Archives I–10,006–16-8 77.

(1) Number of pages 32

(2) Date of repair 5·2·87

(3) Initials of the Referencer

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Public Works DEPARTMENT

~~G.O. No.~~ B.P. No.	2454. W	~~Press.~~ Mis.
Dated	6 - X · 1881	~~197~~ .

Not to be folded or roughly handled

2454 W
1

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

6th October 1881, No. 2454 W.

Buildings and Roads.
Civil Works.

Read the following papers :—

No. 27. No. 263.

MEMORANDUM BY CHIEF ENGINEER.

Letter from the Master Attendant, Administrative Department, Madras, No. 6,000, dated 5th July 1881, forwarding copies of a letter and estimates for making borings across the Island of Rámesvaram received from the Port Officer at Pámban with a sketch.

FORWARDED to the Superintending Engineer, Third Circle, with reference to G.O., No. 1341 W., dated 28th May 1881, and with a request that he will make the requisite arrangements for boring the section taken by Captain Baker, and sinking test wells on the line indicated, in the month of October or such other time as may be most convenient to that officer, under whose supervision the work will be carried out.

2. The Superintending Engineer can allot such funds as may be needed from Provincial, reporting to this office the sum appropriated.

3. The requisite tools and instruments should also be supplied by the Superintending Engineer.

(Signed) R. H. SANKEY, Colonel, R.E.,
Chief Engineer, P.W.D.

To the Superintending Engineer, Third Circle with original enclosures.

No. 264.

COPY of the above forwarded to the Master Attendant, Madras, with a request that he will be so good as to state what he would propose as Captain Baker's remuneration while engaged on the work.

10th July 1881.

(Signed) R. H. SANKEY, Colonel, R.E.,
Chief Engineer, P.W.D.

To the Master Attendant, Madras.

No. 27-A. From J. H. TAYLOR, Esq., Lieutenant, R.N.R., Master Attendant, Administrative Department, to the Chief Engineer, Public Works Department, dated Madras, 16th July 1881, No. 6,384.

WITH reference to your No. 264, dated 11th instant, I have the honor to state that Mr. Baker will return from leave early in October, when further inquiries will be made and a report submitted to you.

No. 27-B. Endorsement of the Chief Secretary to Government in the Marine Department, dated 26th September 1881, No. 1602.

From J. H. TAYLOR, Esq., Lieutenant, R.N.R., Master Attendant, Administrative Department, to the Chief Secretary to Government, Marine Department, dated Madras, 19th September 1881, No. 8157.

I HAVE the honor to forward with this letter a chart of the Island of Ceylon and the adjacent shores of Madura, Tinnevelly, and Tanjore. The whole is intended to illustrate the various tracks that would be taken by steamers in the event of a canal being opened through Rámesvaram. It seems to me highly desirable that Government should be in possession of reliable evidence upon the various points of comparison offered by the present routes and the proposed alterations. I would respectfully recommend, therefore, that some copies of this letter and chart should be struck off and sent to accompany all letters passing through the hands of Government bearing upon this important subject—important, I mean, with reference to the very large sum of money involved in the construction of a canal through Pámban, and the many difficulties which will necessarily be encountered.

2. In the first place the more eastern ports, such as Brisbane and other ports of Queensland, whose new line of mail steamers might wish to call at Galle or Colombo for coal, could not use the canal without loss of time and mileage, and to this class must be added all the Straits, China, and Japan shipping, which, whether calling at Ceylon for coals or not, would lose both in time, distance, and expense by passing through the canal. We next come to Moulmein and Rangoon, the direct passages to which from the meridian of Cape Comorin, through the canal, and round the island, are nearly equal, so nearly so as to render the delay and expense of the canal an entirely extra charge, while if they coaled at Galle or Colombo, as nearly all ships do, the scale is turned very largely in favor of the outer passage.

3. It is not, therefore, until we come to Calcutta that any positive comparison can be offered, or any advantage suggested, and even then it will be at once recognized that the promised gain in distance was much exaggerated in the reports formerly written upon the subject, in which the gain is placed at 350 miles or one and a half days.

4. The chart supposes the various vessels to pass from Aden to the meridian of Cape Comorin, crossing it in the most convenient latitudes for their several objects. Thus A red dotted line is a steamer bound to Calcutta, touching at Colombo for cargo, passengers and coal, and then passing through the canal to a convenient point off Calimere A′. B red dotted line also is a similar ship passing from Colombo round the south of the island until she reaches an equally convenient point on the radius of distance from Sandheads B′.

Red dotted line A from meridian of Comorin to Colombo	135		
from Colombo through Canal A′.	226		
		361	difference 94,
Red dotted line B to Colombo and	135		
round Island to B′	320		
		455	

or, say, nine hours ordinary steaming at a ton of coal an hour. The average price of coal for outward and homeward voyages combined, we may call Rs. (20) twenty a ton, saving Rs. (180) one hundred and eighty, against which stand the expense, delay, and risk of the canal, its approaches and passages.

5. In the very rare case of steamers bound to Calcutta passing Ceylon without calling at any of its ports, the difference would be—

Red line C through Canal C′	220	difference 190.
Red line D round Island D′	410	

6. The delay caused by the passage of the canal, the moderate speed necessary to render the approach to it safe, and the risk from the shoals about Point Pedro has to be set against, say, twenty hours ordinary steaming, and expense of about (400) four hundred rupees for coal.

2454 W
2

7. The case of Madras comes next, and the canal certainly shows on it to greater advantage—

Blue dotted line.	E to Colombo	135		
	E Colombo through Canal to E′ ...	226		
			361	difference 167,
Blue dotted line.	F to Colombo	135		
	F Colombo round Island F′ ...	393		
			528	

or sixteen hours steaming, or Rs. (320) three hundred and twenty for coal.

8. It seems hardly possible that the passage of the canal can be made without considerable delay, often involving a whole night, and great expense, so that even in this case it does not offer much mercantile advantage, if any.

9. In the very unusual case of a vessel requiring to reach Madras by a direct passage, without calling at any Ceylon port, the comparison would be—

Blue line G through Canal to G′	226	difference 264,
Blue line H round Island H′	490	

little more than one day at ordinary steaming, and not taking in account the delays or risks of the canal.

10. It will thus be seen that the advantages of the canal do not press much upon the consideration of either the Imperial or Local Governments, and the selection of Colombo as a site for a harbour and calling place for all classes of ships has altered the conditions under which Colonel Sir Authur Cotton and other writers presented the subject to former Governments. The choice of a cut through Rámesvaram, which seems now decided by a consensus of opinion, deprives Madras of one of its chief reasons for direct interference, as it does not offer or render convenient the construction of a harbour for Southern India, such as was proposed by the Lorne Harbour and the canal through the Ramnad Peninsula. The rapid growth of the coral, which is a principal feature at what would be the mouth of the Lorne Harbour, is a most serious obstacle, as it also forms a difficulty in keeping the present pass open. The navigation of a canal will always be difficult in the strength of the monsoon or, say, six months in every year. The current would have to be shut out by locks, for no ship could run through a canal with a gale of wind and current behind her, the wind will be trial enough, and the large tract of shoal water will require many lighthouses. I cannot believe it will ever be a popular passage. It will certainly have the effect of destroying the large native trade that now uses the Pámban Pass, and that is a serious consideration. The rates and dues charged upon the few steamers that would use it would have to be very heavy, if any re-imbursement of the outlay is intended.

TRANSFERRED to the Public Works Department.

(Signed) R. DAVIDSON,
Chief Secretary.

No. 28. ORDER THEREON, 6th October 1881, No. 2454 W.

THE Honorable the Governor in Council considers that it will be useful to have the purely nautical points connected with the proposed ship canal for Pámban discussed at an early date by the best available experts, but the subject can be best considered when the Government are in possession of the survey and trial borings to be undertaken by Captain Baker in accordance with G.O., No. 1341 W., dated 23rd May 1881, and a rough estimate of the probable cost.

2. Captain Baker will be requested by the Master Attendant to give such information as he may be able to gather from the present clearances of the existing pass channel, both as to the rate of growth of the coral, quantity to be removed annually, and the probable cost of such removal for the proposed canal.

3. When complete information has thus been collected and considered the whole question can be laid before the Government of India for final decision.

4. The chart submitted by the Master Attendant will be lithographed.

(True Extract.)

(Signed) R. H. SANKEY, Col., R.E.,
Secretary. to Government.

To the Marine Department.
,, Master Attendant.
,, Superintending Engineer, Third Circle.

Exd. S. T. Austin.
Spare copies

2454·W
3

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1881) Madras.
PUBLIC WORKS.

To

The MARINE DEPARTMENT,
&c., &c., &c.

Dated October, 6th.

Issued

Recd. Encl.

G. O., 6th October 1881, No. 2454 W.

OCTOBER.
Nos. 27-28.

Proposed Ship Canal for Pámban.—Orders on the subject of the —.

P. 1

P. W. D.

No. 263

2454 W
4

Letter from the Master Attendant, Administrative Department, Madras, No. 6000, dated 5th July 1881, forwarding copies of a letter and estimates for making borings across the Island of Rámaswaram, received from the Port Officer at Paumben with a sketch &c.

—

Forwarded to the Supg. Engineer 3d Circle with reference to G. O. 1341 W, dated 28th May 1881, and with a request that he will make the requisite arrange-ments for boring the section taken by Captain Baker, and

R. S.

sinking test wells on the line indicated, in the month of October or such other time as may be most convenient to that officer, under whose supervision the work will be carried out.

2. The Supdg Engineer can allot such funds as may be needed from Provincial, on reporting to this office the sum appropriated.

3. The requisite tools and instruments should also be supplied by the Supdg: Engineer -

To
The Supdg Engr.
3rd Circle with
Original Enclos:

Copy.

P2

No. 264

24.54.W
5

Copy of the above forwarded to the Master Attendant, Madras, with a request that he will be so good as to state what he would propose as Captain Baker's remuneration while engaged on the work.

10/7/81

To
The Master Attendant
Madras.

C.E. No. 263 & 264 of 11th July 81

Despt. 11-7-81

2454.W
6

P.E

Administrative Department.

Madras,
Marine Office,
16th July 1881.

No. 6384

From
The MASTER ATTENDANT,
ADMINISTRATIVE DEPARTMENT,
Madras,

To
~~The MASTER ATTENDANT of~~
Colonel R. H. Sankey C. B. R. E.
Chief Engineer
P. W. Department.

Sir,

With reference to your No. 264 dated 11th instant I have the honor to state that Mr. Baker will return from leave early in October when further inquiries will be made and a report submitted to you.

I have the honor to be
Sir,
your most obedient servant
W. Taylor
Master Attendant
Administrative Department.

From

The Master Attendant,

Administrative Department,

To

The ~~Master Attendant.~~ Chief Engineer
P. W. Deptt.
Deptt.

Dated 16 } July 1881.
Recd.

No. 6382

Enclosure. None.

Stating that a further report will be submitted when Mr Walker returns from leave

Await further report

19/7/81

19-7-81

O.L.S. 31-9

Administrative Department.

CURRENT No. 586

MADRAS,
No. 8157
Marine Office,
24th 19th September 1881.

P4

From

J. H. TAYLOR, Esq., Lieut., R.N.R.,
Master Attendant,
Administrative Department,
Madras,

To

The Honorable R. Davidson C.S.I.

Chief Secretary to Government,
Marine Department,
Fort Saint George.

SIR,

I have the honor to forward with this letter a chart of the Island of Ceylon, and the adjacent shores of Madura, Tinnevelly and Tanjore. The whole is intended to illustrate the various tracks that would be taken by Steamers in the event of a Canal being opened through Ramesvaram. It seems to me highly desirable that Government should be in possession of reliable evidence upon the various points of comparison offered by the present routes and the proposed alterations. I would respectfully recommend therefore that some copies of this letter and chart should be struck off and sent to accompany all letters passing through the hands of Government bearing upon this important subject

subject, important I mean with reference to the very large sum of money involved in the construction of a Canal through Paumben, and the many difficulties which will necessarily be encountered

2 In the first place the more Eastern Ports such as Brisbane and other ports of Queensland, whose new line of Mail Steamers might wish to call at Galle or Colombo for Coal, could not use the Canal without loss of time and mileage, and to this class must be added all the Straits, China and Japan Shipping which, whether calling at Ceylon for Coals or not, would lose both in time distance and expense by passing through the Canal. We next come to Moulmein and Rangoon, the direct passages to which from the meridian of Cape Comorin, through the Canal, and round the Island, are nearly equal, so nearly same to render the delay and expense of the Canal an entirely extra charge, while if they coaled at Galle or Colombo, as nearly all ships do, the scale is turned very largely in favor of the outer passage

3 It is not therefore until we come to Calcutta that any positive comparison can be offered, or any advantage suggested, and even then

2454-W / 8 P5

then it will be at once recognized that the promised gain in distance was much exaggerated in the reports formerly written upon the subject in which the gain is placed at 350 miles or 1 1/2 days.

4 The chart supposes the various vessels to pass from Aden to the meridian of Cape Comorin crossing it in the most convenient latitudes for their several objects. Thus A red dotted line is a Steamer bound to Calcutta, touching at Colombo for cargo, passengers and coal, and then passing through the canal to a convenient point off Calymere A' B red dotted line also is a similar ship passing, from Colombo round the South of the Island until she reaches an equally convenient point on the radius of distance from Sand Heads B'

red dotted line A from meridian of Comorin to Colombo	135	
from Colombo through Canal A'	226	361
red dotted line B to Colombo and	135	
round Island to B'	320	455

difference 94

or say 9 hours ordinary steaming at a ton of coal an hour. The average price of coal for outward and homeward voyages combined, we may call Rupees (20) Twenty a ton, saving Rupees (180) one hundred and eighty, against which stand the expense

expense, delay and risk of the canal its approaches and passage.

5 In the very rare case of Steamers bound to Calcutta passing Ceylon without calling at any of its ports, the difference would be

red line	C through canal C'	220	difference 190
red line	D round Island D'	410	

6 The delay caused by the passage of the canal, the moderate speed necessary to render the approaches to it safe, and the risk from the Shoals about Point Pedro has to be set against say 20 hours ordinary steaming, and expense of about (400) four hundred Rupees for Coal.

7 The case of Madras comes next, and the canal certainly shews on it to greater advantage.

blue dotted line	E to Colombo	135		difference 167
	E Colombo through Canal to E'	226	361	
blue dotted line	F to Colombo	135		
	F Colombo round Island F'	393	528	

or sixteen hours steaming, or Rupees (320) three hundred and twenty Coal.

8 It seems hardly possible that the passage of the canal can be made without a considerable delay, often involving a whole night, and great expense, so that even in this case it does not offer much tangible advantage if any.

In

2484.W
9

9 In the very unusual case of a vessel requiring to reach Madras by a direct passage without calling at any Ceylon port, the comparison would be

blue line	G through Canal to G'	226	difference 264
blue line	H round Island H'	490	

little more than one day at ordinary steaming, and not taking in account the delays or risks of the canal.

10 It will thus be seen that the advantages of the Canal do not press much upon the consideration of either the Imperial or Local Governments, and the selection of Colombo as a site for a Harbour and calling place for all classes of ships has altered the conditions under which Colonel Sir Arthur Cotton and other writers presented the subject to former Governments. The choice of a cut through Ramesvaram, which seems now decided by a consensus of opinion, deprives Madras of one of its chief reasons for direct interference, as it does not offer or render convenient the construction of a Harbour for Southern India, such as was proposed by the Leona Harbour and the canal through the Ramnad Peninsula. The

rapid

growth of the coral, which is a principal feature at what would be the mouth of the Sorne Harbour, is a most serious obstacle, as it also forms a difficulty in keeping the present pass open. The navigation of a canal will always be difficult in the strength of the monsoon or say six months in every year. The current would have to be shut out by locks for no ship could run through a canal with a gale of wind and current behind her, the wind will be trial enough, and the large tract of Shoal water will require many light-houses. I cannot believe it will ever be a popular passage. It will certainly have the effect of destroying the large Native trade that now uses the Paumben Pass, and that is a serious consideration. The rates and dues charged upon the few steamers that would use it would have to be very heavy, if any reimbursement of the outlay is intended.

I have the honor to be
Sir
Your most Obedt Servant
J H Taylor
Master Attendant
Administrative Department

2454.W
10

P 7/12

No 1602

Transferred to the P.W. Department

J. Davidson.
Chief Secretary

Ootacamund
26 September 1881.

Circ: 25.9.81.

O.L.S. 31/9

Marine (1881) DEPARTMENT.
(Rameshwaram Canal)

From
THE MASTER ATTENDANT,
ADMINISTRATIVE DEPARTMENT,
Madras,

To
THE CHIEF SECY. TO GOVERNMENT,
MARINE DEPARTMENT,
Fort St. Geo

R. D.
SEP 81

No. 8157.

Dated 19 September 1881.
Received 21

No. ~~CURRENT~~ No. 586.

1 chart
26/9

Subject.

Forwarding a Chart and reporting upon the proposed Canal through Rameswaram.

Transferred

Approved
W.H.

OLS 31.9
Circ. 25.9.81. R.C. 3.10.81
M 3.10.81 R. 5.10.81

~~24546~~
11

For orders 24546

It will be useful to have the purely nautical points connected with the proposed Ships Canal for Paumben discussed at an early date by the best available Experts, but perhaps it would be more convenient to have this done when Government are in possession of the Survey & trial borings which will it is presumed be shortly undertaken by Captain Baker G.O. No 263 & 264 of 11/7/81 with perhaps a rough Estimate of the probable cost – ?

Captain Baker will also be asked to

some such information
as he can gather on
the present clearance
of the existing pass
channel both as to
rate of growth of the Coral, quantity
to be removed annually
and probable cost of
such removal in the
proposed canal

When complete the
printed collection
might be circulated
with the Charts &c
for the opinion of such
Experts as Government
may select

Tho' personally quite
satisfied as to the
conclusiveness of
Capt. Taylor's reasoning
it would appear ad-
visable to collect
all needful information
and opinions in
view to the issues
being laid before the
G of I for an authoritative
and it may be hoped
final opinion

28/9/81

2454 W / 12

P 8

No. 2454 W **PUBLIC WORKS DEPARTMENT.**

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 6th Oct. 1881.

Read the following:—

2454 W / 14

Memorandum by the Chief Engineer W.D. No. 263 & 264 of 11th July 1881.

Letter from the Master Attendant, Administrative Dept. } A.E. No. 6384 of 16th July 1881.

Endt. of the Marine Dept. on letter from the Master Attendant Administrative Department } " " 1602 of 26th Septr.

The Honorable the Governor in Council considers that it will be useful to have the purely nautical points connected with the proposed ship canal for

RS

have been discussed at an early date by the best available Experts - but the subject can be best considered when the Government are in possession of the survey and trial borings to be undertaken by Captain Baker in accordance with G.O. No. 1341 W d/ 23d May 1881 and a rough Estimate of the probable cost.

2. Captain Baker will be requested by the Master Attendant to give such information as he may be able to gather from the present clearances

of the Existing pass channel both as to the rate of growth of the coral, quantity to be removed annually, and the probable cost of such removal for the proposed canal.

3. When complete information has thus been collected and considered the whole question can be laid before the Government of India for final decision.

4. The Chart submitted by the Master Attendant will be lithographed.

1/10/81

Marine Dept. ✓
Master Attendant ✓
Supg. Engineer 5th & 6th Circle - ✓

Despd
19-11-81.

2454-n
16

OLS 31. 9.
M. 3. 10. 51.

23-11-81

31-7-07

5702

Govt. of (1881) Madras.

PUBLIC WORKS.

To

7/10

Dated

Issued

Recd. Encl.

G. O., 6 Oct. 1881, No. 2454 W

Nos. 77 - 88

Proposed ship canal for Paumben — orders on the subject of the —

Entd in Receipt Regr.