ..	55
2	Draughtsmen at Rs. 40 ..	80
5	Lascars at Rs. 6 ..	30
Total per mensem ..		285
Total per annum ..		3,420
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2	Clerks at Rs. 20 ..	40
2	Draughtsmen at Rs. 30 ..	60
2	Lascars at Rs. 6 ..	12
Total per mensem ..		272
Party, Tank restoration Scheme.		
16th March 1889.		

G.O., No. 810 W.

[illegible]

(Signed) G. T. WALCH,
Chief Engineer for Irrigation,
Tank Restoration Scheme.

ORDER—dated 28th February 1890, No. 641 W., Public Works.

With his note above recorded, the Chief Engineer for Irrigation submits a statement of special establishment required for the Tank Restoration Scheme during 1890-91. As the Executive Engineers and some of the upper subordinates belong to the permanent establishment and as provision has been separately made for the required temporary upper subordinates, sanction is accorded to the office and petty establishments detailed in the statement.

2. The travelling allowances and contingencies will be met from the lump sum provision in the budget, and separate sanction to the same is unnecessary.

3. This sanction has been registered as Provincial No. 60 W. of 1889-90, and classified as Establishment, Temporary.

(True Extract.)

(Signed) R. R. E. DRAKE-BROCKMAN, Lt.-Col., R.E.,
Ag. Joint Secy. to Govt., P.W.D.

To the Chief Engineer for Irrigation.
„ Examiner, Public Works Accounts.

Exd. J. Moses.
Spare Copies

GENERAL.
ESTABLISHMENT.

Govt. of {1890} Madras.
PUBLIC WORKS.

Dated February, 28th.

Recd.

Encl.

G.O., 28th Feb. 1890, No. 641 W.

FEBRUARY.

Special Establishment required
for the Tank Restoration
Scheme for 1890-91

Orders on application for —.

1890.

P. W. DEPARTMENT.

Current No. //331

From

C. E. M. J.

ENCLOS.—

No. 18762

Dated 26. XI. 90

Received 26. XI. 90

SUBJECT.

Draftsman. Requests
sanction to appoint
an unpassed candidate
for the post of —
in Vizagapatam division.

DISPOSAL.

No. 49690 dated Decr 1st 1890

transferred to the

Edl. Dept.

(Sd) J. P. W.

Dil 12

27/12

Enclosure to No. 3551 G. of 1890.

No. 2551 ^{D.}_{S.}, dated 13th November 1890.

From—The Assistant Surveyor General in charge Drawing Office, Calcutta,
To—The Secretary to the Government of India, P. W. Dept.

In reply to your No. 3096 G. of 4th instant, I have the honour to state that the original Index Maps on the scale of 1"=1 mile similar to those supplied by the Public Works Department, Railway Construction, will exactly suit our wants, and I will be obliged if you will send us similar information regarding canals and roads opened or in course of construction.

No. 3096 G., dated 4th November 1890.

From—The Government of India, P. W. Dept.,
To—The Surveyor General of India.

I am directed to acknowledge the receipt of your No. 2268 S., dated the 6th October last, pointing out the extreme difficulty your Department has in obtaining reliable information as to the exact location of various public works.

2. In reply, I am to enquire whether the supply of a copy of the plans (the largest scale available) on which sanction has been accorded to canals, distributaries from existing canals or roads being undertaken or constructed would sufficiently answer the purpose, or whether the supply of original Index Maps as in the case of railways would be preferred.

No. 2268 S., dated 6th October 1890.

From—The Assistant Surveyor General in charge Drawing Office, Calcutta,
To—The Secretary to the Government of India, P. W. Dept.

With reference to Government of India Circular No. XIV P. W., dated October 11th, 1883, on the subject of supplying the Survey Department with information as to all new public works, I am directed to bring to your notice the extreme difficulty this Department has in obtaining reliable information as to the exact location of various public works.

2. The system instituted was that the sheets of the atlas of India should be forwarded from time to time to the Local Governments, who were to have the various public works entered on them.

3. In the case of railways, it was soon found that the alignment as entered by the railway authorities was frequently very wrong, and at an unofficial conference it was decided that the Railway Department should send their original index plans to this office and that the alignment should be entered on the maps here.

This system has worked well, the line being fitted on to the map in correct relation to the surrounding detail by surveyors accustomed to such work.

4. In the case of canals and roads, however, the old system still prevails; the various items are entered on the sheets by the Canal and District officers, and there is nothing to show whether the canal or road has been entered from surveys in possession of the Public Works Department or whether it is put on purely by guess work. In many cases it is feared that the latter system is adopted, as it is difficult otherwise to account for the fact that frequently different alignments for the same canal or road are shown in successive years.

5. As an instance of this I am directed to enclose a portion of an atlas sheet showing the Balasore Canal as entered by the Public Works Department, Bengal, on three successive occasions.

The alignment in red ink was supplied with their letter No. 191 G. of 20th January 1887; that in blue ink with their letter No. 594 G. of 8th February 1889, and when the map was sent to them a third time, the discrepancy being brought to notice, the third alignment in blue pencil was given as correct.

There appears to be no certainty that the third alignment is any better than its predecessors.

6. Without knowing what data are in the possession of the Canal and Road authorities it is difficult to suggest any remedy beyond that of entrusting the entry of the detail to some responsible person who will take the trouble to get the alignment as correct as possible and that the source from which it is entered be written on the face of the map.

If any maps or plans exist showing the positions of the canals or roads with respect to the neighbouring villages or other detail, it would perhaps be possible to arrange that they might be sent to this office, so that the detail might be inserted on the maps.

No. 3551 G.

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
GENERAL.

To

THE GOVERNMENTS OF MADRAS, BOMBAY, BENGAL, THE NORTH-WESTERN PROVINCES AND OUDH, AND THE PUNJAB.
THE CHIEF COMMISSIONERS OF THE CENTRAL PROVINCES, BURMA, ASSAM AND COORG.
THE RESIDENT AT HYDERABAD.
THE AGENTS TO THE GOVERNOR GENERAL FOR CENTRAL INDIA, RAJ-PUTANA AND BALUCHISTAN.

Calcutta, the 23rd December 1890.

SIR,

In forwarding, in continuation of Public Works Department Circular No. III Public Works of 1890 and previous Circulars on the same subject, copy of the marginally noted papers in which the Surveyor General points out the extreme difficulty now experienced by the Survey Department in obtaining reliable information as to the exact location of various public works, and suggests the procedure to be adopted with a view to remedying the same, I am directed to request that the Government of India may be favoured with your opinion as to the best method of supplying the information required.

2. I am also to request that it may be stated on what maps and on what scale the canals and roads in your Province are accurately recorded.

I have the honour to be,

SIR,

Your most obedient Servant,

G. H. D. WALKER,

Under Secy. to the Govt. of India.

Documents accompanying.

Papers referred to.

No. 3552 G.

Copy forwarded to the Surveyor General for information, with reference to his No. 2551 D. S., dated 13th November 1890.

G. H. D. WALKER,

Under Secy. to the Govt. of India.

No. 3551 G.

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
GENERAL.

To

THE GOVERNMENTS OF MADRAS, BOMBAY, BENGAL, THE NORTH-WESTERN PROVINCES AND OUDH, AND THE PUNJAB.
THE CHIEF COMMISSIONERS OF THE CENTRAL PROVINCES, BURMA, ASSAM AND COORG.
THE RESIDENT AT HYDERABAD.
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G. H. D. WALKER,

Under Secy. to the Govt. of India.

Government of India Central Printing Office,—No. 1105 P. W. D.—27-12-90.—915.

No. 1105 P. W. D. Jan 1891

Communicated
to the Chief Engr for
Indra, The Rev. Dept &
the Local & Muni:
Dept for expression
of the opinion asked
for in para 1 and for
reply to the question
in para 2.

(Ed) J. P.

W

Ch: Engr for Indra
L & M Dept
Rev. Dept with copy of
Hui's note.
Comm. Engr for Rys
for information

Enclosure to No. 3551 G. of 1890.

No. 2551 ^{D.}/_{G.}, dated 13th November 1890.

From—The Assistant Surveyor General in charge Drawing Office, Calcutta,

To—The Secretary to the Government of India, P. W. Dept.

In reply to your No. 3096 G. of 4th instant, I have the honour to state that the original Index Maps on the scale of 1"=1 mile similar to those supplied by the Public Works Department, Railway Construction, will exactly suit our wants, and I will be obliged if you will send us similar information regarding canals and roads opened or in course of construction.

No. 3096 G., dated 4th November 1890.

From—The Government of India, P. W. Dept.,

To—The Surveyor General of India.

I am directed to acknowledge the receipt of your No. 2268 S., dated the 6th October last, pointing out the extreme difficulty your Department has in obtaining reliable information as to the exact location of various public works.

2. In reply, I am to enquire whether the supply of a copy of the plans (the largest scale available) on which sanction has been accorded to canals, distributaries from existing canals or roads being undertaken or constructed would sufficiently answer the purpose, or whether the supply of original Index Maps as in the case of railways would be preferred.

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To—The Surveyor General of India.

I am directed to acknowledge the receipt of your No. 2268 S., dated the 6th October last, pointing out the extreme difficulty your Department has in obtaining reliable information as to the exact location of various public works.

2. In reply, I am to enquire whether the supply of a copy of the plans (the largest scale available) on which sanction has been accorded to canals, distributaries from existing canals or roads being undertaken or constructed would sufficiently answer the purpose, or whether the supply of original Index Maps as in the case of railways would be preferred.

No. 2268 S., dated 6th October 1890.

From—The Assistant Surveyor General in charge Drawing Office, Calcutta,

To—The Secretary to the Government of India, P. W. Dept.

With reference to Government of India Circular No. XIV P. W., dated October 11th, 1883, on the subject of supplying the Survey Department with information as to all new public works, I am directed to bring to your notice the extreme difficulty this Department has in obtaining reliable information as to the exact location of various public works.

2. The system instituted was that the sheets of the atlas of India should be forwarded from time to time to the Local Governments, who were to have the various public works entered on them.

3. In the case of railways, it was soon found that the alignment as entered by the railway authorities was frequently very wrong, and at an unofficial conference it was decided that the Railway Department should send their original index plans to this office and that the alignment should be entered on the maps here.

This system has worked well, the line being fitted on to the map in correct relation to the surrounding detail by surveyors accustomed to such work.

4. In the case of canals and roads, however, the old system still prevails; the various items are entered on the sheets by the Canal and District officers, and there is nothing to show whether the canal or road has been entered from surveys in possession of the Public Works Department or whether it is put on purely by guess work. In many cases it is feared that the latter system is adopted, as it is difficult otherwise to account for the fact that frequently different alignments for the same canal or road are shown in successive years.

5. As an instance of this I am directed to enclose a portion of an atlas sheet showing the Balasore Canal as entered by the Public Works Department, Bengal, on three successive occasions.

The alignment in red ink was supplied with their letter No. 191 G. of 20th January 1887; that in blue ink with their letter No. 594 G. of 8th February 1889, and when the map was sent to them a third time, the discrepancy being brought to notice, the third alignment in blue pencil was given as correct.

There appears to be no certainty that the third alignment is any better than its predecessors.

6. Without knowing what data are in the possession of the Canal and Road authorities it is difficult to suggest any remedy beyond that of entrusting the entry of the detail to some responsible person who will take the trouble to get the alignment as correct as possible and that the source from which it is entered be written on the face of the map.

If any maps or plans exist showing the positions of the canals or roads with respect to the neighbouring villages or other detail, it would perhaps be possible to arrange that they might be sent to this office, so that the detail might be inserted on the maps.

No. 3551 G.

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
GENERAL.

To

THE GOVERNMENTS OF MADRAS, BOMBAY, BENGAL, THE NORTH-WESTERN PROVINCES AND OUDH, AND THE PUNJAB.
THE CHIEF COMMISSIONERS OF THE CENTRAL PROVINCES, BURMA, ASSAM AND COORG.
THE RESIDENT AT HYDERABAD.
THE AGENTS TO THE GOVERNOR GENERAL FOR CENTRAL INDIA, RAJPUTANA AND BALUCHISTAN.

Calcutta, the 23rd December 1890.

SIR,

In forwarding, in continuation of Public Works Department Circular No. III Public Works of 1890 and previous Circulars on the same subject, copy of the marginally noted papers in which the Surveyor General points out the extreme difficulty now experienced by the Survey Department in obtaining reliable information as to the exact location of various public works, and suggests the procedure to be adopted with a view to remedying the same, I am directed to request that the Government of India may be favoured with your opinion as to the best method of supplying the information required.

2. I am also to request that it may be stated on what maps and on what scale the canals and roads in your Province are accurately recorded.

I have the honour to be,

SIR,

Your most obedient Servant,

G. H. D. WALKER,

Under Secy. to the Govt. of India.

Documents accompanying.

Papers referred to.

No. 3552 G.

Copy forwarded to the Surveyor General for information, with reference to his No. 2551 D. S., dated 13th November 1890.

G. H. D. WALKER,

Under Secy. to the Govt. of India.

28TH FEBRUARY 1890, No. 641 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

General,
Establishment.

READ—the following paper:—

No. 46 E.W.

Note by the Chief Engineer for Irrigation.

The accompanying statement of special establishment required for investigation in the Tank Restoration Scheme, from 1st March 1890 to 28th February 1891, is forwarded to the Chief Engineer, Public Works Department, in supersession of the proposition statement forwarded with this office No. 2092, dated 28th October 1889.

2. Since that note was written it has become necessary to modify to some extent the proposals made therein.

3. It has been found necessary to reduce still further the work of investigation as it is still found that the number of estimates sanctioned is far in excess of the requirements for execution and also that there is a large accumulation of estimates in the Central office. It has been decided after due consideration that the most economical way to effect the desired reduction will be to abolish two parties working under the charge of the same Executive Engineer, and No. III and VI Parties working in Bellary and Cuddapah respectively have been selected for the purpose.

4. It is proposed to allow the same *total* grant for Tank Restoration Scheme works as that of the current year and the amount saved on special and work establishment as stated in para. 3 will become available for expenditure on execution of works.

5. The total cost of special establishment now proposed will be Rs. 57,500, or Rs. 37,938 less than the budget for the *current* year. It is also expected that there will be a saving of Rs. 8,562 in work establishment, making a total of Rs. 46,500 available for transfer to execution; of this, Rs. 37,060 approximately will be expended on execution, the balance going to meet the proportionate charges for establishment and tools and plant.

6. It will therefore be seen that an increase to the staff of upper subordinates is necessary, and it is advisable that the proposals for appointing eight temporary overseers made in this office note No. 2338, dated 9th December 1889, should be put into effect from 1st April 1890.

CHEPÂK,
17th December 1889.

(Signed) G. T. WALCH,
Chief Engineer for Irrigation.
Tank Restoration Scheme.

To the Chief Engineer, Public Works Department,
General and Road and Building Branch.

Office note from the Examiner of Public Works Accounts, dated 29th January 1890,
No. 446.