

Gobt. of (1884) Madras.
PUBLIC.

Issued

Recd.

Encl.

G.O., &c., 22nd November 1884,
Nos. 2516-A, 2516-B.

NOVEMBER.

Archæology.

Passing orders on the report furnished by Mr. Black, Special Temporary Engineer, on the work of repairs to the Hampi temples.

Order thereon

No. 2995 of 5 December

Commenced to Mr. Black
through the S. G. C. C. C.

Further orders in the
Public Department
as to a part for the
work will be awaited.
It is desirable that
such orders should
issue at an early
date, as the expenditure
already incurred during
the current year is
now almost regarded
as objectionable from
an account point of
view.

(See Extract)

(S) Brown Major G.
Under Secy to Govt
P. W. Dept.

In the S. G. C. C. C.
for the account

With order

GOVERNMENT OF MADRAS.

PUBLIC DEPARTMENT.

READ—again G.O., dated 19th June 1884, No. 1338, Public.

READ—also the following papers:—

From Lieutenant-Colonel H. M. VIBART, R.E., Superintending Engineer, III Circle, to the Chief Engineer, Public Works department, Madras, dated Bellary, 18th October 1884, No. 1423.

With reference to your memorandum, No. 1651C.—A, dated the 7th instant, I have the honor to submit the estimate and report prepared by Mr. H. C. Black for completing the repairs now in progress to the ruined temples at Hampi.

1 Estimate and report.

2. The estimate provides for:—

	Amount, RS.
1. Making watertight the roofs of the main temple of Vittalsawmi pagoda	2,599
2. Plastering inside walls damaged by fire	23
3. Repairs to five flights of steps	120
4. Pointing floors	64
5. Completing the outside ashlar walls of the main building of the temple	120
6. Raising the outside walls to prevent trespassing	990
7. Two gates for the south and east gopuras	120
8. Examining under-ground passage	400
9. Examining inscriptions	213
10. Propping up insecure beams of five other temples	1,208
11. Establishment for 4½ months	1,931
Total	7,788

3. The cost of finishing the repairs in progress is Rs. 4,649, cost of securing five other temples is Rs. 1,208, and the cost of establishment for 4½ months is Rs. 1,931.

4. The work estimated for would seem to secure the object of the Government, viz., to preserve the buildings without any attempt at so-called "restoration."

5. It would be desirable to carry out the repairs which could be easily completed before the close of the official year.

ENCLOSURES.

ARCHÆOLOGICAL DIVISION.

REPORT as to the amount of work still to be done at Hampi in accordance with Estimate Provincial No. 56 W. of 1883-84.

The work still to be done at Vittalsawmi temple depends entirely on what funds are available and what would be advised by Major Cole, R.E., late Curator of Ancient Monuments, or other competent judge. In default of such advice, undersigned would propose that the following works be completed.

Vittalsawmi.—The roofs of the main temple to be made watertight by filling up all cracks which formed in the terracing. The same to be done to the subsidiary temples, Kallian

Mantapa, and the southern hall, but no further replacing of beams, as suggested in the first estimate, to be continued as it would be too expensive.

Roof of Adytum.—That the roof of the adytum, which is in a most dangerous condition, be taken down. This will have to be done under careful supervision, as the stone beams are so cracked with fire that they are ready to fall. The object of this removal is to avoid accidents to people inspecting the building.

The hall is 54 feet square and, with the exception of about 800 superficial feet, should be taken down. It is proposed to buy or borrow some old railway sleepers and stack them under the cracked beams, after which they and the superincumbent terrace can be removed. This hall should then be left roofless.

Inside walls.—The inside walls, which were so much blistered by fire as to be much damaged, should be plastered, which is absolutely to prevent large flakes of the stone falling out. Replacing the stones would be too expensive.

Propping beams and cornices.—Some of the beams and cornices in the building can be supported by rails. This also will require care, but should be done by stacking sleepers under them as mentioned above, and afterwards placing rails longitudinally beneath the beams, letting in the ends of the rails about four inches into the granite at each side. It will require about two rails to each beam or cornice edge, as there is considerable weight to support. This will require about 296 lineal feet of rails for the porch, and about 210 feet more for other parts of the building. From inquiries made of the District Engineer, Madras Railway Company, old flat-footed contractor's rails of 40 lb. to the yard, and 18 feet long can be sold at Bellary station at 10 rupees each. Thus the expense of propping these beams and cornices will probably not amount to more than 375 rupees.

Stonework in front.—The stonework in front it is not proposed to complete as it will be too expensive, but the five flights of steps mentioned in the progress report should be done, as the expense of each would not exceed Rs. 24 each.

The brickwork in gopuras it is not proposed to rebuild, but propping with rails is necessary in all three, amounting to about 460 lineal feet, or say Rs. 350.

Flooring.—Nothing further need be done to the flooring except pointing, as although still very irregular it will serve the purpose of keeping the rain water out of the foundations if the joints are filled up with mortar.

Ashlar walls.—The outside ashlar walls of the main building of the temple should be completed as they are only three courses short of full height about $4\frac{1}{2}$ feet. It will cost about 120 rupees.

Colonnades.—The expense of re-erecting these colonnades has been found to be much greater than was anticipated, owing to the insecure state of the outside wall which necessitated its being taken down to the foundation before being rebuilt. It is therefore proposed to stop erecting the pillars and roof of these colonnades and merely complete the outside wall, not to its full height and thickness, but only about 18 inches thick so as to form an enclosure to prevent trespassing. The total length of wall that would have to be rebuilt would be about 330 lineal feet. The enclosure would be completed by two gates at the south and east gopuras, the north gopura, which leads to only the river's bank, might be walled up. It is not proposed to rehoist any of the chuggas or large curved eaves.

Brickwork on Car and Kallian Mantapa.—The top of the car having been restored it is not proposed to do anything more to this or to the Kallian Mantapa, nor need the flooring of these or the brickwork of the gopuras be proceeded with, with the exception of propping with rails as mentioned above.

Gates.—Two gates should, however, be made as at first determined on so as to be able to keep the villagers from herding their cattle within the enclosure.

Hazara Ram Chandra.—Nothing need be done to this, as to carry out any satisfactory work would be too costly.

Queen's Baths.—This has been completed as far as was intended, and nothing more requires to be done.

Raganath Malavanta.—Nothing has been done to this beyond clearing the jungle, and it is not proposed to do anything more to it.

Plans and Drawings.—As the Archaeological Surveyor (Dr. Burgess) is now doing this work with a staff of six draughtsmen, it is proposed to discontinue this entirely. Sanction was obtained to this several months ago, but from want of funds to pay off the draughtsman, he has been kept at work until such time as he can be paid up and discharged.

Map.—It is, however, suggested that the map of the town, as it existed at the time of capture, be completed.

Under-ground passage.—It is also proposed that the under-ground passage, said to exist in a continuous line from the building known as the throne towards the western part of the town, should be examined, but only earthwork excavation should be made; at most not more than 160,000 cubic feet of earthwork, at a cost of about 400 rupees, need be excavated.

Inscriptions.—It is not known how many of these Dr. Burgess has had copied, but he has copied some, several of which I had had done before. As Hampi is very rich in these, it is suggested that the remainder be finished and translated.

Time.—It is estimated that the above work will take about two months including every thing.

Other temples.—This does not include several other temples which, perhaps, require propping with rails to prevent the broken beams from falling, but which it is suggested should otherwise be left as they are. Should it be decided to preserve these, the average cost of the five principal temples would be as follows:—

Cost of preserving five of the large temples.

Achayat Rao temple	requires about	450 lineal feet of rails.
Krishnaswami	do. do.	500 do. do.
Lathcheni	do. do.	80 do. do.
Rama	do. do.	310 do. do.
Sita	do. do.	40 do. do.
		1,380 lineal feet.

Of these the temple of Achayat Rao is important, as the Hon. Mr. T. C. Hope, Member of Council, drew my attention to it. This will require about $2\frac{1}{2}$ months more, as it will be necessary to do them consecutively to avoid the expense of purchasing more wooden sleepers for propping.

ESTIMATE.

Work in progress.

Terracing, filling cracks, &c., 790 lineal feet, at Rs. 1-8-0 per cent	12
Dismantling roof of adytum, 1,720 superficial feet, at 10 rupees per 100 superficial feet	172
Propping beams—	
Rails including carriage	425
Propping beams for gopurams	390
Four hundred old wooden sleepers, at 4 rupees each	1,600
Total roofing	2,599
1. Plastering inside walls, 570 superficial feet, at Rs. 4 per 100	23
2. Steps 5, at Rs. 24 each	120
3. Flooring pointing only 3,200 superficial feet, at Rs. 2	64
4. Outside walls, 330 lineal feet, at Rs. 3 per lineal foot (15 rupees 100 cubic feet)	990
5. Gates 2, at Rs. 60	120
6. Earthwork in passage	400
7. Inscriptions 61, at Rs. 3-8-0 each	213
8. Ashlar walls	120
	4,649

10. Establishment including.

Surveying for Map.

1 Engineer, two months at Rs. 350	700
1 Overseer do. at „ 40	80
1 Writer do. at „ 25	50

Establishment.

4 Lascars, two months, at Rs. 8 each per month	64
	894

Other temples if required.

Propping 1,380 lineal feet, at 14 annas per lineal foot	1,208
1 Engineer, $2\frac{1}{2}$ months	875
1 Overseer do. at Rs. 40	100
1 Writer do. at Rs. 25	62
Total	2,245

But the Engineer need not confine himself to this work alone.

SUMMARY.

Work in progress.

	RS.
1. Roofing	2,599
2. Plastering	23
3. Steps	120
4. Flooring	64
5. Outside walls	990
6. Gates	120
7. Earthwork in passage	400
8. Inscriptions	213
9. Ashtar walls	120
10. Establishment	894
Total work in progress ..	5,543
Other temples if required ..	2,245
Grand total ..	7,788

(Signed) H. C. BLACK,
Temporary Engineer in charge.

NOTE.

With his letter quoted above, the Superintending Engineer, III Circle, submits a report from Mr. H. C. Black, Special Temporary Engineer, in which is shown the work already executed, and that remaining to be done to complete the preservation of the ruins at Vijianagar.

2. An estimate, amounting to Rs. 18,990, was sanctioned for this work in G.O., No. 1741 W., dated 21st June 1883. Against that estimate an expenditure of Rs. 9,842 was incurred during 1883-84, leaving an unexpended balance of estimate at the close of the year amounting to Rs. 9,148. The expenditure during the current official year, against advances sanctioned from time to time in the Public Works department, has amounted to Rs. 4,250. A further expenditure of Rs. 3,733-2-0 has been incurred by Mr. Black, which is covered by no appropriation of funds. The total sum to be formally allotted in the current official year to meet outlay already incurred thus amounts to Rs. 7,983-2-0,* against the unexpended balance of estimate at the end of last official year of Rs. 9,148, as shown above.

	RS.	A.	P.
* 4,250	0	0	
3,733	2	0	
Total ..	7,983	2	0

3. To complete the work of preservation, Mr. Black now submits further estimates as follows:—

	RS.
For work in progress at Hampi	4,649
Work at five other temples	1,208
Establishment for 4½ months	1,931
Total ..	7,788

4. The Chief Engineer has recently had an opportunity of inspecting the work on which Mr. Black has been employed, and has no hesitation in saying that what has been done has been done well. He concurs with the Superintending Engineer as to the desirableness of completing the work, and recommends for sanction the estimates amounting to Rs. 7,788 now submitted. The work should be completed before the close of the official year.

	RS.	A.	P.
* Work already executed ..	7,983	2	0
New work proposed ..	7,788	0	0
Total ..	15,771	2	0

5. Should these proposals be approved, a formal appropriation for the current official year of Rs. 15,772 * will now be necessary.

OOTACAMUND,
21st October 1884.

(Signed) J. SHAW-STEWART, Col., R.E.,
Chief Engineer, P.W.D.

No. 803-E.

Transferred to the Public department, with advertence to the correspondence from that department quoted below:—

No. 1338, dated 19th June 1884 (Public).
No. 2274, dated 9th October 1884, „

OOTACAMUND,
21st October 1884.

(Signed) J. SHAW-STEWART, Col., R.E.,
Secy. to Govt., P.W.D.

To the Public department, with letter from the Superintending Engineer, III Circle, No. 1423, dated 18th October 1884, and enclosures and No. 2274, dated 9th October 1884 (Public), and plan of the Vittalaswami, Hampi.

Telegram from the Secretary to the Government of India, Home department, to the Chief Secretary to Government, dated 5th November 1884.

My circular letter, 5th June last. Government of India prepared to give some small assistance towards conservation work to be undertaken during current year. Please say by telegraph what amount required as year is lapsing.

ORDER—dated 22nd November 1884, No. 2516-A, Public.

In G.O., 19th June 1884, No. 1338, Mr. Black was requested to report on what work he was engaged and within what time it would be finished.

2. From the report above recorded, it appears that what remains to be done is—

- (1) to make water-tight the roof of Vittalaswami Pagoda;
- (2) to raise the outside walls to prevent trespassing; and
- (3) to prop up insecure beams and to execute sundry other repairs.

The cost of finishing the work Mr. Black has begun and of such other work as he recommends and of paying establishment up to the end of the current year within which the work will be completed is estimated (including charges incurred) at Rs. 15,772, of which sum part (Rs. 9,148) is due on the unexpended grants of last year. The works under execution or now proposed are those which Major Cole, the late Curator, approved. The Superintending Engineer states that the work now estimated for will secure the object in view, viz., “preservation without any attempt at restoration,” and the Chief Engineer recommends the present estimates for sanction.

3. The Government consider the report submitted by Mr. Black to be far from satisfactory.

For some reason, which is not explained, the bulk of the work executed during the current year has not been paid for, and there are even some arrears for 1883-84 still outstanding. It is also mentioned in Mr. Black's report that sanction was obtained—from whom is not stated—for the discontinuance of preparation of plans and drawings several months ago, but that from want of funds to pay off the draughtsman he has been kept at work until such time as he can be paid up and discharged.

4. His Excellency in Council is of opinion that it is desirable to bring the work on which Mr. Black is engaged to as speedy a conclusion as possible, and he accordingly directs that Mr. Black's attention be confined to the work now estimated for and so far only as *conservation* is concerned; such items as *opening up an underground passage*; copying and translating *inscriptions*; surveying for and preparing a map—being left for Dr. Burgess' consideration.

The Government observe that it is estimated that $2\frac{1}{2}$ months will be occupied at a cost of Rs. 2,245 in placing a number of rails or sleepers as props for the support of five of the large temples. It appears to the Government that all the suggested works of conservation might be accomplished with a smaller expenditure of time and money by the Collector, by whom a report will be submitted on this point.

5. His Excellency in Council desires it to be clearly understood that Mr. Black's services will not be required after the end of the current official year, by which time the Government expect all the work upon which he is now engaged to be completed.

6. The Government of India will be asked by telegraph for a grant of Rs. 10,000.

(True Extract.)

E. F. WEBSTER,
Chief Secretary.

To the Public Works department.
„ the Collector of Bellary.
„ Dr. Burgess.

Copy to Dr. Bidie, C.I.E.
„ R. Sewell, Esq.

ENDORSEMENT—dated 22nd November 1884, No. 2516-B, Public.

Copy to the Government of India, Home department.

E. F. WEBSTER,
Chief Secretary.

Govt. of (1884) Madras.
PUBLIC.

Order thereon

No. 2995 of 5 December

Command to Mr. Black
through the Secy. III Circle.

Further orders in the
Public Deptt. as to a
part for the work will
be awaited - It is
desirable that such
orders should issue
at an early date, as
the expenditure already
incurred during the
current year is meanwhile
regarded as "objectionable"
from an account point
of view.

Secy. Deptt.

127 Chittoor in Mysore.

Under Secy. Deptt.
P. W. D.

Secy. III Circle

by P. W. D.

Public Deptt.

Issued

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Nos. 2516-A, 2516-B.

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ESTIMATE.

Work in progress.

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10. Establishment	894
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Other temples if required	2,245
Grand total	7,788

(Signed) H. C. BLACK,
Temporary Engineer in charge.

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RS.	A.	P.
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3,733	2	0
Total ..	7,983	2 0

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4. The Chief Engineer has recently had an opportunity of inspecting the work on which Mr. Black has been employed, and has no hesitation in saying that what has been done has been done well. He concurs with the Superintending Engineer as to the desirableness of completing the work, and recommends for sanction the estimates amounting to Rs. 7,788 now submitted. The work should be completed before the close of the official year.

	RS.	A.	P.
* Work already executed	7,983	2	0
New work proposed	7,788	0	0
Total	15,771	2	0

5. Should these proposals be approved, a formal appropriation for the current official year of Rs. 15,772 * will now be necessary.

OOTACAMUND,
21st October 1884.

(Signed) J. SHAW-STEWART, Col., R.E.,
Chief Engineer, P.W.D.

No. 803-E.

Transferred to the Public department, with advertence to the correspondence from that department quoted below:—

No. 1338, dated 19th June 1884 (Public).
No. 2274, dated 9th October 1884, „

OOTACAMUND,
21st October 1884.

(Signed) J. SHAW-STEWART, Col., R.E.,
Secy. to Govt., P.W.D.

To the Public department, with letter from the Superintending Engineer, III Circle, No. 1423, dated 18th October 1884, and enclosures and No. 2274, dated 9th October 1884 (Public), and plan of the Vittalaswami, Hampi.

Telegram from the Secretary to the Government of India, Home department, to the Chief Secretary to Government, dated 5th November 1884.

My circular letter, 5th June last. Government of India prepared to give some small assistance towards conservation work to be undertaken during current year. Please say by telegraph what amount required as year is lapsing.

ORDER—dated 22nd November 1884, No. 2516-A, Public.

In G.O., 19th June 1884, No. 1338, Mr. Black was requested to report on what work he was engaged and within what time it would be finished.

2. From the report above recorded, it appears that what remains to be done is—

- (1) to make water-tight the roof of Vittalaswami Pagoda;
- (2) to raise the outside walls to prevent trespassing; and
- (3) to prop up insecure beams and to execute sundry other repairs.

The cost of finishing the work Mr. Black has begun and of such other work as he recommends and of paying establishment up to the end of the current year within which the work will be completed is estimated (including charges incurred) at Rs. 15,772, of which sum part (Rs. 9,148) is due on the unexpended grants of last year. The works under execution or now proposed are those which Major Cole, the late Curator, approved. The Superintending Engineer states that the work now estimated for will secure the object in view, viz., “preservation without any attempt at restoration,” and the Chief Engineer recommends the present estimates for sanction.

3. The Government consider the report submitted by Mr. Black to be far from satisfactory.

For some reason, which is not explained, the bulk of the work executed during the current year has not been paid for, and there are even some arrears for 1883-84 still outstanding. It is also mentioned in Mr. Black's report that sanction was obtained—from whom is not stated—for the discontinuance of preparation of plans and drawings several months ago, but that from want of funds to pay off the draughtsman he has been kept at work until such time as he can be paid up and discharged.

4. His Excellency in Council is of opinion that it is desirable to bring the work on which Mr. Black is engaged to as speedy a conclusion as possible, and he accordingly directs that Mr. Black's attention be confined to the work now estimated for and so far only as *conservation* is concerned; such items as *opening up an underground passage*; copying and translating *inscriptions*; surveying for and preparing a map—being left for Dr. Burgess' consideration.

The Government observe that it is estimated that $2\frac{1}{2}$ months will be occupied at a cost of Rs. 2,245 in placing a number of rails or sleepers as props for the support of five of the large temples. It appears to the Government that all the suggested works of conservation might be accomplished with a smaller expenditure of time and money by the Collector, by whom a report will be submitted on this point.

5. His Excellency in Council desires it to be clearly understood that Mr. Black's services will not be required after the end of the current official year, by which time the Government expect all the work upon which he is now engaged to be completed.

6. The Government of India will be asked by telegraph for a grant of Rs. 10,000.

(True Extract.)

E. F. WEBSTER,
Chief Secretary.

To the Public Works department.
„ the Collector of Bellary.
„ Dr. Burgess.

Copy to Dr. Bidie, C.I.E.
„ R. Sewell, Esq.

ENDORSEMENT—dated 22nd November 1884, No. 2516-B, Public.

Copy to the Government of India, Home department.

E. F. WEBSTER,
Chief Secretary.

Gobt. of (1884) Madras.
PUBLIC.

Order thereon

No. 2995 of 5 December 1884

Command to Mr Black
through the Sd. III Circle.

Further orders in the
Public Deptt. as to a
grant for the work will
be awaited - It is
desirable that such
orders should issue
at an early date, as
the expenditure already
incurred during the
current year is meanwhile
regarded as "objectionable"
from an account point
of view.

Sluc & Pract

127 C.B. W. S. K. S. N. S.

Indes. Com. to Port.
P. W. S.

Sd. III Circle
by: P. W. A.
Public Deptt.

Issued

Recd.

Encl.

G.O., &c., 22nd November 1884,
Nos. 2516-A, 2516-B.

NOVEMBER.

Archæology.

Passing orders on the report furnished by Mr.
Black, Special Temporary Engineer, on the work
of repairs to the Hampi temples.

With order

Therms
corruption
deceit
over

Returned to records
14-11-84

Communicated
to Mr. Black through
the Suptg. Engineer
III. Circle.

Further orders in
the Public Deptt. as to
a grant for the work
will be awaited. It is
desirable that such
orders should issue at
an early date, as the
expenditure already in-
-curred during the
current year is meanwhile
regarded as "objectionable"
from an account point
of view.

C.U.

4. 12. 84

S.E. III Circle

Ex: P.W. acct.

Public Deptt.

S. Deshp

Gobt. of (1884) Madras.
PUBLIC.

Ms. 10091

85C



Issued

Recd.

4/12/84

Encl.

G.O., &c., 22nd November 1884,
Nos. 2516-A, 2516-B.

15. 12. 2995. W. A. 5. 12. 84

NOVEMBER.

Archæology.

Passing orders on the report furnished by Mr.
Black, Special Temporary Engineer, on the work
of repairs to the Hampi temples.

Copy taken from

With order

22ND NOVEMBER 1884, Nos. 2516-A, 2516-B, PUBLIC.

GOVERNMENT OF MADRAS.

PUBLIC DEPARTMENT.

READ—again G.O., dated 19th June 1884, No. 1338, Public.

READ—also the following papers:—

From Lieutenant-Colonel H. M. VIBART, R.E., Superintending Engineer, III Circle, to the Chief Engineer, Public Works department, Madras, dated Bellary, 18th October 1884, No. 1423.

With reference to your memorandum, No. 1651C.—A, dated the 7th instant, I have the honor to submit the estimate and report prepared by Mr. H. C. Black for completing the repairs now in progress to the ruined temples at Hampi.

2. The estimate provides for:—

	Amount, RS.
1. Making watertight the roofs of the main temple of Vittalsawmi pagoda	2,599
2. Plastering inside walls damaged by fire	23
3. Repairs to five flights of steps	120
4. Pointing floors	64
5. Completing the outside ashlar walls of the main building of the temple	120
6. Raising the outside walls to prevent trespassing	990
7. Two gates for the south and east gopuras	120
8. Examining under-ground passage	400
9. Examining inscriptions	213
10. Propping up insecure beams of five other temples	1,208
11. Establishment for 4½ months	1,931
Total	7,788

3. The cost of finishing the repairs in progress is Rs. 4,649, cost of securing five other temples is Rs. 1,208, and the cost of establishment for 4½ months is Rs. 1,931.

4. The work estimated for would seem to secure the object of the Government, viz., to preserve the buildings without any attempt at so-called "restoration."

5. It would be desirable to carry out the repairs which could be easily completed before the close of the official year.

ENCLOSURES.

ARCHÆOLOGICAL DIVISION.

REPORT as to the amount of work still to be done at Hampi in accordance with Estimate Provincial No. 56 W. of 1883-84.

The work still to be done at Vittalsawmi temple depends entirely on what funds are available and what would be advised by Major Cole, R.E., late Curator of Ancient Monuments, or other competent judge. In default of such advice, undersigned would propose that the following works be completed.

Vittalsawmi.—The roofs of the main temple to be made watertight by filling up all cracks which formed in the terracing. The same to be done to the subsidiary temples, Kallian

Mantapa, and the southern hall, but no further replacing of beams, as suggested in the first estimate, to be continued as it would be too expensive.

Roof of Adytum.—That the roof of the adytum, which is in a most dangerous condition, be taken down. This will have to be done under careful supervision, as the stone beams are so cracked with fire that they are ready to fall. The object of this removal is to avoid accidents to people inspecting the building.

The hall is 54 feet square and, with the exception of about 800 superficial feet, should be taken down. It is proposed to buy or borrow some old railway sleepers and stack them under the cracked beams, after which they and the superincumbent terrace can be removed. This hall should then be left roofless.

Inside walls.—The inside walls, which were so much blistered by fire as to be much damaged, should be plastered, which is absolutely to prevent large flakes of the stone falling out. Replacing the stones would be too expensive.

Propping beams and cornices.—Some of the beams and cornices in the building can be supported by rails. This also will require care, but should be done by stacking sleepers under them as mentioned above, and afterwards placing rails longitudinally beneath the beams, letting in the ends of the rails about four inches into the granite at each side. It will require about two rails to each beam or cornice edge, as there is considerable weight to support. This will require about 296 lineal feet of rails for the porch, and about 210 feet more for other parts of the building. From inquiries made of the District Engineer, Madras Railway Company, old flat-footed contractor's rails of 40 lb. to the yard, and 18 feet long can be sold at Bellary station at 10 rupees each. Thus the expense of propping these beams and cornices will probably not amount to more than 375 rupees.

Stonework in front.—The stonework in front it is not proposed to complete as it will be too expensive, but the five flights of steps mentioned in the progress report should be done, as the expense of each would not exceed Rs. 24 each.

The brickwork in gopuras it is not proposed to rebuild, but propping with rails is necessary in all three, amounting to about 460 lineal feet, or say Rs. 350.

Flooring.—Nothing further need be done to the flooring except pointing, as although still very irregular it will serve the purpose of keeping the rain water out of the foundations if the joints are filled up with mortar.

Ashlar walls.—The outside ashlar walls of the main building of the temple should be completed as they are only three courses short of full height about $4\frac{1}{2}$ feet. It will cost about 120 rupees.

Colonnades.—The expense of re-erecting these colonnades has been found to be much greater than was anticipated, owing to the insecure state of the outside wall which necessitated its being taken down to the foundation before being rebuilt. It is therefore proposed to stop erecting the pillars and roof of these colonnades and merely complete the outside wall, not to its full height and thickness, but only about 18 inches thick so as to form an enclosure to prevent trespassing. The total length of wall that would have to be rebuilt would be about 330 lineal feet. The enclosure would be completed by two gates at the south and east gopuras, the north gopura, which leads to only the river's bank, might be walled up. It is not proposed to rehoist any of the chuggas or large curved eaves.

Brickwork on Car and Kallian Mantapa.—The top of the car having been restored it is not proposed to do anything more to this or to the Kallian Mantapa, nor need the flooring of these or the brickwork of the gopuras be proceeded with, with the exception of propping with rails as mentioned above.

Gates.—Two gates should, however, be made as at first determined on so as to be able to keep the villagers from herding their cattle within the enclosure.

Hazara Ram Chandra.—Nothing need be done to this, as to carry out any satisfactory work would be too costly.

Queen's Baths.—This has been completed as far as was intended, and nothing more requires to be done.

Raganath Malavanta.—Nothing has been done to this beyond clearing the jungle, and it is not proposed to do anything more to it.

Plans and Drawings.—As the Archaeological Surveyor (Dr. Burgess) is now doing this work with a staff of six draughtsmen, it is proposed to discontinue this entirely. Sanction was obtained to this several months ago, but from want of funds to pay off the draughtsman, he has been kept at work until such time as he can be paid up and discharged.

Map.—It is, however, suggested that the map of the town, as it existed at the time of capture, be completed.

Under-ground passage.—It is also proposed that the under-ground passage, said to exist in a continuous line from the building known as the throne towards the western part of the town, should be examined, but only earthwork excavation should be made; at most not more than 160,000 cubic feet of earthwork, at a cost of about 400 rupees, need be excavated.

Inscriptions.—It is not known how many of these Dr. Burgess has had copied, but he has copied some, several of which I had had done before. As Hampi is very rich in these, it is suggested that the remainder be finished and translated.

Time.—It is estimated that the above work will take about two months including every thing.

Other temples.—This does not include several other temples which, perhaps, require propping with rails to prevent the broken beams from falling, but which it is suggested should otherwise be left as they are. Should it be decided to preserve these, the average cost of the five principal temples would be as follows:—

Cost of preserving five of the large temples.

Achayat Rao temple	requires about	450 lineal feet of rails.
Krishnaswami	do. do.	500 do. do.
Lathcheni	do. do.	80 do. do.
Rama	do. do.	310 do. do.
Sita	do. do.	40 do. do.

1,380 lineal feet.

Of these the temple of Achayat Rao is important, as the Hon. Mr. T. C. Hope, Member of Council, drew my attention to it. This will require about $2\frac{1}{2}$ months more, as it will be necessary to do them consecutively to avoid the expense of purchasing more wooden sleepers for propping.

ESTIMATE.

Work in progress.

	RS.
Terracing, filling cracks, &c., 790 lineal feet, at Rs. 1-8-0 per cent ..	12
Dismantling roof of adytum, 1,720 superficial feet, at 10 rupees per 100 superficial feet	172
Propping beams—	
Rails including carriage	425
Propping beams for gopurams	390
Four hundred old wooden sleepers, at 4 rupees each	1,600
1. Total roofing	2,599
2. Plastering inside walls, 570 superficial feet, at Rs. 4 per 100	23
3. Steps 5, at Rs. 24 each	120
4. Flooring pointing only 3,200 superficial feet, at Rs. 2	64
5. Outside walls, 330 lineal feet, at Rs. 3 per lineal foot (15 rupees 100 cubic feet)	990
6. Gates 2, at Rs. 60	120
7. Earthwork in passage	400
8. Inscriptions 61, at Rs. 3-8-0 each	213
9. Ashlar walls	120
	4,649

10. Establishment including.

Surveying for Map.

1 Engineer, two months at Rs. 350	700
1 Overseer do. at „ 40	80
1 Writer do. at „ 25	50

Establishment.

4 Lascars, two months, at Rs. 8 each per month	64
	894

Other temples if required.

Propping 1,380 lineal feet, at 14 annas per lineal foot	1,208
1 Engineer, $2\frac{1}{2}$ months	875
1 Overseer do. at Rs. 40	100
1 Writer do. at Rs. 25	62
Total	2,245

But the Engineer need not confine himself to this work alone.

SUMMARY.

Work in progress.

	RS.
1. Roofing	2,599
2. Plastering	23
3. Steps	120
4. Flooring	64
5. Outside walls	990
6. Gates	120
7. Earthwork in passage	400
8. Inscriptions	213
9. Ashtar walls	120
10. Establishment	894
Total work in progress ..	5,543
Other temples if required ..	2,245
Grand total ..	7,788

(Signed) H. C. BLACK,
Temporary Engineer in charge.

NOTE.

With his letter quoted above, the Superintending Engineer, III Circle, submits a report from Mr. H. C. Black, Special Temporary Engineer, in which is shown the work already executed, and that remaining to be done to complete the preservation of the ruins at Vijianagar.

2. An estimate, amounting to Rs. 18,990, was sanctioned for this work in G.O., No. 1741 W., dated 21st June 1883. Against that estimate an expenditure of Rs. 9,842 was incurred during 1883-84, leaving an unexpended balance of estimate at the close of the year amounting to Rs. 9,148. The expenditure during the current official year, against advances sanctioned from time to time in the Public Works department, has amounted to Rs. 4,250. A further expenditure of Rs. 3,733-2-0 has been incurred by Mr. Black, which is covered by no appropriation of funds. The total sum to be formally allotted in the current official year to meet outlay already incurred thus amounts to Rs. 7,983-2-0,* against the unexpended balance of estimate at the end of last official year of Rs. 9,148, as shown above.

RS.	A.	P.
* 4,250	0	0
3,733	2	0
Total ..	7,983	2 0

3. To complete the work of preservation, Mr. Black now submits further estimates as follows:—

	RS.
For work in progress at Hampi	4,649
Work at five other temples	1,208
Establishment for 4½ months	1,931
Total ..	7,788

4. The Chief Engineer has recently had an opportunity of inspecting the work on which Mr. Black has been employed, and has no hesitation in saying that what has been done has been done well. He concurs with the Superintending Engineer as to the desirableness of completing the work, and recommends for sanction the estimates amounting to Rs. 7,788 now submitted. The work should be completed before the close of the official year.

	RS.	A.	P.
* Work already executed ..	7,983	2	0
New work proposed ..	7,788	0	0
Total ..	15,771	2	0

5. Should these proposals be approved, a formal appropriation for the current official year of Rs. 15,772 * will now be necessary.

OOTACAMUND,
21st October 1884.

(Signed) J. SHAW-STEWART, Col., R.E.,
Chief Engineer, P.W.D.

No. 803-E.

Transferred to the Public department, with advertence to the correspondence from that department quoted below:—

No. 1338, dated 19th June 1884 (Public).
No. 2274, dated 9th October 1884, „

OOTACAMUND,
21st October 1884.

(Signed) J. SHAW-STEWART, Col., R.E.,
Secy. to Govt., P.W.D.

To the Public department, with letter from the Superintending Engineer, III Circle, No. 1423, dated 18th October 1884, and enclosures and No. 2274, dated 9th October 1884 (Public), and plan of the Vittalaswami, Hampi.

Telegram from the Secretary to the Government of India, Home department, to the Chief Secretary to Government, dated 5th November 1884.

My circular letter, 5th June last. Government of India prepared to give some small assistance towards conservation work to be undertaken during current year. Please say by telegraph what amount required as year is lapsing.

ORDER—dated 22nd November 1884, No. 2516-A, Public.

In G.O., 19th June 1884, No. 1338, Mr. Black was requested to report on what work he was engaged and within what time it would be finished.

2. From the report above recorded, it appears that what remains to be done is—

- (1) to make water-tight the roof of Vittalaswami Pagoda;
- (2) to raise the outside walls to prevent trespassing; and
- (3) to prop up insecure beams and to execute sundry other repairs.

The cost of finishing the work Mr. Black has begun and of such other work as he recommends and of paying establishment up to the end of the current year within which the work will be completed is estimated (including charges incurred) at Rs. 15,772, of which sum part (Rs. 9,148) is due on the unexpended grants of last year. The works under execution or now proposed are those which Major Cole, the late Curator, approved. The Superintending Engineer states that the work now estimated for will secure the object in view, viz., "preservation without any attempt at restoration," and the Chief Engineer recommends the present estimates for sanction.

3. The Government consider the report submitted by Mr. Black to be far from satisfactory.

For some reason, which is not explained, the bulk of the work executed during the current year has not been paid for, and there are even some arrears for 1883-84 still outstanding. It is also mentioned in Mr. Black's report that sanction was obtained—from whom is not stated—for the discontinuance of preparation of plans and drawings several months ago, but that from want of funds to pay off the draughtsman he has been kept at work until such time as he can be paid up and discharged.

+ The explanation is already on record in the Public Dept. Memo No. 2219 d/2-8-84. The fact of no allotment having been made was pointed out and orders were requested. Vide also No. 3109 d/23-6-84.

4. His Excellency in Council is of opinion that it is desirable to bring the work on which Mr. Black is engaged to as speedy a conclusion as possible, and he accordingly directs that Mr. Black's attention be confined to the work now estimated for and so far only as *conservation* is concerned; such items as *opening up an underground passage*; copying and translating *inscriptions*; surveying for and preparing a map—being left for Dr. Burgess' consideration.

The Government observe that it is estimated that $2\frac{1}{2}$ months will be occupied at a cost of Rs. 2,245 in placing a number of rails or sleepers as props for the support of five of the large temples. It appears to the Government that all the suggested works of conservation might be accomplished with a smaller expenditure of time and money by the Collector, by whom a report will be submitted on this point.

5. His Excellency in Council desires it to be clearly understood that Mr. Black's services will not be required after the end of the current official year, by which time the Government expect all the work upon which he is now engaged to be completed.

6. The Government of India will be asked by telegraph for a grant of Rs. 10,000.

(True Extract.)

E. F. Webster
Chief Secretary.

To the Public Works department.
„ the Collector of Bellary.
„ Dr. Burgess.

Copy to Dr. Bidie, C.I.E.
„ R. Sewell, Esq.

ENDORSEMENT—dated 22nd November 1884, No. 2516-B, Public.

Copy to the Government of India, Home department.

E. F. WEBSTER,
Chief Secretary.

Exd. T. O'Connor.

13. No 1602. W a/ 26-6-84

No 362 E a/ 13-9-83

G.O. 3214 W a/ 6-12-82

" 2006. W a/ 20-7-83

13. No 2783 W a/ 7-11-84

" " 2462 W a/ 6-10-84

" " 2177 W a/ 3-9-84

" " 1968 W a/ 12-8-84

" " 1717 W a/ 11-7-84

13. No 2995 a/ 5-12-84

No 556. E a/ 26-8-84

" 1390. S a/ 8-8-84

" 1373. S a/ 6-8-84

" 1360 S a/ 4-8-84

" 1313 S a/ 28-7-84

" 327 E a/ 27-6-84

" 310. E a/ 23-6-84

" 221. E a/ 2-6-84

" 2472 S a/ 21-11-83

" 328. W a/ 7-2-84

13. No 264 W a/ 30-1-84

13. No 3350 W a/ 23-11-83

13. No 2712 W a/ 27-9-83

13. No 2495 W a/ 5-9-83

G.O. 2393 W a/ 27-8-83

13. No 2023 W a/ 23-7-83

Suppl. 38
2545. W a/ 10-9-83

G.O. 2545 W a/ 10-9-83

G.O. 2393 W a/ 27-8-83

G.O. 2279 W a/ 15-8-83

G.O. 2018. W a/ 23-7-83

G.O. 2260 W a/ 14-8-83

G.O. 2005 W a/ 20-7-83

G.O. 1741 W a/ 21-6-83

G.O. 1326 W a/ 7-5-83

No 1957. C a/ 28-11-84

" 1908. C a/ 20-11-84

" 803. E a/ 21-10-84

" 572. E a/ 28-8-84

" 462. E a/ 17-8-84